Asset Management Plan Summary

Social housing

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 look after the Council's social housing. This includes planning delivery to meet Council's social housing goals, managing renewal and significant maintenance projects, undertaking upgrades required under legislation or Council policies, and managing leases. Tenancy management and minor maintenance for the portfolio is undertaken by the Ōtautahi Community Housing Trust (OCHT) in accordance with Council's lease arrangement with the trust.

Why we do it

Housing has a key influence on social and economic wellbeing. Good housing is as important to community wellbeing as employment and access to services and facilities is.

The Council provides social housing to:

- Ensure there is a sufficient supply of and access to a range of housing
- Promote safe and healthy communities
- Promote a strong sense of community
- Contribute to an inclusive, equitable economy with broad-based prosperity for all

Our assets

We own 1964 units spread over 85 housing complexes. We are in partnership arrangements with third party organisations to provide another 29 units. Between March 2019 and November 2020, we transferred 428 units to the trust.

Our lifecycle management plans detail how we manage these assets (and their components, such as the roof, windows and wall cladding) at the agreed levels of service while also optimising lifecycle costs. In making decisions around renewals, replacement, upgrades and disposals we assess the condition, age and location of a unit or complex. In general, a house in New Zealand has a life expectancy of around 90 years, and this guides our replacement planning.

Christchurch City Council

Where we've come from

Christchurch was New Zealand's first local authority to provide social housing, starting in the early 1920's by providing homes for the elderly. Over time the portfolio grew and changed to what is now known as social housing.

Several factors combined to put pressure on the fund that provides operational and capital expenditure for social housing – a trend for lower than market rents, and ageing portfolio, buildings no longer be fit for purpose, earthquake damage and deferred maintenance.

Rather than impose large rent increases to make the portfolio sustainable, Council looked at alternative ways of managing social housing. This resulted in the creation of a Community Housing Provider Trust that would lease units and lead tenancy management. This meant prospective tenants qualified for access to the Income Related Rent Subsidy for new tenancies, which Council tenants would otherwise not be eligible for. In October 2016 the Ōtautahi Community Housing Trust began leasing most of our housing portfolio under this arrangement.

Our issues and risks

Our asset management plan provides a snapshot of the greatest risks recorded for social housing.

The portfolio is vulnerable to a wide range of risks, from issues such as climate change through to inherent operational risks such as not complying with consents and staff health and safety risks. These are all outlined in the asset management plan, along with our planned mitigations.

Risk description	Residual risk rating
Social housing assets fail due to inability to fund needed work.	Medium
Tenants, staff and others come into contact with contaminants (asbestos, methamphetamines).	Medium
Tenants are displaced and properties damaged by natural or man-made disaster.	Medium
Staff and/or customers experience stress and anxiety due to the challenging nature of the team's work.	Medium

What it costs

In June 2020 the book value of the social housing portfolio was more than $251 million.

Asset description	Value
Buildings	142,694,585
Other	2,201
Land	109,238,443
Land improvements	3,221,027
Social housing TOTAL	**255,156,257**

Our budget for the activity that uses these assets in Year 1 of the LTP is $5.58 million (total activity net cost of service plus capital spend for 21/22), with the net operational expenditure projected at - $310,000 (net cost of service) and capital expenditure at $5.89 million (total capital spend). Tables for each area of spending are included in our activity plan.

How we're funded

Council maintains a Social Housing Fund. All social housing lease payments (base rents) from the Ōtautahi Community Housing Trust are paid into the fund, and all costs are met from the fund. Modelling shows that in the long term, Council's social housing goals and levels of service can be met if the fund is used only for operations, maintenance, renewals and upgrades.

In 2020 we began a significant programme to improve our housing stock so it meets legislative and policy requirements for warm, dry homes. A loan was approved for this work to prioritise it for delivery over the next two years.

Our ability to undertake future maintenance, renewals and replacements, depends on capital. We use a 'sinking fund' to pay for social housing maintenance and renewals. Revenue from the Trust lease is set aside over a period of time, earning compound interest, to fund future capital expenses. This also helps to ensure the total life cost of a building is shared equally across generations (inter-generational equity). It's important to use the fund only to pay for future capital expenses, not to consider it available capital for new projects.

How it's delivered

The Council owns the social housing portfolio and it is leased to the Ōtautahi Community Housing Trust. The expectation is that, over time, the trust will develop its own social housing for Christchurch.

Staff deliver

- Specialist services such as asset planning, financial and legal advice and property resources to help ensure the portfolio is managed efficiently and effectively
- Major repairs and renewals

Contractors

- Ōtautahi Community Housing Trust delivers tenancy management, rent-setting and general maintenance
- Citycare Ltd delivers maintenance services (including using subcontractors)

Other delivery partners include:

- Housing NZ–Kainga Ora
- Ministry of Social Development
- Ka Wahine
- YWCA
- South Baptist Church
- Home and Family
- Various non-government organisations

Our functions and services

We provide a range of social housing, and support other providers, to ensure there is a supply of housing for those in need and who would otherwise find it difficult to access housing.

Our social housing is designed, built and located so that it contributes to safe neighbourhoods and communities and so that the effects of climate change and the risk of natural hazards are taken into account.

By providing access to secure housing we are enabling people to take part in the community and to access services and facilities, which provides a sense of community. Housing stability enables people to participate in their community, including in citizenship activities such as enrolling to vote.

There are stable long-term benefits to people in community housing and to the surrounding community.

Housing is a key area through which social and economic wellbeing is influenced – adequate housing is strongly linked to economic performance. It is important that social housing is located where people can easily access community infrastructure – transport, shopping, recreation, education and employment.

We maintain our social housing as a 'rates neutral' service.

Asset maturity assessment

The 2020 maturity assessment for all our Facilities assets shows we are performing at an intermediate level in most areas. The average score rose from 68 percent to 72 percent in the past two years, with the target being 87 percent. More detailed information about this is included in our asset management plan.

The assessment showed we are close to achieving our targets in the areas of risk management, maintenance planning and operational planning and reporting.

However there are significant gaps between current performance and target in the areas of improvement planning, demand forecasting and asset management data.

Looking ahead

Ageing housing stock

Almost a quarter of our housing stock was developed during the 1960's and almost half during the 1970's. Only 9 percent of the stock was developed since 1990.

In managing our assets' lifecycle, we plan a 'midlife spend', where major maintenance work is carried out at 30-50 year intervals. This aligns with the lifecycles of many major building components, including roofs, kitchens and windows.

Complexes built in the 1970s and earlier are due for their midlife refurbishments in the next few years. Almost 75 percent of the portfolio was built during this time, which means large capital expenditure requirements over the next few decades.

Ageing population

As the Christchurch population ages there will be more demand for social housing suitable for their needs.

The number of people aged 65 and older is projected to more than double between 2013 and 2043, increasing to 105,700.

As a proportion of the total population, the 65 and older age group will rise from 15 percent to 23 percent.

Climate change

Coastal assets are vulnerable to sea level rise, erosion and flooding. In some parts of the city we may not be able to provide social housing because of these risks.

Some coastal assets may incur increased insurance premiums or be ineligible for insurance. This may mean the Council having to self-insure some assets.

The cost of building new houses and maintaining existing houses will rise, as design takes higher floor levels and more weather-resilient materials into account.

As weather patterns change there could be more demand for air-conditioning and the housing stock will be at risk from more frequent extreme weather and related events – strong winds, heatwaves, floods and wildfires.

Earthquakes and tsunami

Our primary seismic threat is the Alpine Fault, which experts say has a 30 percent to 65 percent chance of rupturing, causing a magnitude 8 earthquake in the next 50 years.

As a low-lying coastal city, parts of Christchurch are at risk from tsunami and we have several complexes in tsunami evacuation zones.

We need to be prepared for these events, ensuring our assets are robust enough to withstand the worst impacts and that our residents are safe.

COVID-19

The emergence of COVID-19 this year has affected work across Council.

One consequence is the uncertainty around funding. As social housing is not rates-funded there may be fewer effects here than in other areas of Council.

Over the next three years there may be delays in scheduled capital works due to workforce availability and/or contractor viability issues, and increased pressure on Council budgets.

In the medium and longer-term the effects are less certain, but priorities may shift, which could mean maintenance and capital programme deferrals.

Continuous improvement

We have a strong commitment to continuous improvement. Careful planning will be needed to ensure the highest priority improvement items are delivered first, that future delivery costs are well understood and that sufficient funding is allocated in the Long Term Plan 2021-31.

Several areas for improvement have been identified. Those of highest priority are:

- Quality management –implement a structured quality programme
- Capital programme – improve decision making and capital investment strategies
- Climate change – improve maintenance planning and risk management
- IT – improve information systems
- Asset management – improve analysis of resourcing, and reporting around responsibilities, timelines and improvement tasks.
- Energy efficiency – targeted energy audit of operations

Social Housing Asset Management Plan

June 2021

Christchurch City Council

Table of Contents

1 Summary of the Activity

1.1 Activity Description

1.1.1 What do we do?

- Planning for the delivery of Council's social housing goals in perpetuity including monitoring the condition of assets, devising management strategies to achieve financially sustainable outcomes, and planning for the replacement of units at the end of their useful life;
- Managing renewal and major maintenance projects. This includes the design and physical works and managing the temporary relocation and rehousing of tenants; and
- Undertaking legislatively required and / or policy mandated asset upgrades such as insulation installation or energy efficiency measures.
- Lease management

1.1.2 Why do we do it?

Housing is a key area through which social and economic well-being is influenced. Successful housing outcomes are as important to community well-being as the availability of employment and access to services and facilities. This exists on a continuum across society:

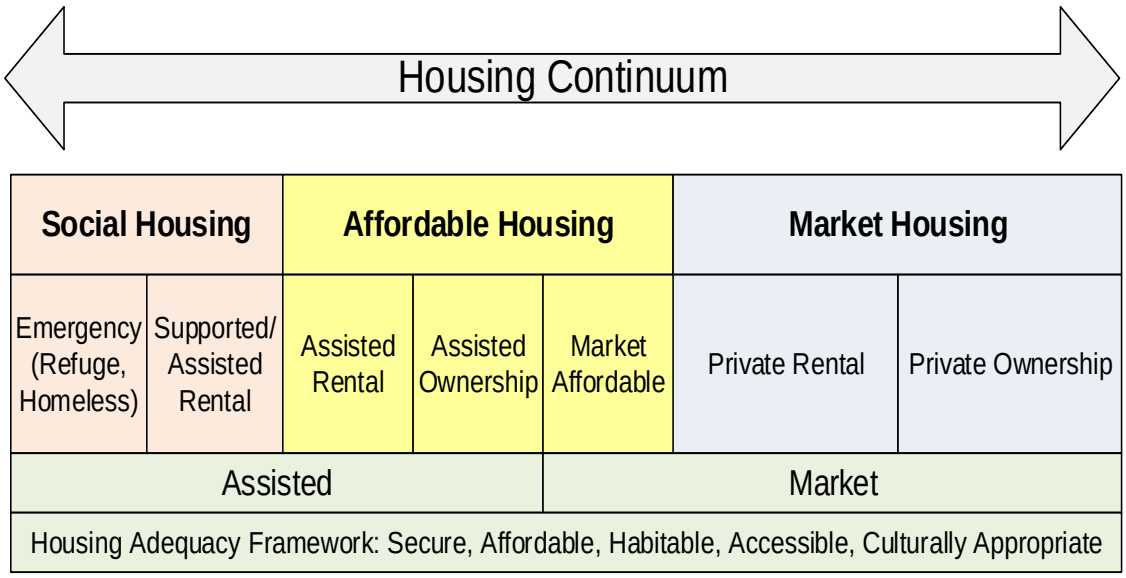


Figure 1-1: Housing Continuum

Christchurch City Council (CCC) provides Social Housing to meet the following Community Outcomes:

Table 1-1: Community Outcomes

Community outcomes	How does the activity effect the Community Outcome
Sufficient supply of, and access to, a range of housing:	• Sufficient supply of, and access to, a range of housing • By providing social housing, and supporting the efforts of other providers, Council contributes to the supply of housing for those in need and those who would otherwise find it hard to access housing. • This activity will help meet identified community housing need as noted in the Greater Christchurch Settlement Pattern Update.
Safe and healthy communities	• Our social housing is designed, built and located so as to contribute to safe neighbourhoods and communities. • Our social housing is built and located to take into account the impacts of climate change and the risk of natural hazards.
Strong sense of community:	• Having access to secure housing is a major key to a sense of community as it enables people to take part in the community and access services and facilities. • Community housing provides stable long term benefits to both the people it houses and the surrounding community.
An inclusive, equitable economy with broad-based prosperity for all	• Housing is a key area through which social and economic well-being is influenced. Adequate housing is strongly linked to economic performance.

1.1.3 How is it funded?

Council maintains a Social Housing Fund. All social housing lease payments (base rents) from the Ōtautahi Community Housing Trust are paid into the Housing Fund, and all costs are met from, the fund. Financial modelling shows that over the long term, Council's goal, and the level of services derived from this, can be met if the Social Housing Fund is only used for operations, maintenance, renewals and upgrades. The fund has in recent years contained insurance claim proceeds, which distort the underlying position. These proceeds have now been spent.

In 2020 a significant programme of works has commented to improve the Housing stock in terms of providing warm dry homes that meets legislative and policy requirements. A lending facility has been approved to facilitate and prioritise this project for delivery in 2020/21. The underlying Housing Fund position would have the target at risk, however modelling shows an improvement from year 5 onwards as the impacts of the change in delivery model take effect (i.e. tenancy management by a community housing provider with uptake of Income Related Rental Subsidy).

1.1.4 How much does it cost?

In order to undertake future maintenance, midlife spend and replacement of the asset capital must be available. This is normally done through a sinking fund. A sinking fund is revenue set aside over a period of time to fund a future capital expense. The sinking fund earns compound interest, increasing its size over time. This also ensures that the total life cost of a building is shared equally by generations, so called inter-generational equity. It is therefore important that part of the housing fund is treated as a sinking fund, which should fund future capital expenses and not be considered as available capital.

Table 1-2: Housing Service Plans Table (Inflated)

Community Housing 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											
Social Housing Asset Management	10,472	5,276	5,426	5,551	5,679	5,815	5,955	6,103	6,268	6,438	6,605
	10,472	5,276	5,426	5,551	5,679	5,815	5,955	6,103	6,268	6,438	6,605
Activity Costs by Cost type											
Direct Operating Costs	433	270	277	283	289	296	303	311	320	328	337
Direct Maintenance Costs	9,504	4,793	4,935	5,043	5,159	5,283	5,410	5,545	5,695	5,849	6,001
Staff and Contract Personnel Costs	523	205	207	216	221	227	232	238	244	251	257
Other Activity Costs	12	8	7	8	9	9	9	9	10	10	10
	10,472	5,276	5,426	5,551	5,679	5,815	5,955	6,103	6,268	6,438	6,605
Activity Costs before Overheads	**10,472**	**5,276**	**5,426**	**5,551**	**5,679**	**5,815**	**5,955**	**6,103**	**6,268**	**6,438**	**6,605**
Overheads, Indirect and Other Costs	4,653	4,245	4,458	4,621	4,739	4,919	5,005	5,152	5,337	5,440	5,595
Depreciation	6,543	5,966	6,224	6,488	6,752	7,025	7,324	7,659	8,009	8,373	8,749
Debt Servicing and Interest	-	-	-	-	-	-	-	-	-	-	-
Total Activity Cost	**21,668**	**15,488**	**16,107**	**16,660**	**17,169**	**17,759**	**18,284**	**18,914**	**19,614**	**20,251**	**20,949**
Funded By:											
Fees and Charges	15,339	15,755	16,385	17,079	17,766	18,510	19,229	19,931	20,644	21,326	21,933
Cost Recoveries	42	43	43	44	45	46	48	49	50	51	53
Total Operational Revenue	**15,381**	**15,798**	**16,429**	**17,123**	**17,811**	**18,557**	**19,276**	**19,980**	**20,694**	**21,378**	**21,985**
Net Cost of Service	**6,287**	**(310)**	**(321)**	**(464)**	**(642)**	**(798)**	**(993)**	**(1,066)**	**(1,080)**	**(1,126)**	**(1,037)**
Funding Percentages:											
Housing Fund	29.0%	-2.0%	-2.0%	-2.8%	-3.7%	-4.5%	-5.4%	-5.6%	-5.5%	-5.6%	-4.9%
Fees and Charges	70.8%	101.7%	101.7%	102.5%	103.5%	104.2%	105.2%	105.4%	105.3%	105.3%	104.7%
Grants and Subsidies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost Recoveries	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Capital Expenditure											
Replace Existing Assets	11,527	5,890	5,960	4,995	5,076	5,278	6,629	6,903	6,118	7,253	7,532
Total Activity Capital	**11,527**	**5,890**	**5,960**	**4,995**	**5,076**	**5,278**	**6,629**	**6,903**	**6,118**	**7,253**	**7,532**

Figures 1.2 below outlines the output from modelling undertaken to account for long term planning for the Housing portfolio. It is important to note that this modelling differs slightly from that outlined in the Activity plan as it is anticipated that a $10M loan facility will be called on in 2021 following the completion of the Warm and Dry Programme. This work has targeted insulation, heating and thermal protection for complexes across the portfolio. This loan hasn't as yet featured in the Housing Fund accounts, but is expected to provide a "cash injection" in the next year in order to keep the fund solvent.

Repayments of the loan are then modelled to follow over the next 10 years, and are reflected in the numbers in the charts below accordingly.

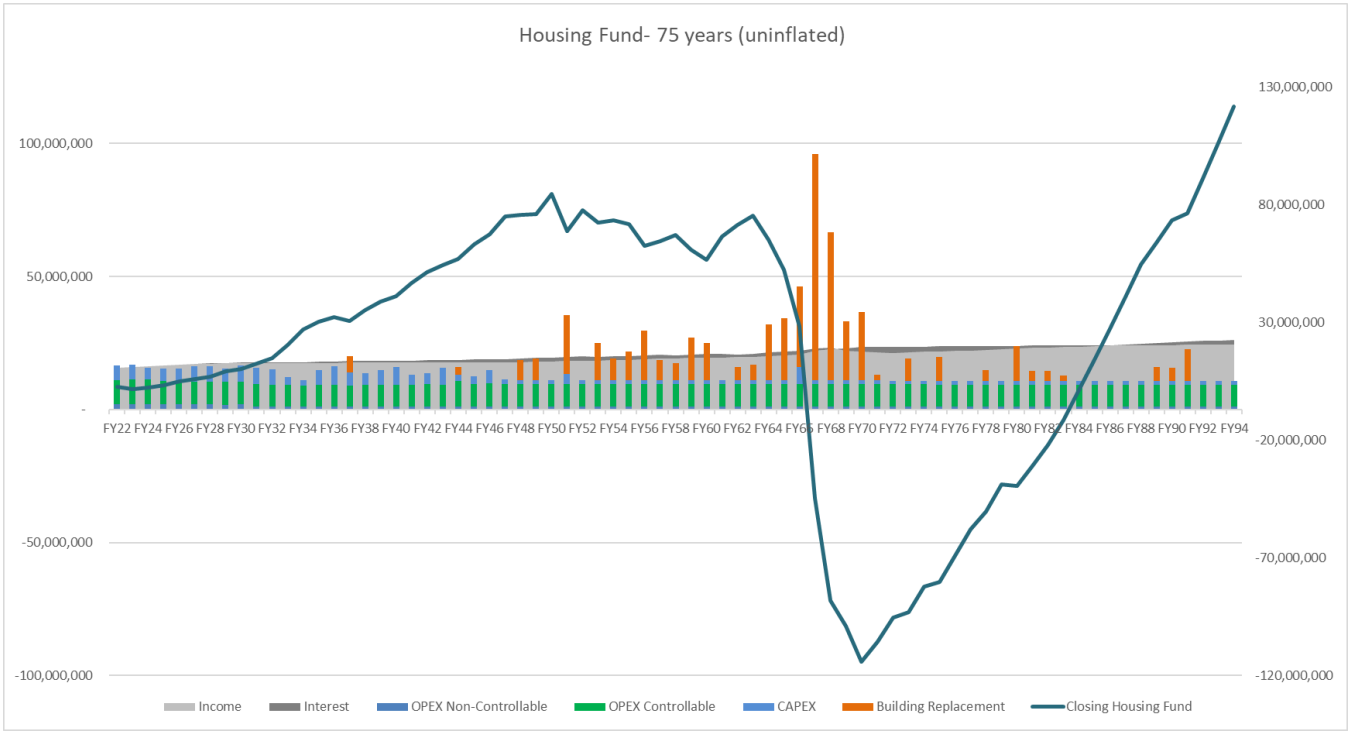


Figure 1-2: Social Housing Fund Projections

1.1.5 How is it delivered?

The Social Housing portfolio is owned by the Christchurch City Council (CCC). Since 2016 the Ōtautahi Community Housing Trust (ŌCHT) has leased the assets from Council. The Trust is responsible for tenancy management, rent-setting and the day-to-day maintenance of units, while major repairs and renewals remain the Council's responsibility. Over time, Council's expectations are that the Trust will develop its own social housing for Christchurch.

During the setup phase, Council approved the use of $50m of social housing assets to capitalise the Trust. Capitalisation has taken place through the gifting or "loan" of land, buildings and other social housing assets. While only $5m of the total $50 m is gifted, the remaining $45m worth of properties is effectively no longer controlled by Council, leading to its removal from the level of service.

A number of internal specialists such as asset planning, finance, legal, and property offer internal resource to assist in the efficient and effective management of the social housing portfolio.

A variety of stakeholders both within Council and externally can affect or be affected by the organization's actions, objectives and policies. These stakeholders and their general needs and expectations are further detailed in Section 3.

1.1.6 Overview of assets

As at June 2021 Council is the owner of 84 social housing complexes, totalling 1916 units.

Council is also in several partnership arrangements with third party organisations to provide a further 28 units.

New Zealand building mortality, an indicator of useful life, is approximately 90 years. A building can be physically, functionally and/or economically obsolete. Physical is the physical decay and deterioration of the building. Functional obsolescence means the building no longer provides the required housing services, i.e. too large or too small, changed family types and lifestyles. Economic factors include better use of the land that is currently used by buildings.

The components of a building require different maintenance cycles, depending on the condition and materials used. A so called 'midlife spend' where major maintenance work is carried out is assumed to take place at 30-50 year intervals. This aligns with many major components' lifecycles (such as roofs, bathrooms, kitchens, windows, etc.).

Almost a quarter of the housing stock was developed during the 1960s, and almost half was developed in the 1970's. Only 9% of the stock has been developed since 1990. Complexes built in the 1960/70's and before are due for their midlife refurbishments in the next few years. Almost 75% of the portfolio was built during this time, which means large capital expenditure requirements over the next few decades.

1.2 Where have we come from and where are we heading

1.2.1 Background

Christchurch City was the first local authority in New Zealand to provide social housing. Council started out in the early 1920s providing homes for the elderly. Over time, the portfolio grew and changed into what is today known as social housing. The combination of factors has combined to create pressure on the housing fund that provides for operational and capital expenditure. These factors include:

- A trend for lower than market rents
- An aging portfolio
- Functional obsolescence
- The earthquakes of the last decade
- Deferred maintenance

Faced with a large rental increase in order to make the portfolio sustainable, Council began looking at options for reaching financial sustainability. The selected option was to create a Community Housing Provider Trust, which would lease units

from Council and lead the tenancy management. This has the advantage of qualifying for the central government funded Income Related Rent Subsidy (IRRS), which Councils are currently not eligible for. Ōtautahi Community Housing Trust (ŌCHT) began leasing the majority of Council's housing portfolio in October 2016 under this arrangement.

1.2.2 Looking Forward

Social Housing Asset Management strategic directions include:

- Planning for the delivery of Council's social housing goals in perpetuity, including monitoring the condition of assets, devising management strategies to achieve financially sustainable outcomes, and planning for the replacement of units at the end of their useful life; and
- Managing renewal and major maintenance projects. This includes the design and physical works and managing the temporary relocation and rehousing of tenants; and
- Undertaking legislatively required and / or policy mandated asset upgrades such as insulation installation or energy efficiency measures.
- Lease management (note that tenancy management is undertaken by others, notably the Ōtautahi Community Housing Trust)

1.2.3 Success Factors

Table 1-3: Key Success Factors

Success Factor	Measure
Council maintains Social Housing as a rates-neutral service A principle of its Social Housing Strategy 2007 is that Council's social housing provision is self-funding. This is further reinforced in the goals, where provision is to be "rates neutral". No rates subsidy is required to provide and maintain Council's social housing portfolio	2019/20 $8M 2018/19: $23.9M 2017 Assisted Housing Unit Baseline: $31M Modelling shows that the fund will remain solvent and, after 2021, start growing to meet future renewal needs.
Tenants of Council owned housing complexes are well housed – tenant satisfaction.	2018/19: 65% 2017 Assisted Housing Unit Baseline: 64%
Tenants of Council owned housing complexes are well housed – interior condition.	2018/19: 89% 2017 Assisted Housing Unit Baseline: 83%
Tenants of Council owned housing complexes are well housed – exterior condition.	2018/19: 96.7% 2017 Assisted Housing Unit Baseline: 74%

1.2.4 Strategic Issues and Risks

Table 1-4: Strategic Priorities and responses

Strategic Priorities	Possible activity responses
Enabling active and connected communities to own their future	Providing stable housing to those in need enables them to access essential citizenship activities such as enrolling to vote. Having a home is also a cornerstone of participation in the community, as a person usually would need to feel safe, secure and healthy in order to do so. Location of Social Housing determined with location and accessibility to community infrastructure including transport, shopping, recreation, and where applicable schools and education. Ōtautahi Community Housing Trust (ŌCHT) is responsible for tenant management. Views are canvassed through ŌCHT satisfaction survey and Council led consultation as applicable.
Meeting the challenge of climate change through every means available	Rising groundwater is a consideration for the maintenance of housing assets. Mitigation strategies are investigated in line with the age and type of build, the tenant demographic and accessibility structure of the property. This may include introduction of swale, foundation tanking, placement of moisture barriers underfloor (where possible) and elevated paths and driveways. Future location planning for social housing will take into account flooding and sea level rise when determining suitability of sites for development and the height and type of foundation build. Maintenance plans would be put in place accordingly. The installation of Thin Tanks for collection of rain water has been trialled in two new build complexes and future consideration should be given for installation to existing and development projects.

Strategic Priorities	Possible activity responses
	Transport is a key component of housing provision with an expectation to provide car parking at all complexes. Number of carparks available is limited with the inclusion of bicycle parking and storage; motorised scooter plug ports. When designing and building of complexes consideration is given to sites that are located near services and amenities reducing the necessity to have vehicles but to utilise public transport. Locating new social housing units in close proximity to public transport links enables the use of these by tenants. Active transport also relevant for good social housing provision, meaning this activity links to the Active Travel Activity Plan. Transport is a key component of housing provision with an expectation to provide car parking at all complexes. The number of carparks available is limited with the inclusion of bicycle parking and storage, and motorised scooter plug ports.
Ensuring a high quality drinking water supply that is safe and sustainable	Not applicable
Accelerating the momentum the city needs	Mixed tenure and typology ventures are being explored as opportunities arise. The energy efficiency and accessibility of a unit or complex also underpins this strategic direction. Secure housing also provides a basis for potential participation in education and/or employment.
Ensuring rates are affordable and sustainable	Community housing is delivered as a rates neutral service

The responses to those issues and risks are:

- 1,944 Social Housing units after all transfers are completed)including partnership housing arrangements)
- Since April 2019 have completed EQ repairs to 9 complexes (total 158 units).
- One complex has been rebuilt replacing 3 earthquake damaged properties with 5 new units built to Lifemark 6 standards
- Insulation programme completed – all properties now meet the legislative requirements
- Continued planned programme of works including exterior paints, paths and driveways and tree maintenance
- The Warm and Dry programme is currently being undertaken with the first phase completed May 2020, with the aim of meeting the Healthy Home requirements by June 2021

2 Introduction

2.1 Background

This asset and activity management plan (AMP) is the basis for the social housing activity planning. 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 required levels of service over a 30-year planning period.

The objective of asset management is to:

"Deliver the required level of service 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 Council aims to achieve, and the measures used to monitor the performance of the social housing activity.
- To translate Council's Strategic Vision and Goals into activity strategies and action plans. The plan identifies forward works programmes based on strategic outcomes sought and financial forecasts required to meet agreed service levels and cater for growth.
- To demonstrate responsible management of the Social Housing activity infrastructure to stakeholders, ensuring that funds in the social housing portfolio are optimally applied to deliver cost effective services to meet customer expectations.
- To document current asset management practices used by Council based on clear evidence as part of a sustainable and optimised lifecycle management strategy for the social housing infrastructure, and identify actions planned to enhance management performance.
- To comply with the requirements of relevant legislation.

The key outputs of this AMP are inputs into the 2021-2031 10 Year Plan process, which will be the subject of a special public consultative procedure. The intention of this AMP is to set out how Council manages Social Housing assets and services in a way that is appropriate for a readership including elected members of the Council, executive management, interest groups and business partners associated with the management of the Social Housing activity along with interested members of the community. It covers the services that are provided from ownership and management of the associated assets.

This AMP covers a period of 30 years commencing 1 July 2021. Operational, maintenance and renewal programmes for the first 3 years are generally well defined with reasonable certainty of being implemented to budget as planned. Beyond this period, work programmes are 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 unit costs as at 1 July 2021.

2.2 Scope of the Assets and Services Covered

The following assets and services are covered in this AMP:

Table 2-1: Scope of Assets and Services Covered in this Plan

In Scope	Out of Scope
• Social Housing Units and Complexes • Services to units including power supply, storm/ wastewater and water supply • Partnership arrangements with 3rd party providers • Grounds assets including carparks, paths, letterboxes and lighting • Residents Lounges • Garages and Carports • Communal Laundries • Chattels including: Hot Water Cylinders, Stoves, Heat Pumps, HVAC, Fire Systems Heaters, Floor and Wall coverings, Kitchen and Bathroom Fit-outs, Curtains, Blinds, Extractor Fans, Insulation • Minor maintenance contract works as carried out by ŌCHT • Owner Occupier units that are bought back by Council	• Tenants improvements • Improvements owned by other parties in partnership arrangements

2.3 Relationship with other plans

Many of the assets planning activities undertaken by Council are applied to all infrastructure assets. For this reason, Council has developed asset management plans in two parts. A Strategic Asset Management plan (SAMP) document that provides an overview of asset management planning at the Council, and an AMP document for each asset group that 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 Council's vision and goals.

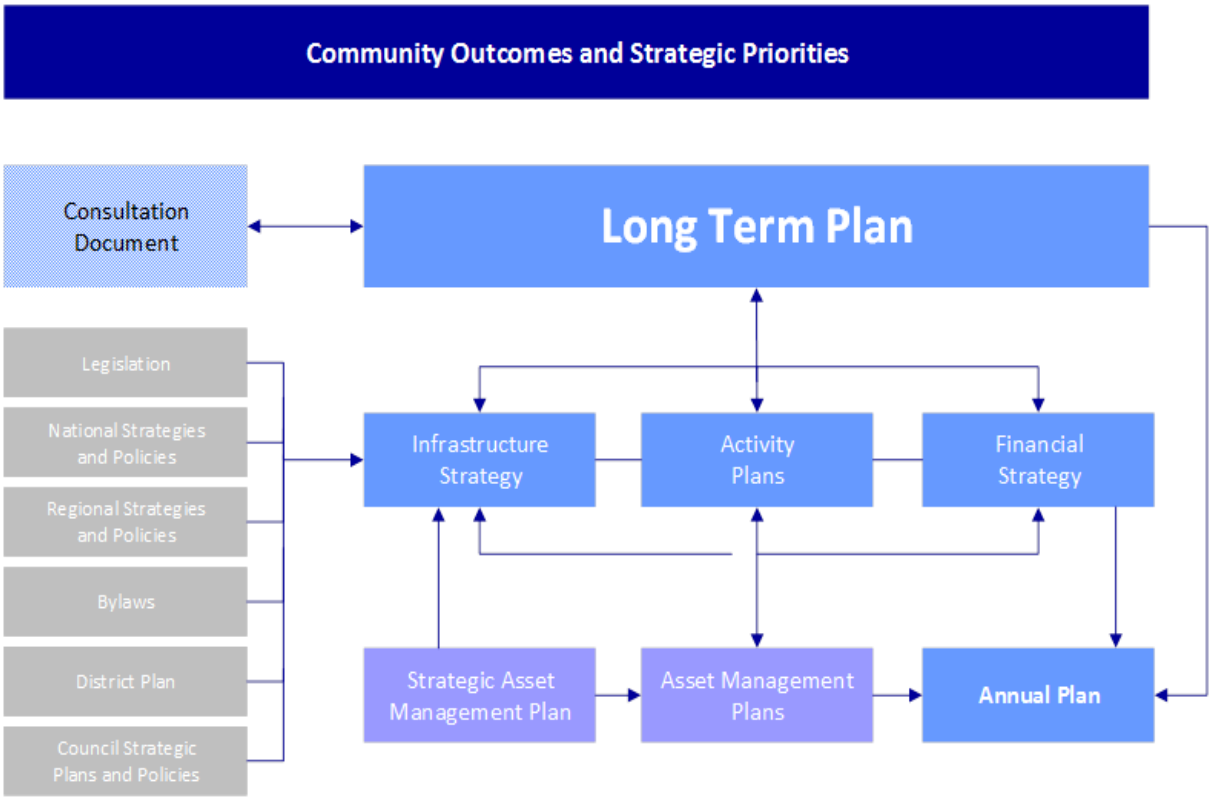


Figure 2-1: Council's Planning Framework

The SAMP provides an overview of the linkages between Asset Management planning and the other business processes of 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:

- ***Strategic Framework:*** strong community with active participation in civic life, the overarching principle of partnership and supporting principles of collaboration, agility and trust.
- Christchurch City Council Housing Policy
- Draft Christchurch City Council Social Community Housing Strategy 2020-2030

2.4 Delivering on Council's Strategic Framework

2.4.1 Alignment of Outcomes, Priorities and Activity Objectives

Council's strategic framework and general implications for the activities are presented in Council's Strategic Asset Management Plan. 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

	Relevant Community Outcomes for Community Facilities	How the activity effects the Community Outcomes
Primary Outcome	Sufficient supply of, and access to, a range of housing	Sufficient supply of, and access to, a range of housing: By providing social housing, and supporting the efforts of other providers, Council contributes to the supply of housing for those in need and those who would otherwise find it hard to access housing. This activity will help meet identified community housing need as noted in the Greater Christchurch Settlement Pattern Update.

	Safe and healthy communities	Our social housing is designed, built and located so as to contribute to safe neighbourhoods and communities. Our social housing is built and located to take into account the impacts of climate change and the risk of natural hazards.
Secondary Outcome	Strong sense of community	Having access to secure housing is a major key to a sense of community as it enables people to take part in the community and access services and facilities. Community housing provides stable long-term benefits to both the people it houses and the surrounding community.
	An inclusive, equitable economy with broad-based prosperity for all	Housing is a key area through which social and economic well-being is influenced. Adequate housing is strongly linked to economic performance.

2.4.2 Activity Responses to Strategic Priorities

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, with reference to the relevant section in the AMP where further detail on responses is provided. 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	Providing stable housing to those in need enables them to access essential citizenship activities such as enrolling to vote. Having a home is also a cornerstone of participation in the community, as a person usually would need to feel safe, secure and healthy in order to do so. Location of social housing determined with location and accessibility to community infrastructure including transport, shopping, recreation, and where applicable schools and education. Ōtautahi Community Housing Trust (ŌCHT) is responsible for tenant management. Views are canvassed through ŌCHT satisfaction survey and Council led consultation as applicable.
Meeting the challenge of climate change through every means available	Rising groundwater is a consideration for the maintenance of housing assets. Mitigation strategies are investigated in line with the age and type of build, the tenant demographic and accessibility structure of the property. This may include introduction of swale, foundation tanking, placement of moisture barriers underfloor (where possible) and elevated paths and driveways. Future location planning for social housing will take into account flooding and sea level rise when determining suitability of sites for development and the height and type of foundation build. Maintenance plans would be put in place accordingly. The installation of Thin Tanks for collection of rain water has been trialled in two new build complexes and future consideration should be given for installation to existing and development projects. Transport is a key component of housing provision with an expectation to provide car parking at all complexes. Number of carparks available is limited with the inclusion of bicycle parking and storage; motorised scooter plug ports. When designing and building of complexes consideration is given to sites that are located near services and amenities reducing the necessity to have vehicles but to utilise public transport.

Strategic Priorities	Possible activity responses
	Locating new social housing units in close proximity to public transport links enables the use of these by tenants. Active transport also relevant for good social housing provision, meaning this Activity links to the Active Travel Activity Plan. Transport is a key component of housing provision with an expectation to provide car parking at all complexes. The number of carparks available is limited with the inclusion of bicycle parking and storage, and motorised scooter plug ports.
Ensuring a high quality drinking water supply that is safe and sustainable	Not applicable
Accelerating the momentum the city needs	Mixed tenure and typology ventures are being explored as opportunities arise. The energy efficiency and accessibility of a unit or complex also underpins this strategic direction. Secure housing also provides a basis for potential participation in education and/or employment.
Ensuring rates are affordable and sustainable	Community housing is delivered as a rates neutral service

2.5 AMP Development Process

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

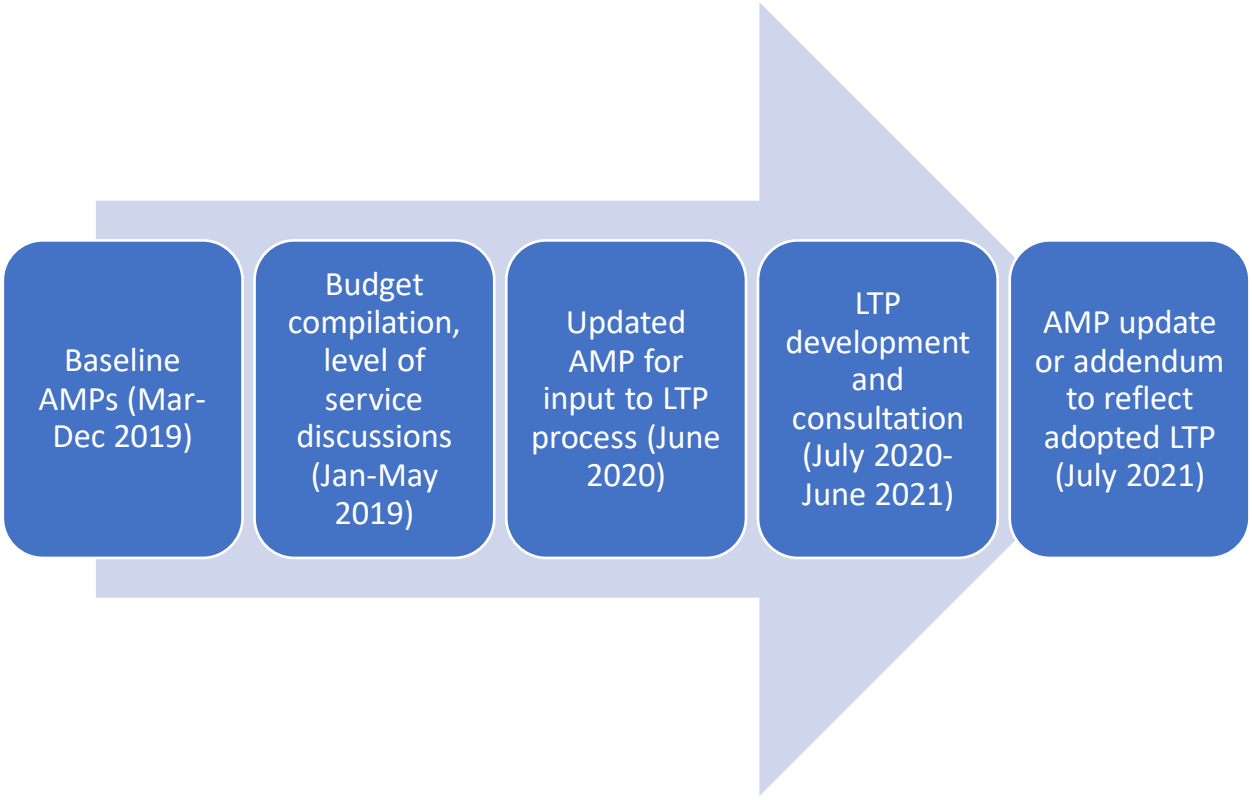


Figure 2-2: AMP Development Timeline

This AMP has been prepared as a team effort by officers dedicated to and trained in asset management 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.

2.6 Changes to the AMP since 2018

As an exercise in standardisation and completeness, this AMP has been completed by way of a standardised template designed by the Asset Management Unit. Each Section has been the subject of a facilitated workshop with interested parties after which the Section has been written by Asset Management planners and reviewed by social housing staff and other appropriate staff.

The AMP is more refined and precise than previous versions, is a living document that provides for electronic links to appropriate documents and websites.

2.7 Navigating the AMP

The AMP follows the general format for AM Plans 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

- Levels of service – specifies the services and levels of service 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 Council will manage its existing and future assets to provide defined levels of service,
- 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 organisation's objectives.

3 The Services We Provide

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

Provision of social housing is part of a wider continuum across society:

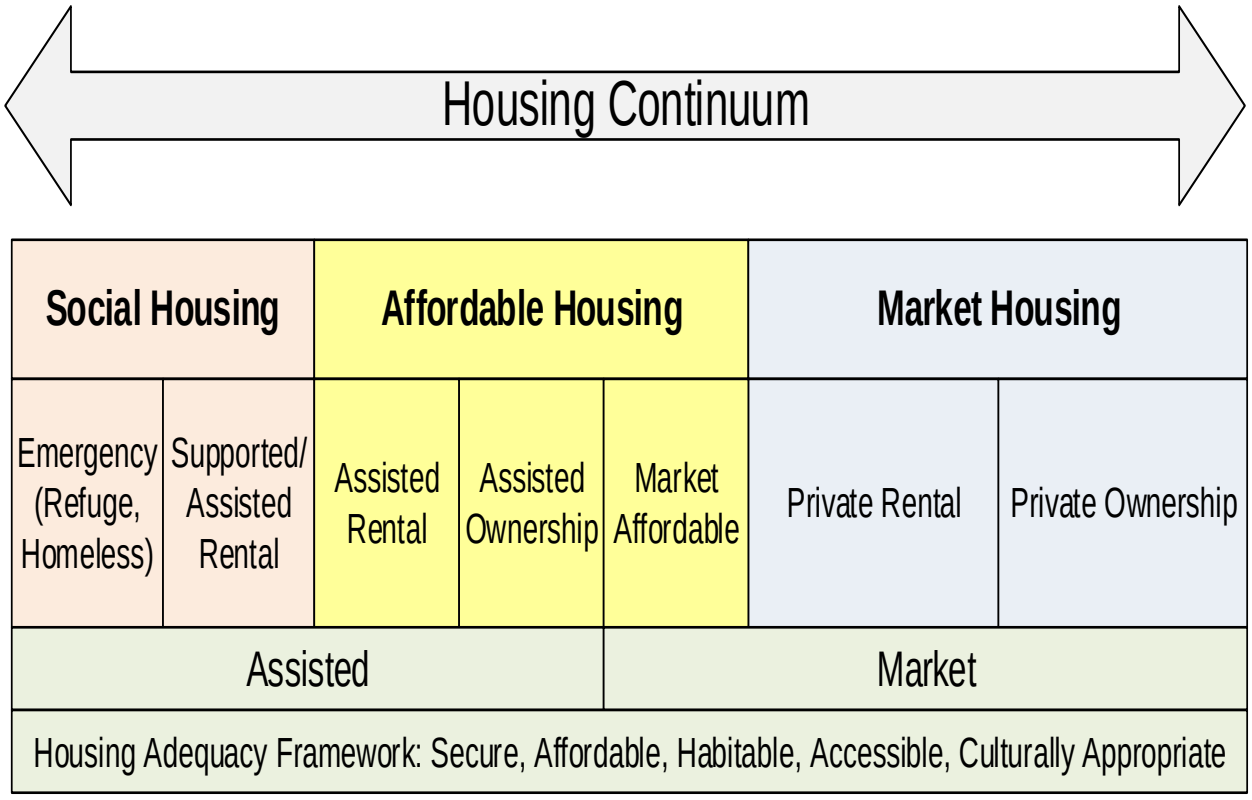


Figure 3-1: Housing Continuum

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.

Christchurch is made-up of many different communities, whether based on location, interests, differences, strengths or identities. The diversity of these groups and their collective strengths and differences make Christchurch an interesting, attractive place in which to live, work, play and visit. It is persons from these varied communities that use social housing services and assets.

This activity provides direct Council support and assistance to these many different types of communities, with a goal of developing their access and capacity in order to not only realise local aspirations, but to also enable them to provide community inclusion. This activity enhances connections and cohesion within and between communities, and plays an important role in facilitating their ability to contribute to all forms of local decision-making and community action.

By enabling communities, this activity helps build cohesion, connectedness, resilience, wellbeing and increased self-sufficiency into our city.

Table 3-1: Customer Expectations

Category	Stakeholders	General Needs and Expectations
Facility and Service Users	Groups and individuals	Information about and access to social housing.
	Community agencies	A safe & affordable place to be housed.
The Community	Residents and ratepayers	Safe, well maintained, conveniently located complexes that contribute to their quality of life and enhance the neighbourhood.
	Iwi	Protection and enhancement of cultural values and places. Opportunities for cultural activities.
Affected Parties	Contractors / Consultants / Equipment suppliers	Well-planned and scoped works programmes to bid for. Fair processes and good contract management. Fair and transparent opportunities to supply equipment for development.
	Customers with specific interactions e.g. adjacent residents	Noise, onsite and offsite parking, access and traffic issues.
Internal Customers	Council staff (Asset Managers/Planners/Project Managers/Operations)	Good quality data and asset information, work programmes, planning documents, and advice.
	Elected Representatives, Councillors & Community Boards	Cost effective & well-managed range of assets. Good quality communications to keep them informed of significant events. Open and helpful staff that provide good quality, well-reasoned and timely advice.
External organisations	Regulators, e.g. Council Building Consent & Resource staff / ECan Housing providers e.g. Government, Non-Government Organisations, Community Housing Providers (primarily ŌCHT). Tenants	Good quality information to allow adherence to statutory requirements. Open and helpful staff that provide good quality, well-reasoned and timely advice.
	Central Government, Office of the Auditor General, Ministry for the Environment, Department of Conservation	Good quality information to allow adherence to statutory requirements. Open and helpful staff that provide good quality, well-reasoned and timely advice.
	Local authorities neighbouring Christchurch City Council; Selwyn and Waimakariri District Councils	Informed joint strategic planning and collaboration on all levels to ensure synergy in service provision and future proof greater district interaction.
	Emergency Services Care Givers	Convenient access to facilities when required during emergency e.g. firefighting / ambulance services. Access to suitable spaces during civil emergencies, e.g. earthquakes. Open & helpful staff that provide good quality, well-reasoned & timely advice.

Council has several ways in which it seeks to identify customer expectations and the extent to which these expectations are being met. These include:

- Council and ŌCHT undertake customer research in the form of annual resident's surveys. Council has an overall Residents survey, while ŌCHT carried out a Tenant Satisfaction Survey. These seek the level of satisfaction of ratepayers/ tenants regarding the condition of their units in correlation to the previous year.

Key findings from our engagement with tenants include:

Table 3-2: Engagement Survey Results with Tenants

Satisfaction rating	Output
Tenants of Council owned housing complexes are well housed – tenant satisfaction.	2018/19: 65% 2017 Assisted Housing Unit Baseline: 64%
Tenants of Council owned housing complexes are well housed – interior condition.	2018/19: 89% 2017 Assisted Housing Unit Baseline: 83%
Tenants of Council owned housing complexes are well housed – exterior condition.	2018/19: 96.7% 2017 Assisted Housing Unit Baseline: 74%

It is recommended that the annual Residents' Survey be continued to build upon the findings of recent years.

Continued consultation with the ŌCHT in regards to maintenance of units is undertaken through co-ordination meetings between ŌCHT and the Council.

The figure below presents the key stakeholders of the social housing portfolio.

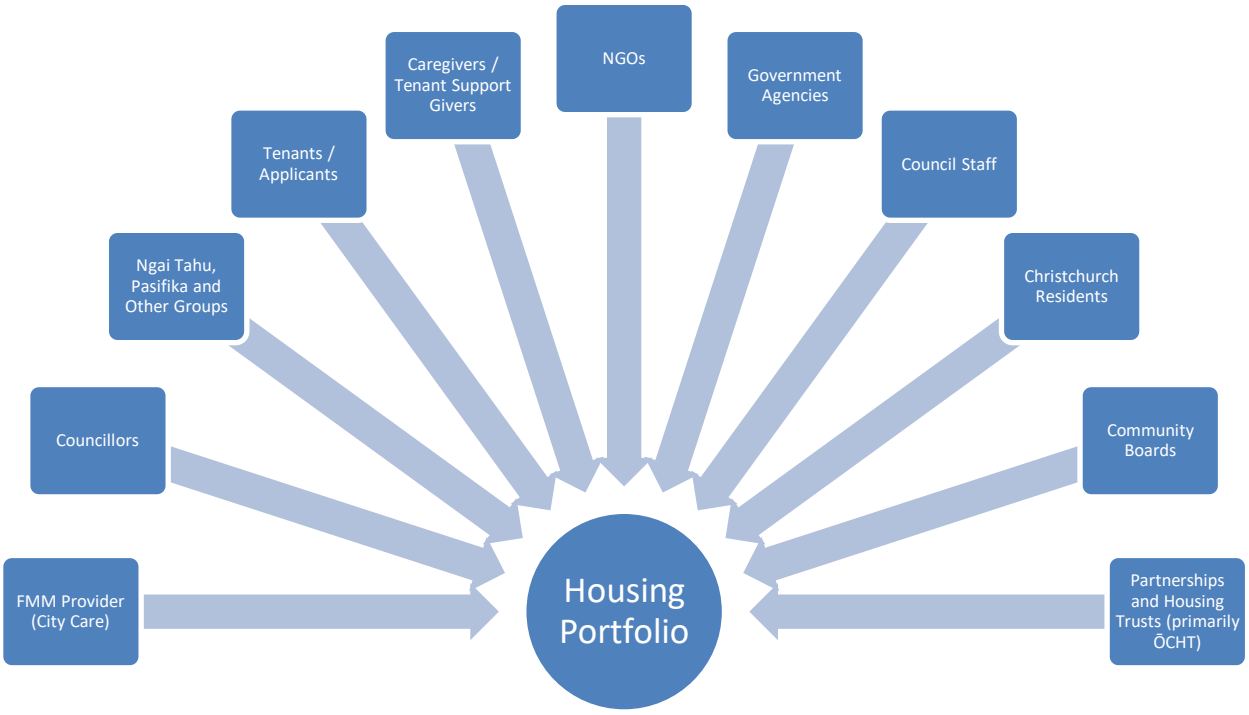


Figure 3-2: Key Stakeholders

3.1.2 Legislation/Regulation

Alongside customer expectations, we consider legislation, regulation and standards that impose level of service standards for Social Housing. These are summarised in the table below.

Table 3-3: Legislative and Regulatory Level of Service Drivers

Legislation / Regulation	Impacts on Levels of Service (LOS)
Building Act 2004	Compliance with building consents and warrant of fitness issued under the act and relevant regulations and standards
Health Act 1956	Regulation and protection of public health in the district Requirement to provide sanitary works
Residential Tenancies Act 1986	Rental Properties must be provided and maintained in a reasonable state of repair
Health & Safety in Employment Act 1992 / 2003	Ensure the safety of the public and all workers (including contractors) when carrying out works
Health & Safety at Work Act 2015	The main purpose of this Act is to provide for a balanced framework to secure the health and safety of workers and workplaces.
Local Government Act 2002	Requires Councils to produce statements of the intended LOS provisions, including the performance targets and other measures by which actual LOS provision may be meaningfully assessed. This is required in detail for each of the first three years and in outline for the subsequent years of the Long Term Plan (LTP).
Local Government (Rating) Act 2002	The funding companion to the Local Government Act 2002
Resource Management Act 1991	Sustainability of natural and physical resources Avoid, remedy or mitigate adverse effects on the environment Compliance with district and regional plans Take into account the principles of the Treaty of Waitangi Compliance with resource consents issued by the Environment Canterbury.
Healthy Homes Guarantee Act 2017	The Healthy Homes Guarantee Act passed in 2017 allowed for the development of standards to improve the quality of rental housing in New Zealand.

Local Government Act 2002

The Local Government Act 2002 outlines minimum expectations that councils have when providing a social housing service. Christchurch City Council typically meets these minimum requirements.

> *11A Core services to be considered in performing role*
>
> *In performing its role, a local authority must have particular regard to the contribution that the following core services make to its communities:*
>
> *(e) Libraries, museums, reserves, and other recreational facilities and community amenities*
>
> *17A Review of service delivery*
>
> *Review the cost effectiveness of current arrangements for providing local infrastructure, services and regulatory functions at regular intervals. Reviews must be undertaken when service levels are significantly changed, before current contracts expire, and in any case not more than 6 years after the last review*

Building Act 2004

> The Building Act sets out the law on building work, primarily the person(s) responsible to ensure the building complies with the law.
>
> *14B Responsibilities of owner*

An owner is responsible for:

(a) Obtaining any necessary consents, approvals, and certificates:

(b) Ensuring that building work carried out by the owner complies with the building consent or, if there is no building consent, with the building code:

(c) Ensuring compliance with any notices to fix.

3.1.3 Industry Guidance

The Human Right to Adequate Housing in New Zealand

The central or local government is not obliged to provide housing, however have agreed through the Human Rights Commission to ensure that the right to adequate housing is progressively realised in New Zealand. The definition of adequate housing by the Human Rights Commission is relevant in Council's provision of social housing. Although not a legislative requirement it is prudent that Council's social housing adheres to these standards.

More recently, we have operated under a framework of creating warm, dry and affordable housing across New Zealand. The standards associated with these moves are presented as follows:

Healthy Homes Standards

From 1 July 2021, private landlords must ensure that their rental properties comply with the standards within 90 days of any new tenancy. Housing New Zealand and registered Community Housing Providers have until 1 July 2023 to ensure all their properties comply.

All rental properties in New Zealand must meet the Healthy Homes Standards by 1 July 2024.

The Healthy Homes Standards (HHS) are:

- **Heating** – Rental homes must have fixed heating devices in living rooms, which can warm rooms to at least 18°C. Some heating devices are inefficient, unaffordable or unhealthy, and they will not meet the heating standard requirements.
- **Insulation** – Rental homes must have ceiling and underfloor insulation, which either meets the 2008 Building Code, or (for existing ceiling insulation) is at least 120mm thick.
- **Ventilation** – Rental homes must have the right size extractor fans in kitchens and bathrooms, and opening windows in the living room, dining room, kitchen and bedrooms.
- **Moisture and drainage** – Rental homes must have efficient drainage and guttering, downpipes and drains. If a rental home has an enclosed subfloor, it must have a ground moisture barrier if it's possible to install one.
- **Draft stopping** – Rental homes must have no unnecessary gaps or holes in walls, ceilings, windows, floors, and doors that cause noticeable drafts. All unused chimneys and fireplaces must be blocked.

3.1.4 Strategic Framework

This AMP covers a period of 30 years commencing 1 July 2021. Operational, maintenance and renewal programmes for the first 3 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 unit costs as at 1 July 2021.

A 30-year capital expenditure programme has been prepared alongside the Infrastructure Strategy. This sits alongside the Finance Strategy in Councils wider LTP planning process. More specific to social housing there are strategic and policy directions within the Housing Policy and Community Housing Strategy 2020-2030 (Draft). Some of the areas referenced in these documents are beyond the scope of this Asset Management Plan, for example partnership housing and Council's approach to enabling Assisted Housing.

Council's Strategic Framework is outlined below:

Figure 3-3: Council's Strategic Directions Housing Policy (2016)

Vision: That all people in Christchurch have access to housing that is safe, affordable, warm and dry.

The Housing Policy guides the Council's decisions and support collaborative action across the continuum of social, affordable and market housing to achieve the policy's vision.

Social housing, including emergency housing such as for the homeless and others in such need, can be defined as not-for-profit housing programmes that are supported and/or delivered by central or local government, or community housing providers, to help low income households and a range of other disadvantaged groups to access appropriate, secure and affordable housing. This can be of a supported nature such as addressing emergency housing issues, or of a more general assisted nature where low incomes in relation to housing costs may be the main issue.

Affordable housing can be defined in terms of low to middle income households (i.e. those households earning up to 120% of median household income) spending no more than 30% of their gross income on rent or mortgage costs. For those on middle incomes, this can be further defined in tenure terms of a median household income being sufficient to affordably purchase a lower quartile priced house (which stood at $383,000 in mid-2016, meaning that it is borderline affordable to purchase on such an income of about $70,000 within a low interest environment, assuming that standard deposit and bank lending criteria can be met).

Market housing is private housing bought, sold or rented under prevailing open market conditions, largely without any direct assistance. In any given area there may be a mixture of housing types, as well as housing tenure groups within them across a range of household incomes. In mid-2016, the median house price was $460,000, with the median rent for a three bedroom home being $420 per week.

Wider affordability and community considerations are the housing-related energy and transport costs, access to services and amenities, and the quality and performance of both new and existing houses. This means that localised collaborative planning and provision approaches taking into account a range of drivers are needed when developing a set of options to address affordable housing issues in a socially sustainable way.

The principles of the Housing Policy are:

1. **A human right** - To adequate housing that is secure, affordable, habitable, accessible, well located, and culturally appropriate.
2. **Security of tenure** - Is a foundation to building strong communities.
3. **Collaboration** - Among all sectors of society is required to address long term social and economic housing challenges facing Christchurch.
4. **Quality of life** - Housing outcomes are linked to social, cultural, economic, environmental, and health outcomes.
5. **Quality of housing** - Well-designed, maintained and located housing is critical to supporting the social, economic and environmental recovery and resiliency of Christchurch.

The goals of the Housing Policy are:

1. **Demand analysis** - Take a long-term, systematic, demand-driven housing needs analysis to identifying housing trends so as to develop plans and targets for social, affordable and market housing provision.
2. **Building knowledge** - Improve, develop and share research, information and intelligence on housing issues to support the capacity and capability of those involved in innovative housing actions.
3. **Mixed housing** - Promote and support mixed housing developments that utilise land and amenity value to include a range of housing types and tenures.
4. **Inclusive housing** - Support quality housing developments that create inclusive communities and overcome exclusionary housing practices.
5. **A Range of responses** - Develop a range of integrated regulatory and non-regulatory measures which reduce housing barriers and incentivise good quality social and affordable housing.
6. **Acute needs** - Work with other agencies in the effective provision of housing and associated support services to address acute housing need and to eliminate homelessness.

7. **Retaining affordable housing** - Develop a range of creative, collaborative and innovative ways to ensure the co-ordinated long term promotion, provision and retention of both social and affordable housing.
8. **Housing quality** - Improve the standards, regulations and monitoring on housing design and quality to achieve healthier housing for households irrespective of their income.

Community Housing Strategy 2020-2030

Vision: Community housing as a cornerstone of housing in Ōtautahi Christchurch for our wellbeing (subject to review 2020/21)

Community Housing is a form of assisted or non-market housing working alongside private housing in the open market, meeting housing need through a range of social and both affordable rental and home ownership options. Community Housing complements and includes the public (or social) housing traditionally provided by central or local government, and other community providers.

Taking its lead from the Council's overall Housing Policy and underpinned with collaborative leadership, Council's Community Housing Strategy reframes community housing as central to the City's fabric and wellbeing with the following goals:

- Cornerstone – Community housing is a key infrastructure ingredient to community wellbeing
- Integration – Community housing is part of a mixed housing, mixed tenure approach in housing developments
- Capacity – Support Council and community provider capacity to deliver community housing
- Provision – Community housing provision meets human rights based 'housing adequacy'
- Prevention – Undertake preventative action to ensure secure, stable tenancies to build community connections and wellbeing

3.2 Defining and Measuring Levels of Service

3.2.1 Measuring our Levels of Service

Please see **Section 5 Specify Levels of Service in the Community Housing Activity Plan**. Performance of Community (C) Levels of Service will be reported to the Finance and Performance Committee each month.

3.2.2 How we are / should we be performing?

The following measures have been tracked over recent years:

Table 3-4: Performance Measures

Performance Measure	Output
Council makes a contribution to the social housing supply in Christchurch	2020/21: 1944 units including partnership arrangments 2019/20: Units in Council Portfolio: 1964 units 2018/19: 2,241 2017/18: 2,478 2016/17: 2,478
Council makes a contribution to the social housing supply in Christchurch - Council owned units are available for use	2018/19: 2,045 units with 97.87% utilisation rate 2017 Assisted Housing Unit Baseline: 2,306 units, 93% utilisation rate
Council maintains Social Housing as a rates-neutral service A principle of its Social Housing Strategy 2007 is that Council's social housing provision is self-funding. This is further reinforced in the goals, where provision is to be "rates neutral". No rates subsidy is required to provide and maintain Council's social housing portfolio	2019/20: $8.6M (End Of FY19 actual) 2018/19: $23.9M 2017 Assisted Housing Unit Baseline: $31M Modelling shows that the fund will remain solvent and, after 2021, start growing to meet future renewal needs.
Tenants of Council owned housing complexes are well housed – interior condition.	2018/19: 89% 2017 Assisted Housing Unit Baseline: 83%
Tenants of Council owned housing complexes are well housed – exterior condition.	2018/19: 96.7% 2017 Assisted Housing Unit Baseline: 74%

3.2.3 Performance Framework, 2021-2031

The Activity Plan summarises the performance measures included in the LTP. Refer to the Community Housing Activity Plan for details.

3.3 Level of Service Projects and Programmes

These are the projects or programmes that are planned to close the gap between the current and target level of service.

Table 3-5: LOS Programmes and Projects

Major Initiatives to address level of service gaps	Strategic and Level of Service Drivers	Indicative $	Year (if in existing budget)	Comments
State project or programme title.	*E.g. required to meet drinking water standards*	*E.g. CAPEX < $10K, OPEX $20Kpa*	*State 'unscheduled' if not in existing 10-year budget*	
Warm and Dry/ Healthy Homes	To meet Healthy Homes Standards	Capex $16M	Spread across current 2 years from 2019, $10M Loan Facility is approved	Heat pumps, insulation, heaters, extractor fans, water ingress, draught stopping and window/ doors.

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 will be based on the information outlined in this section.

4.1 Demand Drivers

There are various factors influencing current and future demand for Council's social housing provision. The more prominent ones are detailed below:

4.1.1 Demographics

- Population numbers in Christchurch have surpassed pre earthquake levels
- Further future population growth is predicated

In the two years following the 2010/2011 earthquakes, the overall population of Christchurch City decreased by 21,200 (-6%) to 355,100.

By 2017, the population had stabilised and surpassed the pre-earthquake population figure for the first time. As at June 2018 Christchurch's population was estimated to be 388,000.

By 2028, Christchurch City's population is projected to reach 424,000 (recommended medium projection) as detailed in the figure below. This is a population increase for the city of 36,000 (9%) over the next decade (2018-2028). Existing social housing facilities need to be cyclically upgraded and maintained to ensure their longevity, and new facilities may be developed to meet demand.

By 2043, medium projections suggest the population of Christchurch will be around 459,000. As a result, greater Christchurch is set to overtake Wellington and become New Zealand's second largest city region.

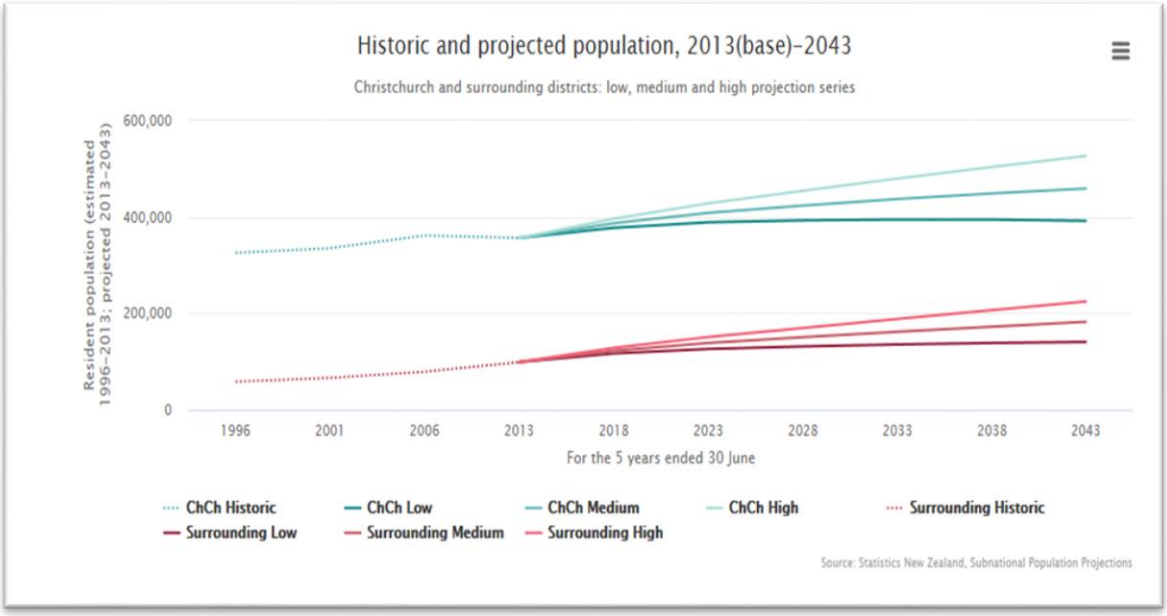


Figure 4-1: Population Projections- Christchurch City

Suburban Population concentrations have changed post-earthquake

The majority of Christchurch household growth will take place in priority Greenfield areas identified in the Land Use Recovery Plan (LURP), a statutory document that was prepared under the Canterbury Earthquake Recovery Act 2011 (CER Act). Growth is projected predominantly in the following locations:

- **Southwest Christchurch including Halswell and Wigram -** Post earthquake population movement saw an extension of an existing drift to the southwest. Red-zoned land in the east saw a population movement to areas of readily available subdivided sections. The drift of business activity towards the west of the city is combining with development of the Christchurch Southern Motorway making southwest Christchurch a popular location.
- **The northern suburbs of Christchurch includes Belfast, Prestons and Sawyers Arms** –existing residential land is available with planning approvals, infrastructure and services in place across the northern portion of the city. The Christchurch Northern Corridor Project is facilitating more efficient transport links to the northern areas of Christchurch City.

2013 household density data and projected 2053 household density data emphasising the anticipated population expansion in the north eastern and south western sectors of Christchurch and where social housing provision is located to cater for that growth in combination with existing population concentrations.

It is Council's aspiration to ensure the spatial location of new and existing social housing allows for ease of accessibility to existing and future populations, both in terms of housing needs and access to other community facilities. In reality however, we must face the constraint of limited funding for new land and developments. Utilising existing Council owned land parcels and corridors over the life of the LTP is a potential solution, and where appropriate this can be considered in conjunction with 3rd party providers, such as those projects that have already moved forward alongside ŌCHT.

The Central City is re-establishing itself and predictions are for further growth

As at June 2010, before the 2010–2011 Canterbury earthquake sequence, the estimated central Christchurch population within the Four Avenues surrounding central Christchurch was 8280.

One effect of the earthquakes was a sharp drop in central Christchurch's population as many older dwellings near the CBD were uninhabitable or destroyed. Shops and facilities that serviced this population were depleted. The impact of the earthquakes resulted in the population declining to a low point in 2014 of 5050 people. Since 2014, the central city population has increased by 1100 people to an estimated 6160 people at June 2018.

Local and central government strategies call for continued growth of the central city as central city businesses re-establish themselves and housing stock increases.

Surrounding Canterbury Districts are expanding

Selwyn and Waimakariri districts had each been experiencing much higher growth rates than Christchurch in the two decades prior to the earthquakes, and these higher rates of growth have continued post-earthquakes.

Between 2017 and 2018, Selwyn and Waimakariri experienced the third and fourteenth fastest growth in the country respectively (out of 67 territorial authorities). Selwyn district's annual increase was 4.8% while Waimakariri district's was 2.4%.

The population of Selwyn and Waimakariri areas deserve consideration as post-earthquake analysis suggest 41% of workers who lived in Waimakariri and 45% of workers who live in Selwyn District travel to Christchurch for work. This needs consideration alongside provision of social housing across the wider Canterbury region by all social housing providers

Christchurch's population is ageing

Demographic trends, the decline in fertility and mortality, better medical and health care and improvements in the overall quality of people's life has determined, moving forward a greater proportion of Christchurch's population will exceed 75 years of age.

The number of older people in Christchurch aged over 65 years is projected to more than double between 2013 and 2043, increasing from 52,100 to 105,700.

Meanwhile, as a proportion of the total population, the 65 years and over age group will increase from 15% to 23%.

Longer term, the number and proportion of children in the population is expected to decline while the elderly population will grow.

The aged will become a significant group seeking social housing and related community facility provision. Council will need to be cognisant of their requirements such as accessibility, affordability, ease of use, age appropriate access, equipment and programs and plan for the provision of such within its services.

There will be increased ethnic diversity in Christchurch

Christchurch will become more ethnically diverse with the ratio of Maori, Pacific and Asian peoples to European projected to increase.

Over the next 20 years, through to 2040 the percentage of Christchurch's community recognised as 'European' or 'other' is predicted to fall 8% to 76%, whilst populations of Pacific, Maori and Asian peoples are predicted to increase.

Council will need to be familiar with the needs of a more culturally diverse population. Council may see an increased demand for community facilities as a hub for social networks and communities. Social Housing

New Zealand family structures are changing

The "nuclear family" is becoming a thing of the past, replaced by a diverse range of households.

Sole parenthood rates have risen significantly and 'Blended Families' are increasing.

Couples without children are increasing as a proportion of all families and families with adult children are increasing.

This restructuring of the typical family has implications on participation, time constraints and the accessibility of community facilities. This is of particular relevance to the location of social housing.

4.1.2 Customer Needs

Accessibility

As the Christchurch community continues to change, we need to change to keep pace with people's changing needs and preferences, and to remain relevant. Customer expectations are many and varied and can be contradictory. To cater for the widest possible range of expectations, preferences and the greatest number of people, a targeted network of different types of facilities, programmes and events are required that matches opportunities to expectations. Successful social housing is deemed to be that which provides warm, dry and safe accommodation along with easy access to modes of transport, shops, health providers and community facilities such as cycling and walking.

Council has in the past looked to locate its new facilities and housing within close proximity to concentrated populations of people and alongside main arterial links and recognised public transport routes to give people equitable access to facilities citywide. In more recent years, particularly with the advances in technology and the Healthy Homes Standards the focus is increasingly on design and functionality.

Ability to pay

One of the six principles of Asset Management, as outlined in the Council's Asset Management Policy adopted by the Executive Team in February 2016 was that Levels of Service would match customer expectations alongside their ability to pay. Determining the level of social housing activity options that are accessible to citizens of Christchurch is an important consideration for Council.

In terms of ability to pay, those with social housing needs are assisted through government funding streams including the accommodation supplement, income related rental subsidy (IRRS) and other grants or benefits as applicable. Christchurch City Council has established the Ōtautahi Community Housing Trust to facilitate these relationships.

Reliability

The public will look for consistent delivery of an agreed Level of Service. Council needs to be dependable and accurate in its service provision and reliably produce clean, safe and accessible social housing.

Consistency, reliability and predictability will be the cornerstones of creating long-term relationships with customers/ tenants.

Availability

Those with a housing need will look for accommodation that meets their expectations around location and proximity to services. At present across the sector demand for social housing is high. Site and space capacity need to be sufficient to meet demand.

The total number of housing units, both owner occupied and rented, forms the supply side of the market for Christchurch. The 2013 Census showed a housing supply of 130,428 units in Christchurch. It is worth taking into consideration the level of supply in Greater Christchurch when looking at the total housing stock. There are approximately 179,240 dwellings in Greater Christchurch, of which 168,450 is within an urban area (excluding any buildings on red zoned land). Over 90 % of these dwellings were damaged in the earthquakes and required some form of repair after the earthquakes.

The following part of the section refers to Christchurch City's housing stock only unless otherwise stated. Below is a table listing the number of units between 2001 and 2013 by type in relation to number of bedrooms in. The following figure shows the distribution of the data displayed in the table.

Table 4-1: Number of Units Sorted by Type in Relation to Number of Bedrooms, 2001-2013

Unit Type	2001		2006		2013	
	Number	Proportion	Number	Proportion	Number	Proportion
One-bedroom	7,170	5.7%	7,254	5.4%	6,300	4.8%
Two-bedroom	31,719	25.2%	32,169	23.9%	30,309	23.2%
Three-bedroom	55,737	44.2%	58,326	43.3%	54,393	41.7%
Four-bedroom	21,552	17.1%	25,722	19.1%	26,628	20.4%
Five or more bedroom	5,961	4.7%	7,098	5.3%	7,248	5.6%
Not elsewhere included	3,918	3.1%	4,161	3.1%	5,550	4.3%
Total	**126,054**		**134,727**		**130,428**	

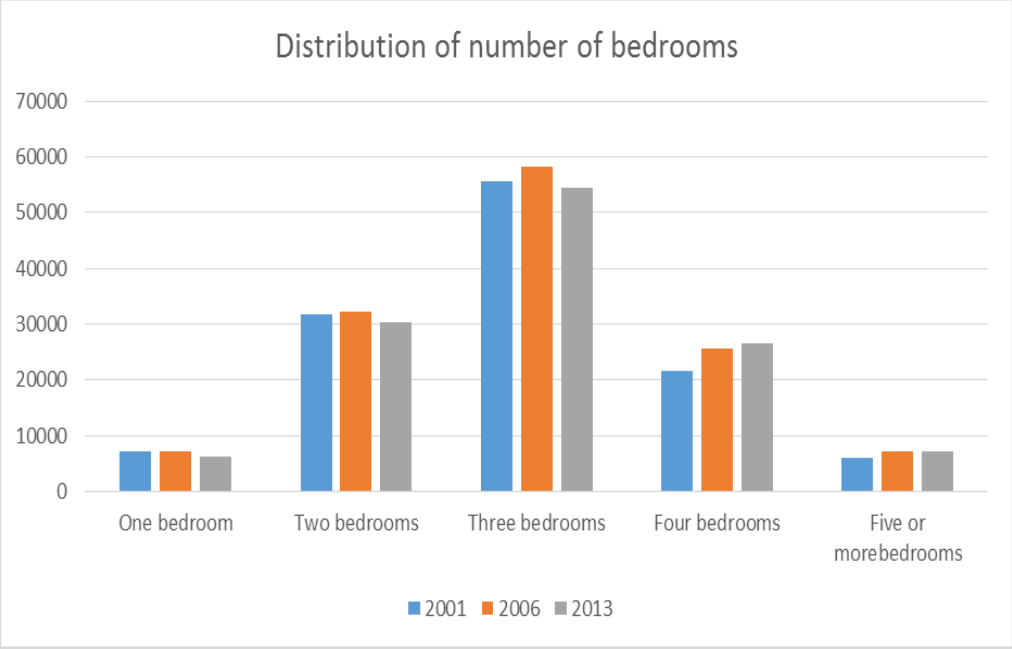


Figure 4-2: Number of Units, both Owner Occupied and Rented, Sorted by Type in Relation to Number of Bedrooms, 2001-2013

The increase in large units, predominantly four or more bedrooms, and a decrease in the number of small dwellings may be having an impact on the demand for social housing.

The Social Housing Market

The different housing types are described in the table below. This section refers to social housing as described in the table under housing type "social".

Table 4-2: Housing Type Description

Housing Type	Description
Social	Specifically refers to housing provided by government and third sector not-for-profit organisations, which offer long-term tenancy to those low income groups facing housing affordability constraints and with special housing need. These social housing landlords may be supportive landlords, but they are essentially accommodation providers.
Supported	Provided by third sector not-for-profit organisations for those with special housing need. In addition to its landlord role the provider may also deliver a range of services to the tenant some of which will be to assist the tenant to maintain their tenancy, while others will address more specifically the special needs of the individual be they driven by mental illness, reintegration into the community in the case of released prisoners etc. Supported housing can be delivered either to individuals in say one-bedroom dwellings or to individuals living with others in larger dwellings
Transitional	Social housing for those with special housing needs, but generally with a short to medium-term period. It has fewer supports than supported housing and is viewed as a mid-way step between supported housing and/or social housing or private renting
Emergency	Available to meet a specific and immediate need. It is short term and will essentially meet the shelter requirements of those who are homeless. There may be some level of support offered

The social housing sector accounts for approximately 20% of the total rental market in Christchurch. The table below presents a summary of the social housing stock in Christchurch.

Table 4-3: Social Housing Stock Summary, Christchurch

Provider	Number of units	Percentage
Housing New Zealand/ Kāinga Ora	6272	67 %
Christchurch City Council	1964	21 %
Third Sector (long-term providers)	647	7 %
Transferred / built ŌCHT*	498 (includes 52 new builds)	5%
Total	**9,381**	

- At the time of writing, ŌCHT has a further 161 units in the pipeline for construction by 2021/22 at Brougham St, Coles St and Gowerton Place.

There are 122 social housing units in the neighbouring Councils. Waimakariri District Council owns 112 units of which the majority is 1-bedroom units and provided for pensioners. This number is 7 shy of pre- earthquake numbers. Selwyn District only has three social housing units, all one bedroom.

The social housing stock (excluding third sector) in Christchurch City is predominantly one to three bedrooms.

User Expectations

There are no major anticipated changes to customer expectations other than providing housing options that meet legislative standards and are warm, dry and safe. As in the past, there is a general trend for demand for smaller units (ie 1 bedroom). However, social housing needs cross all demographic groupings and Council is part of meeting need in conjunction with central government and community housing providers. There are no clear targets for Council's direct provision of social housing, this is an area that is dependent on the mix of direct builds vs how Council enables other parties, e.g. Government and Community Housing Providers.

4.1.3 Technology

Constant improvements in building technology enables more affordable construction of homes. Although the initial building costs can be made more affordable, there is a risk of decreased life of components. It is important to look at the cost over the entire life of the building when assessing a new building project.

4.1.4 Economic

The housing market in Christchurch and Canterbury has been subdued in the past few years, as the post-earthquake rebuild process restored housing supply. In 2020 we are now seeing signs of upwards market value movement, particularly since the COVID-19 lockdown Christchurch house values increased on average 5% according to November 2020 Quotable Valuations figures. By contrast, rental prices have in the past few years fallen and plateaued in response to what was very strong growth post-earthquake, but again in more recent months there has been an upward swing in rentals.

Prior to COVID-19 the New Zealand economy was steady with previous growth drivers including construction, migration, housing and tourism either peaking or beginning to wane from peaks.

The table below indicates the performance and trends of the New Zealand economy over the last 12 to 18 months:

Economic Indicator	Period	Rate	Forecast Trend
GDP	June 2020	-2%	↓
CPI	October 2020	1.4%	↔
OCR	October 2020	0.25%	↔
Unemployment Rate	November 2020	5.3%	↑
10 Year Bond Rate	November 2020	Circa 0.89%	↔
Net Migration	August 2020	71,500	↓

4.1.5 Impact of Demand Drivers

The determinants presented in the table below can be grouped together to show the overarching factors affecting the demand for social housing.

Table 4-4: Social Housing Demand Determinants

Total number of homes	Population, migration and household numbers tells us how many homes are needed. As these factors increase, the total demand for housing also increases.
Housing type	Household composition, household location, tenure, disabilities and age tells us what type of housing is required, i.e. number of bedrooms, accessibility, location, etc.
Social housing demand	The number of households with affordability issues/ financial housing stress, which includes income, house prices/rent levels, wealth, employment, educational qualifications, occupational class, deprivation, price elasticity of supply, make up a large part of demand. Apart from affordability, there are other social housing needs, which include homelessness, concealed households, sharing households, insecure tenure, unsuitable accommodation, overcrowding, disabilities, care-leavers and ex-offenders.

The social housing demand driver grouping can be further analysed and broken down into sub-groupings. The drivers of these sub-groupings can be a combination of issues as seen in the table below.

Table 4-5: Social Housing Demand Driver Sub-Groupings

Affordability	Due to affordability alone, i.e. income to housing cost ratio and wealth with the housing cost including both the cost of rentals and owner-occupier accommodation
Homelessness	Due to lack of supply of housing, affordability issues, mental health issues or other health issues or a combination of these factors

Concealed households*	Due to lack of supply of housing, the type of housing available, affordability issues or a combination of these factors
Sharing households**	Due to lack of supply of housing, the type of housing available, affordability issues or a combination of these factors
Insecure tenure	Due to lack of supply of housing, affordability issues, mental health issues or other health issues such as alcohol and drug addiction or a combination of these factors
Unsuitable accommodation	Due to lack of supply of housing, the type of housing available, the condition of the housing stock, physical disabilities (age related or other), affordability issues or a combination of these factors
Overcrowding	Due to lack of supply of housing, the type of housing available, affordability issues or a combination of these factors
Stigma	Difficulties entering (or re-entering) the housing market due to discrimination as a result of stigma caused by, for example, mental disabilities and being an in-care leaver or ex-offender
**family units living with other households which may wish to live separately given the opportunity* ***households living together but who do not share either living room or regular meals together*	

4.2 Demand Forecasts

4.2.1 Historic Demand Changes

Drawing from the paper *A Repeatable Multi-Criteria Decision Model for Social Housing Asset Intervention Decisions" (R. Lundgren 2019),* Christchurch City Council provides around 2,000 social housing units. These have regularly featured in press and public opinion in a somewhat negative light and public debate ensues regarding the warmth and condition of social housing complexes, not just in Christchurch but across New Zealand. Christchurch City Council accounts for 6.5% of the total rental market and 28% of the social housing market in Christchurch.

Furthermore, rents below market levels, a large proportion of deferred maintenance, the presence of asbestos, cold and damp units and numerous issues are now forcing many hard decisions in regards to the Social Housing portfolio. Add to this the impacts of the 2010/11 earthquakes which have reduced the number of units available for tenants.

As council no longer provides tenancy management (outsourced to the Ōtautahi Community Housing Trust) it is difficult to assess the impact of the utilisation of the assets in relation to occupancy rate. Council solely holds units in order to accommodate maintenance and repairs and this is believed to be on a level that maximises utilisation

Refer to 4.1.2 for data on current numbers of social housing units in the Greater Christchurch area. In 2016 it was assessed that Social Housing provision in Greater Christchurch was 550 units short of demand, with growth in this unmet demand expected in coming years.

Table 4-6: Projected Growth in Social Housing Need in Christchurch

Year	Supply	Unmet Demand
2016	8,232	*550*
2021	8,232	*590*
2026	8,232	*630*
2031	8,232	*677*

4.2.2 Forecast Future Demand

From June 2019 to June 2020 the Ministry of Social Development recorded a 50.4% increase in the number of applicants for Social Housing across New Zealand, which now total 18,520 as at June 2020. In Christchurch the growth is less dramatic where the public housing register grew from 721 in March 2018 to 989 in March 2020. This does represent a significant spike well above historic trends, and if it verifies as a longer term trend then the pressure on waitlists for social housing will become extreme across all providers.

Demand and New Builds

Demand for public housing in New Zealand is growing (see Figure). The Housing Register shows applicants not currently in public housing who have been assessed as eligible, and who are ready to be matched to a suitable property. Nearly one thousand of those on the register were in Christchurch City. Council has also reviewed other modelling, and established a potential demand for 1500 additional units in Christchurch by 2030. Traditionally Council and the community sector have met a third of this demand.

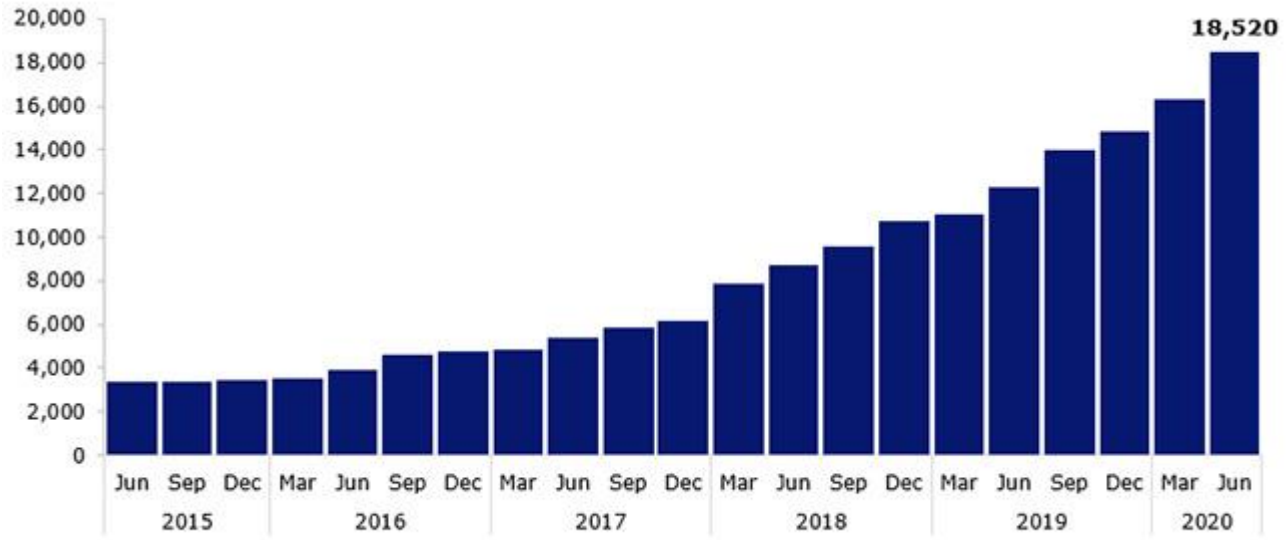


Figure 4-3: Ministry of Social Development Housing Register at 30 June 2020 (Source: www.msd.govt.nz)

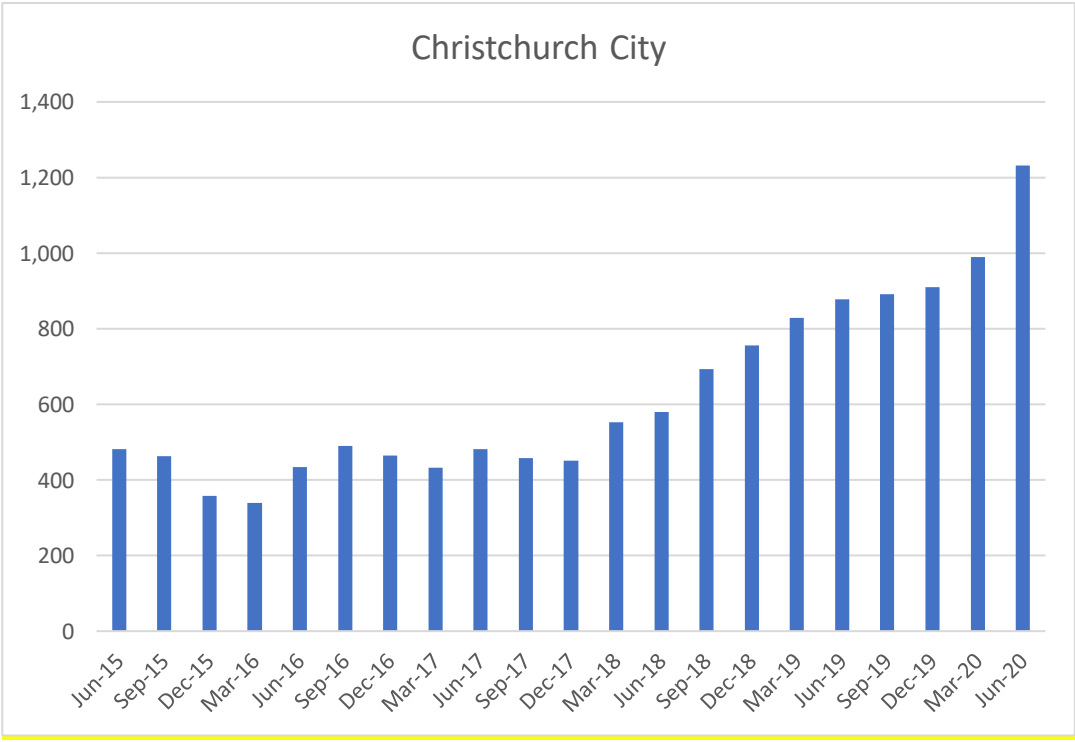


Figure 4-4- Ministry of Social Development Housing Register for Christchurch City at 30 June 2020 (Source: www.msd.govt.nz)

At present Council is not able to contribute directly to meeting this demand. It has, however, been able to indirectly contribute through financing developments by the Ōtautahi Community Housing Trust.

Considering current assets are fully utilised new units are required in order to meet the increasing demand for social housing. Three options in regards to the increasing demand are presented below.

Table 4-7: Impact of Meeting Demand

Option 1	**Council portfolio numbers remain constant**
Cost	**No added costs**

The graphs below shows Option 1 effect on the social housing fund over a 75-year period.

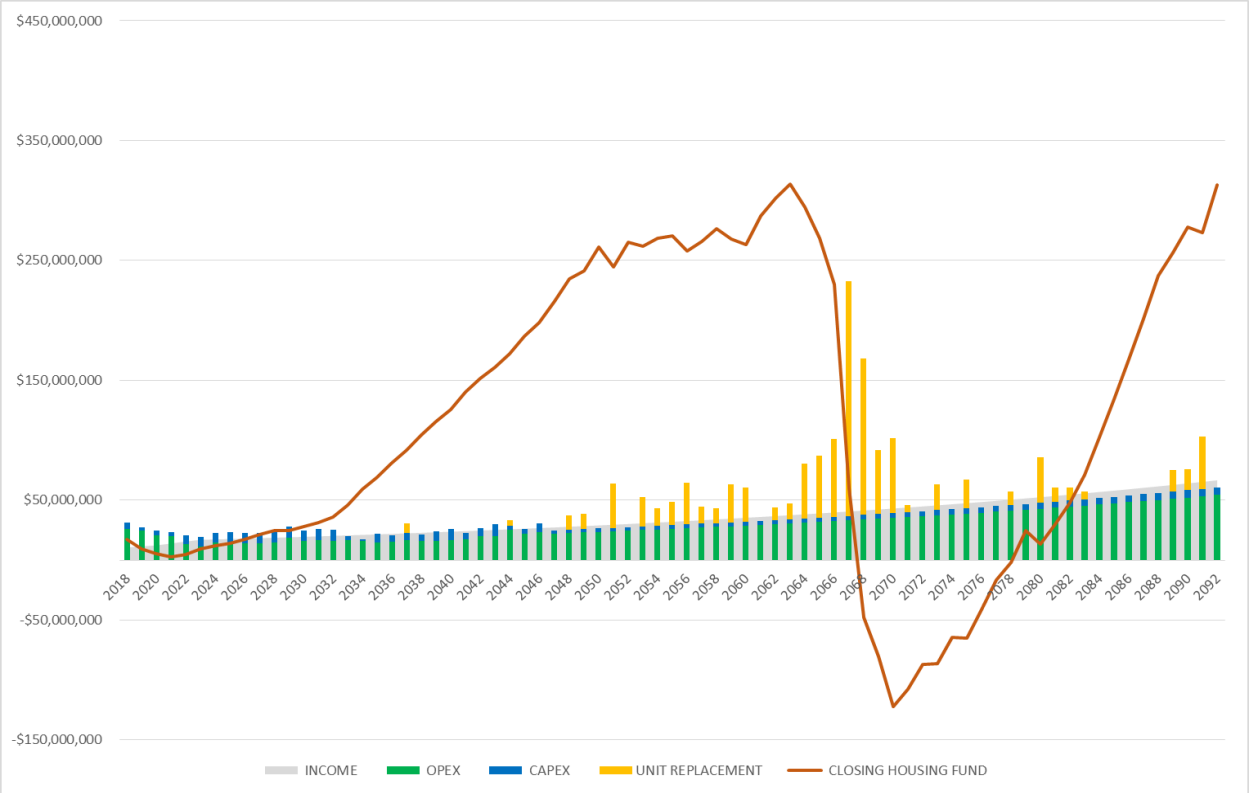


Figure 4-5: Housing Fund- steady state unit numbers

The deficit in 2070 is small enough to be able to be managed through capital smoothing – i.e. spreading the large rebuild programme over a longer period, thus ensuring the long-term financial sustainability of the social housing fund. In order to keep the social housing fund financially sustainable option 1 is preferred until further analysis can be made about income as well as demand.

Option 2	Half of the unmet demand is met by increased Council portfolio numbers
Cost	**$129,466,788 over 9 years (2023 to 2031) Cost of borrowed capital is not included in this cost estimate, however is included in the projections seen below**

Increasing the portfolio with 339 units by 2031 will meet half of the projected unmet demand. A 3-year lead in period is required for planning and scoping. The graphs below shows Option 2 effect on the social housing fund over a 75-year period.

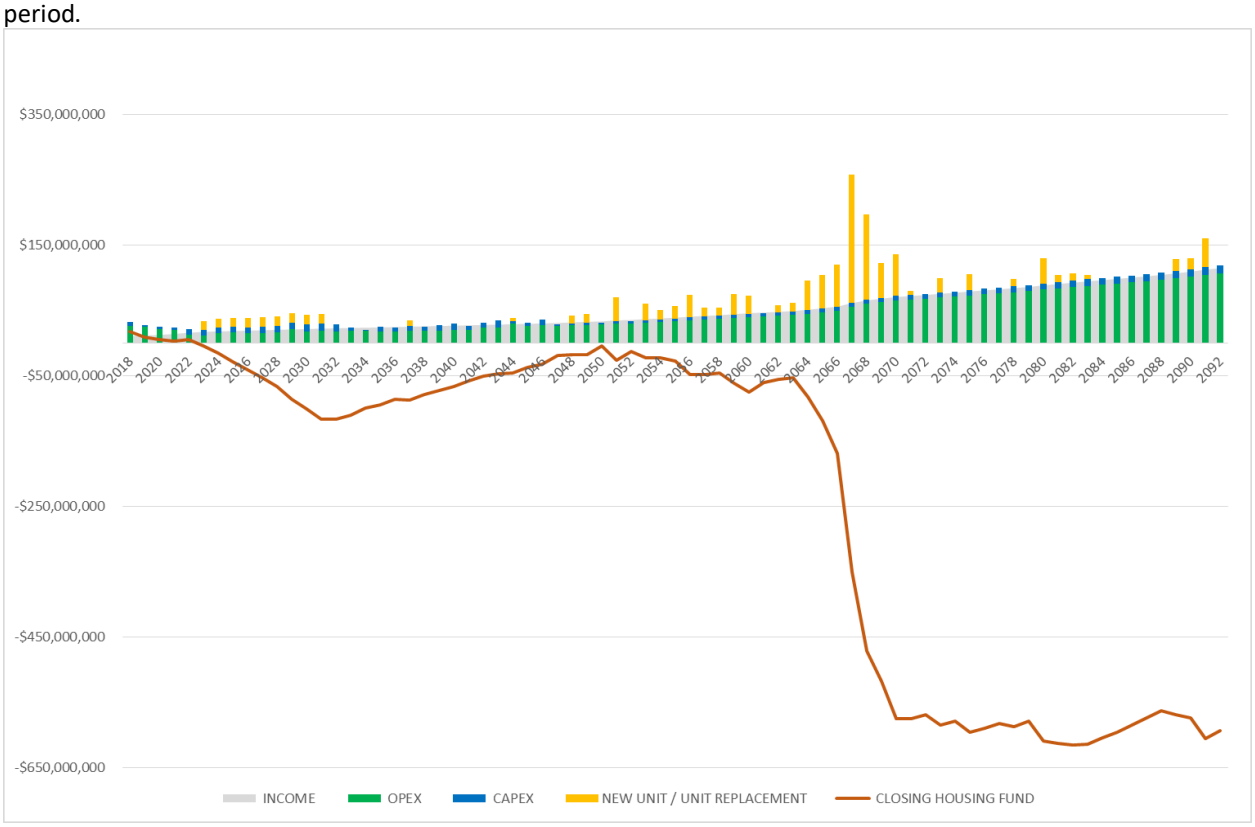


Figure 4-6: Housing Fund- Half unmet demand built

The social housing fund would run a deficit between 2023 onwards. The likely outcome of building 339 new units to add to the portfolio will be that 694 units will not be rebuilt at the end of their life in order to avoid long-term deficit of the fund. This would lead to a reduction in total number of units in the social housing portfolio by 355 units by year 2064. This option is therefore not recommended.

Option 3	All unmet demand is met by increased Council portfolio numbers
Cost	**$258,520,431 over 9 years (2023 to 2031) Cost of borrowed capital is not included in this cost estimate, however is included in the projections seen below**

Increasing the portfolio with 677 units by 2031 will meet the entirety of the projected unmet demand. A 3-year lead in period is required for planning and scoping. The graphs below shows Option 3 effect on the social housing fund over a 75-year period.

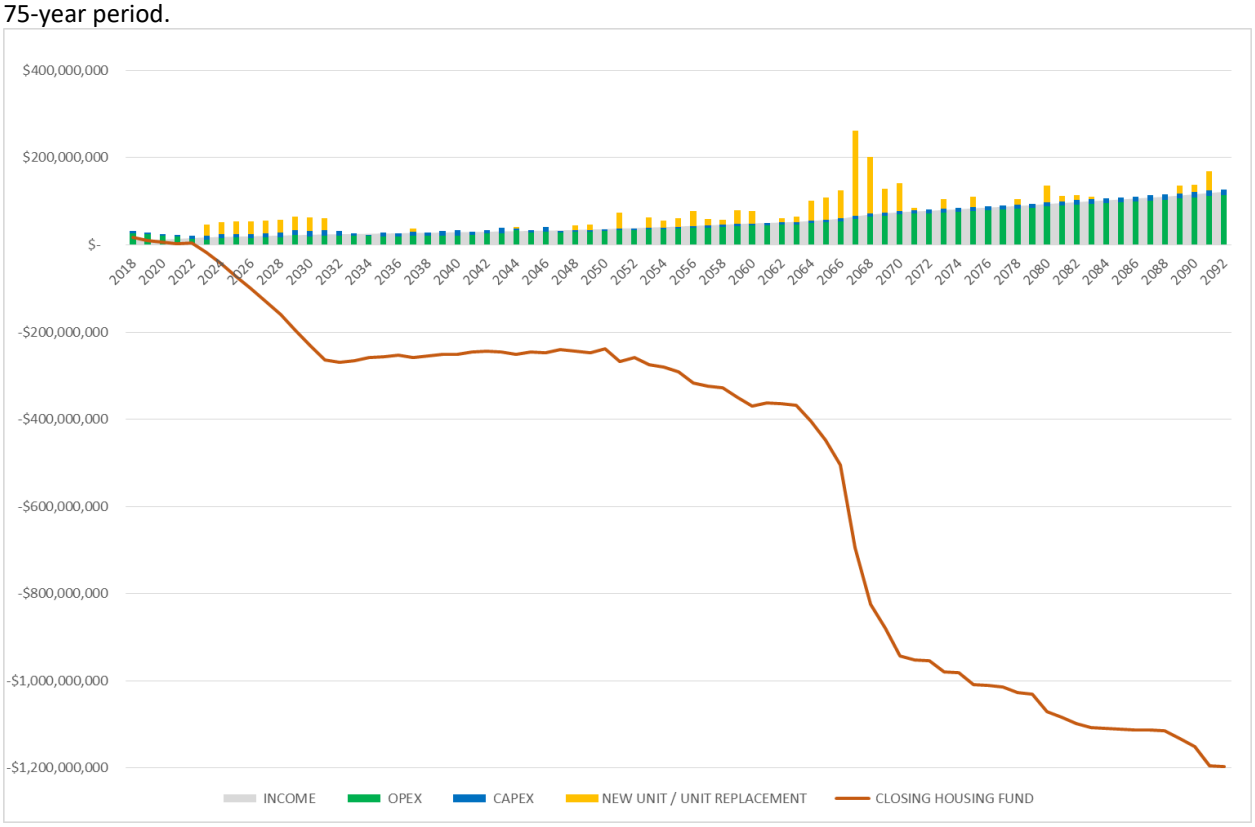


Figure 4-7: Housing Fund- All unmet demand built

The social housing fund would run a deficit from year 2022 onwards. The likely outcome of building 677 new units to add to the portfolio will be that 1,973 units will not be rebuilt at the end of their life in order to avoid long-term deficit of the fund. This would lead to a reduction in total number of units in the social housing portfolio by 1,238 units in year 2067 and is therefore not recommended.

In the past 3 years Council has transferred assets, land and cash to the ŌCHT in order to enable the ŌCHT to enter into developments of their own. This programme has enabled the ŌCHT to commit to a building programme of their own and is now seen as the preferred path for meeting the objective of growing social housing stock across Christchurch back to pre-earthquake numbers, and then into growth.

4.3 Impact of Changing Demand on Existing Assets

Any change in demand, as potentially indicated by the surge outlined in the previous section, could have an impact on the level of service and condition of each asset involved, potentially leading to differing maintenance requirements and/or the need for non-asset solutions.

Social housing provision is a jointly delivered by central government, local authorities and third sector organisations. Demand is increasing across New Zealand as indicated in this chapter and a multi-agency approach is needed to meet this demand.

4.4 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of assets, and providing new assets to meet demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures. In the case of social housing it also involves working with and enabling other social housing providers.

Demand management initiatives may increase or decrease the demand for a Council service. This could have an impact on the need for assets and their management. Demand management is activities that are undertaken by the activity provider (Council) to alter demand. It is not related to external factors that influence demand – these are the demand drivers, discussed earlier in Section 4.1.

In many instances demand management is understood to be trying to limit the need for a service. However, demand for a service can also be increased by initiatives undertaken.

Demand management (or non-asset solutions) aims to influence demand rather than responding to it through creation of new or improved assets. It can involve four components – demand substitution, incentives, restrictions, and education.

Housing demand management is mostly targeted at those whose housing need is caused by affordability issues. Housing demand management largely requires a Central Government solution. It is important when looking at demand management solutions to know who will benefit from the expenditure and what effect it will have. Expenditure can be in the form of capital outlays, benefits, tax exemptions, etc. Indirect assistance, for example tax benefits, assists those who need it least and is poorly targeted.

Any scheme targeted at increasing the aggregated income needs to consider that an increase in overall income can leave those on benefits or low incomes worse off. One might assume that an increase in income will lead to less people in need, but this may not be true. This is especially so for regions with supply constraints or where supply is not keeping up with demand. When demand rises in these regions the prices increase and so the people in need may actually be no better off, or be worse off, than they were before the rise in income.

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions, including:

- Altering demand for the service
- Altering the level of service (allowing some assets to deteriorate beyond current service levels) or
- Educating customers to accept appropriate asset failures.

There are many other varieties of demand management solution options for housing. Many of these solutions are central government led schemes and can include:

- Tax related solutions,
- First-home owner grants
- Private rental support programmes
- Rent assistance (accommodation supplement)
- Advisory.

An example of a solution that can be carried out by local government is housing accords, where local government collaborates with central government and possible other organisations to achieve housing outcomes. Another example is a rates rebate scheme where low-income ratepayers may qualify for a rates rebate in order to lower their total cost of housing.

4.5 Growth Related Projects and Programmes

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the Council. New assets constructed/acquired by the Council are discussed in Section 5. The cumulative value of new contributed and constructed assets are summarised in Table4-7.

Table 4-8: Growth Related Projects

Major Initiatives to meet growth	Project Driver	Capex ($)	Opex ($)
New Build Programme	Consideration of Council led new builds to move portfolio to pre earthquake numbers across the next 10 years. This includes new builds associated with developments enabled at the ŌCHT	$130M (including those built since 2019 between ŌCHT and Council)	Ongoing on a pro rata basis based on numbers of units total
Hard Decisions programme	Functional obsolescence and inability to meet healthy homes standards in a cost effective manner for some complexes- may allow for intensification of some sites	To be assessed	To be assessed

Acquiring these new assets may commit the Council to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs both above in this section, and in the financial section.

5 Managing Risk and Investing in Resilience

This section outlines 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 resilience City. All 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 of 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

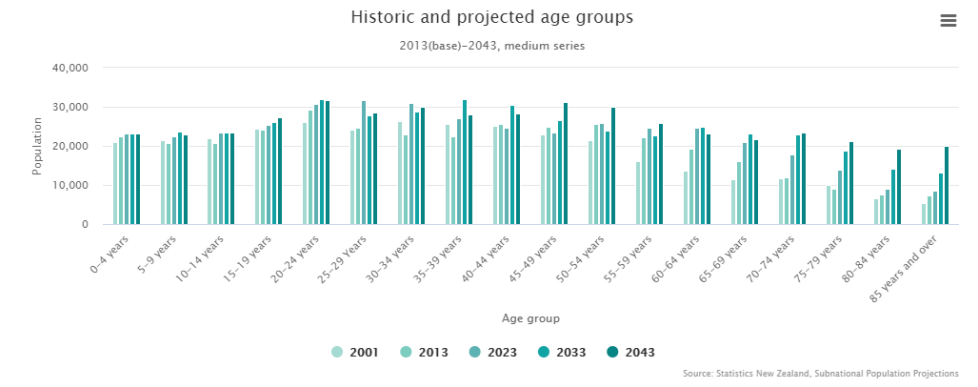
5.2.1 Understanding our Resilience Challenges

Appendix 1.6 of the SAMP detailed the 'shocks and stresses' (disruptors) that provide resilience challenges for Christchurch.

Below Table 5-1 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 levels** Sea level rises could affect coastal assets. Some coastal assets may have to be self-insured and coastal assets will be vulnerable to coastal hazards such as coastal erosion and flooding. Reference 2017 Coastal Hazard Assessment for Christchurch and Banks Peninsula (Tonkin & Taylor) 50 and 100-year scenarios. Sea level rises could affect coastal assets. Some coastal assets may incur increased insurance premiums or even the retreat of insurance provision, requiring Council to self-insure some assets. Increased construction costs to reengineer assets and their surrounds in order to adapt to and mitigate climate change effects e.g. flood walls, wetland restoration, pumps. 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. All leading to a potential increase in total build costs. Predicting the outcome of climate change is an uncertain and iterative process, no one model can provide a definitive answer **Weather patterns** Average warmer temperatures could lead to increased demand for air-conditioning to manage these temperature changes. Changing & extreme weather patterns (more frequent strong winds, increased heat, floods & wildfires) may lead to more and sustained weather damage to vulnerable social housing complexes near potential coastal and river inundation areas. This includes several complexes in New Brighton and Sumner areas as outlined below.
	Globalisation	**Population movement** There may be an increased population as it becomes easier and more desirable to relocate to New Zealand for lifestyle reasons. This can lead to pressure on demand for social housing provision across the agencies that provide it. Indirect links also include transport and community networks that utilise community spaces and facilities in respect to their proximity to social housing provision.
	Demographic Changes	**Increased & ethnically diverse population** Immigration rates may lead to an increased and more diverse population, consequently there may be added pressure on current resources to meet demands (space). Ageing population needs differ to younger generation needs, this may become apparent types of housing, and access to community facilities is to be considered. For the ageing population there may be accessibility issues (ramps, handrails, accessible showers, etc.) The number of older people in Christchurch aged over 65 years is projected to more than double between 2013 and 2043, increasing from 52,100 to 105,700. Meanwhile, as a proportion of the total population, the 65 years and over age group will increase from 15% to 23%.

		 **Figure 5-1: Age Profile Christchurch residents**
	Population Health	Ageing populations and changes to health, mobility and life expectancy is expected to lead to more older persons seeking support. Given current population growth trends this will continue to add stress to the current situation of high demand for social housing. Elderly people may not be able to drive, nor be physically capable of using a bus and find it hard to overcome these health challenges. 1 in 5 elderly in NZ describe themselves as lonely. Social isolation loneliness can make many health conditions worse, including pain depression, anxiety and respiratory conditions. Elderly persons needs include accessibility, warmth, lighting, clean accessible toilets, safe, and mobility- all factors for the design process.
	Housing and Social Inequity	Home ownership rates have been falling across NZ and with projected aging population and a rise in people paying mortgage debt of at later stages of life the is expected to be increased pressure in relation to housing access and social inequality. Lower income groups tend to be directed into lower quality housing, and have inferior health. Well insulated and warm homes are now an expectation in line with legislation and standards for all homes in NZ- something that is reflected in current social housing works prioritisations.
Acute Shocks	**Seismicity**	**Alpine fault** Our primary seismic threat is the Alpine Fault, which extends down the spine of the South Island with experts believing there is roughly a 30% to 65% chance there could be a magnitude 8 earthquake on this fault in the next 50 years. **Protection** Due to Canterbury earthquakes, Council assets have been inspected by engineers and necessary strengthening undertaken and / or new builds built to current earthquake specifications.
	Tsunami	**Exposure** Canterbury's low lying and flat areas make the region exposed to tsunami threats. Various coastal zones have been identified as potentially affected by a tsunami. Complexes owned by Council and assessed as in the zones include Bridgewater Courts, G F Allan Courts, Nayland St, Aberfoyle Courts, Knightsbridge Lane, Mackenzie Courts, Thurso Place, St John Courts, William Massey Courts, Jura Courts, Roimata Place, Aldwins Courts, Sandilands, Lyn Christie, Gayhurst Rd, Maurice Hayes Pl, and Biddick Courts.
	Flooding	Flooding is the most common hazard to affect Canterbury communities and becoming increasingly more exposed and vulnerable. Localised surface flooding after rainfall events has been elevated post-earthquakes due to ground subsidence. **High Flood Hazard Management Area** means an area subject to inundation events where the water depth (metres) x velocity (metres per second) is greater than or equal to 1, or where depths are greater than 1 metre, in a 0.2% AEP (1 in 500-year) flood event (as identified in the Canterbury Regional Policy Statement, Chapter 11). As at November 2020 there are no Council owned social housing complexes assessed as in the High Flood Hazard Management

		Area (HFHMA), although it is noted that Louisson Place and Avonheath Courts (transferred to ŌCHT) are in the HFHMA **Flood Management Area** means an area identified on the Council planning maps which is at risk of flooding in a major flood event, where specific minimum floor level rules and earthworks rules apply. 30 Social Housing complexes owned by Council and assessed as in the Flood Management Area (FMA), primarily being located in the south and east sides of Christchurch, but also encroaching into northern sites in some areas. Planning rules affecting these areas are specific to sites and the District Plan should be consulted before any construction works are undertaken at these complexes.

5.2.2 Resilient Projects or Activities in this Plan

The following 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.

Table 5-2: Post Earthquake Asset Strengthening

Project Description	Post-earthquake strengthening. Get all buildings to 67% of NBS. Engineering inspections and reports undertaken to highlight any structural concerns, suggest remediation's, and undertake works.
Scope and Expected Impact	Engineering inspections, review of structural design – strengthening. The Detailed Engineering Evaluation (DEE) reports provided a detailed picture of a building's structure, 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. DEE's were prepared after the Canterbury Earthquakes for all affected social housing complexes which aided open/ close and repair strategy responses.
The Case for Change	A detailed structural engineering review and analysis on each complex. Validation of structural building strength across the social housing portfolio.
The Resilience Dividend	Provides recommendations and other opportunities for improvement, which focuses Council direction, and provide for efficiencies and increased effectiveness of service provision. Obtain and store relevant asset data. Invest in maintaining older assets and in hub – style facilities thus adding to financial resilience. Aligns with Councils Liveable City strategic direction, to provide sufficient supply, and access to, a range of housing.
Further Opportunities	Undertake localised independent feasibility studies for new housing complexes, or redevelopment or decommissioning of existing complexes.

Table 5-3: Advancement of Asset Data

Project Description	Advance the capture of asset information
Scope and Expected Impact	Initiate the capture 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, timeliness, and consistency in decision-making. Reducing risks. Better capital investment decisions.
Further Opportunities	Continued investment in data capture, storage and manipulation.

Table 5-4: Technology Advancement – Geospatial and BIM

Project Description	Increased use of technology especially geospatial solutions to capture, measure, analyse, monitor, and share built and environmental information to help accomplish resiliency goals and objectives. More effective use of BIM data to undertake asset assessment, decision making, operational efficiencies, disaster recovery/business continuity.
Scope and Expected Impact	Use of Council geospatial data to more effectively and efficiently manage Social Housing assets; for eg the project initiating the monitoring of sensors at various locations to provide real time seismic data on Earthquake strength - these can be viewed spatially against all Council assets.
The Case for Change	Allow quicker information as to potential damage to social housing complexes – which can be used. Helps assess which areas may have incurred increased asset damage.
The Resilience Dividend	More effective scheduling of asset maintenance and replacement, accurately forecasting opex and capex, energy use and building performance, managing hazards and disaster recovery, maintaining and updating records – more effective strategic planning.
Further Opportunities	Continuation of expansion of the use of technology to advance asset management pursuits. Look at the feasibility of retrospective generation of BIM files on existing council assets.

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 LTP's and are summarised in Table 5-5.

Table 5-5: Opportunities to Improve Resilience

Disruptor	Opportunities	Timeframe	Resources
An aging asset base, with 50% exceeding 40-50 years of age and at the point where midlife refurbishments are expected.	Better understand our assets by way of regular asset condition assessment and accurate data collection and analysis.	In time for establishing more accurate repairs maintenance and capital budgets moving forward.	Funding required for an internal or external resource for data collection. Confirmation of systems to allow for holding and reporting on asset data.
Additional financial investment required in assets to alleviate post-earthquake and mid life repairs/ renewals and to continue to keep an aging asset base from functional obsolescence	Optimisation work and complex prioritisations allow for the best investment of limited funds.	Site inspections 2020 informing maintenance and capital budgeting for the 2021-31 LTP.	Funding required for an internal or external resource for data collection. Confirmation of systems to allow for holding and reporting on asset data.

5.3 Managing Risks

Council's approach to managing risk is detailed in its Risk Management Policy (including a risk assessment framework) which is summarised in Appendix 1.6 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 Council is managing. The Council risk framework sets out the levels at which residual risks are escalated, reported and governed.

The strategic risks identified in relation to this activity include:

Table 5-6: Strategic Risks for this Activity

Description of Risk	Risk Rating
Insufficient funding available to cover commitments.	HIGH
The condition of many facilities is progressively deteriorating.	HIGH
Community expectation on the quality and quantity of asset and service provision of post-quake is unrealistic.	HIGH
User data collected is insufficiently accurate and complete to inform the management of the network	MEDIUM
Unpredicted increase in the cost of capital projects renders them un affordable.	MEDIUM

5.3.2 Asset Risks

The Social Housing unit also identifies and records risks at a more detailed level, as shown in Table 5-7 on the following page.

Table 5-7: High and very high inherent risk items

ID	Risk Description	Inherent rating	Treatments in place (today)	Residual rating
1	**Asset Failure** There is a risk that social housing assets will fail. Caused by the Council's inability to fund repairs, upgrades and replacements. This may result in people being harmed, displaced, units closed and associated reduction in rent revenue, adverse media and stakeholder scrutiny and levels of service will not be met.	High	Annual property inspections, repair programme, reactive maintenance, planned maintenance scheduled, facilities management contracts, procedures and relationships	Medium
2	**Contamination** There is a risk that tenants, staff and others will come in contact with contaminants. Caused by contaminants in social housing (e.g. asbestos and methamphetamines). This may result in adverse effects to people's long-term health, unit remediation costs or units closed and associated reduction in rent revenue, adverse media and stakeholder scrutiny and levels of service will not be met.	Very High	Property inspections, expanded methamphetamine testing, removal of asbestos, contaminated sites identified and tenants advised of restrictions on use and/or coverings are on the site, staff training, lead testing	Medium
3	**Displacement and damage** There is a risk that tenants will be displaced and properties damaged. Caused by natural or man-made disasters. This may result in unit closures with the associated reduction in rent revenue, additional costs in insurance excesses and levels of service will not be met.	High	Business Continuity Plan, Civil Defence Response plans, relationships with other providers/partnerships/MOUs, staff training	Medium
4	**Breach** There is a risk that a breach of legislative and organisational requirements occurs. Caused by staff action and inaction. This may result in financial and other penalties, and adverse media and stakeholder scrutiny.	High	Housing Team policy and procedures, Human resource policies and procedures, staff training	Low

ID	Risk Description	Inherent rating	Treatments in place (today)	Residual rating
5	**Harm** There is a risk that staff and customers will experience stress and anxiety. Caused by the challenging nature of the team's work. This may result in financial and other legislative penalties, adverse media and stakeholder scrutiny, staff leaving the team with associated business continuity risks and difficulties in attracting replacement staff.	Very High	Housing Team policy and procedures (e.g. Anti-social behaviour, red flags, incident reports, Bodyguard phone app, health and safety training and systems – 2 person visits, health and safety committee plan	Medium
6	**Stress and anxiety** There is a risk that staff and customers will experience stress and anxiety. Caused by the challenging nature of the team's work. This may result in financial and other legislative penalties, staff burnout, and staff leaving with associated business continuity risks, difficulties in attracting replacement staff, adverse media and stakeholder scrutiny and a reduction in levels of service.	High	Communications and engagement with staff and customers, dedicated human resource support for staff, operational transition plan	Medium

5.3.3 Risk Mitigation Strategies

The Council's 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
- take action to eliminate, isolate or minimise each risk

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

Asset Design

Standards in the design and construction of facility 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. IDS for Facilities are currently under development for Facilities following the Facilities Better Business Management project.

New infrastructure installed since the 2010/2011 Canterbury earthquakes is made of modern materials to the latest design standards and therefore has greater resilience to future earthquake damage and potentially other disruption. It should also meet LifeMark standards to best ensure functional obsolescence is not a future issue.

Insurance

All social housing assets are insured under Council's insurance policies.

Business Continuity and Emergency Response Planning

Social Housing has the following draft Business Continuity Plans (BCP) in place:

- Corporate Services Group BCP
- Facilities Property and Planning BCP
- Asset Management Team BCP
- Social Housing BCP *under review
- Facilities Management BCP

Other specific initiatives:

Social Housing should implement options that design for resilience when renewing or constructing new assets. In order to make social housing assets more resilient, they should be designed to be more durable with potential risks in mind (for example, coastal or riverside complexes are likely to have increased risk of flooding due to climate change and sea level rise). Materials and design details should be chosen to minimise risk.

Housing staff carry security apps in the field for quick assistance in the event of a tenant or health and safety related risk.

5.4 Summary of Risk and Resilience Projects

The following risk and resilience improvement projects or activities are included in the AMP programme and budgets.

Table 5-8: Projects for Risk Management

Improvement or Mitigation	Where is this recorded (eg: a CAPEX project or AMP improvement project).	Cost
Facilities IDS project	Continuous improvement plan task	Both CAPEX and OPEX
Risk Register	Continuous development of the risk register	OPEX
Review portfolio with regards to Alpine Fault AF8 readiness	Create options for decreasing risk	Both CAPEX and OPEX
Asset Data project	Continuous improvement plan task	Both CAPEX and OPEX

6 How we Deliver our Services

6.1 Historical Context

Christchurch City was the first local authority in New Zealand to provide social housing. Council started out in the early 1920s providing homes for the elderly. After the First World War, there was an acute housing shortage in Christchurch. In 1921, the Council received a special loan from the State Advances Office to build eight houses on Council land in Huxley Street, Sydenham. Six more were built in 1922.

Although hampered by a lack of funds, in 1935, the Council decided that something further needed to be done about the City's housing shortage. In 1938, a sub-committee recommended that a loan be raised from the State Advances Department to construct 50 old-age pensioners' cottages.

The report was adopted and the first 16 cottages were built on a portion of what was then the waterworks yard in Sydenham. They were built facing Barnett Avenue, a street specifically designed for the new housing complex.

Officially opened in August 1938, Barnett Avenue was the first purpose-built complex for elderly persons' housing (EPH) provided by a local authority in New Zealand. Later, another loan was raised and eight more cottages built on the same site. Another 26 houses were built on Willard Street, at the rear of Addington School, bringing the city's total number of pensioners' cottages to 50.

Social housing grew over the years to provide more housing for Christchurch's elderly residents. The 1970s and 1980s were particularly high-growth years. Some complexes were built on Council-owned land; others were purchased by the Council already built. This growth was encouraged by central government, which offered low-interest loans to City Councils to provide housing.

Central government stopped providing the low-interest loans in the early 1990s. Along with this change, Christchurch City Council acknowledged that there were gaps in the provision of affordable housing for people with disabilities or who were otherwise disadvantaged.

After a 1996 review of housing needs, a formal decision was made to build more flexible accommodation options to meet the community's needs (e.g. units with more bedrooms or facilities for people with physical disabilities).

Faced with a large rental increase in order to make the portfolio sustainable, Council began looking at options for reaching financial sustainability. A series of options were considered, the preferred option being the creation of a Community Housing Provider Trust (CHP), which would lease units from Council and lead the tenancy management. The main advantage of this option was the ability to qualifying for IRRS, which Councils are currently not eligible for. Ōtautahi Community Housing Trust (ŌCHT) began leasing the majority of Council's housing portfolio in October 2016.

The Trust is responsible for tenancy management, rent-setting and the day-to-day maintenance of units (since 1 July 2017), while major repairs and renewals remain the Council's responsibility. Over time, Council's expectations are that the Trust will also continue to develop its own social housing for Christchurch.

During the setup phase, Council approved the use of $50m of social housing assets to capitalise the Trust. Capitalisation will take place through the gifting or "loan" of land, buildings and other social housing assets. While only $5m of the total $50 m is gifted, the remaining $45m worth of properties is effectively no longer controlled by Council, leading to its removal from the level of service.

A number of complexes are no longer operable or functionally obsolete in the portfolio. These include Sandilands, Cecil Courts and Carey Street. These units are at or well past mid- life and on assessment of their condition it was considered uneconomical to repair to the required standards due to long term deferred maintenance, earthquake damage, asbestos and legislative requirements.

In order to run the social housing portfolio Council maintains a social housing fund. All social housing lease payments (base rents) are paid into, and all costs are met from, the fund. Financial modelling shows that over the long term, Council's goal, and the level of services derived from this, can be met if the Social Housing Fund is only used for operations, maintenance, renewals and upgrades. The fund currently contains insurance claim proceeds, which distort the underlying position. These proceeds will be spent after the planned completion of earthquake repairs. The underlying position would have the target at risk, however external modelling shows an improvement as the impacts of the change in delivery model take effect.

6.2 Internal Business Structure

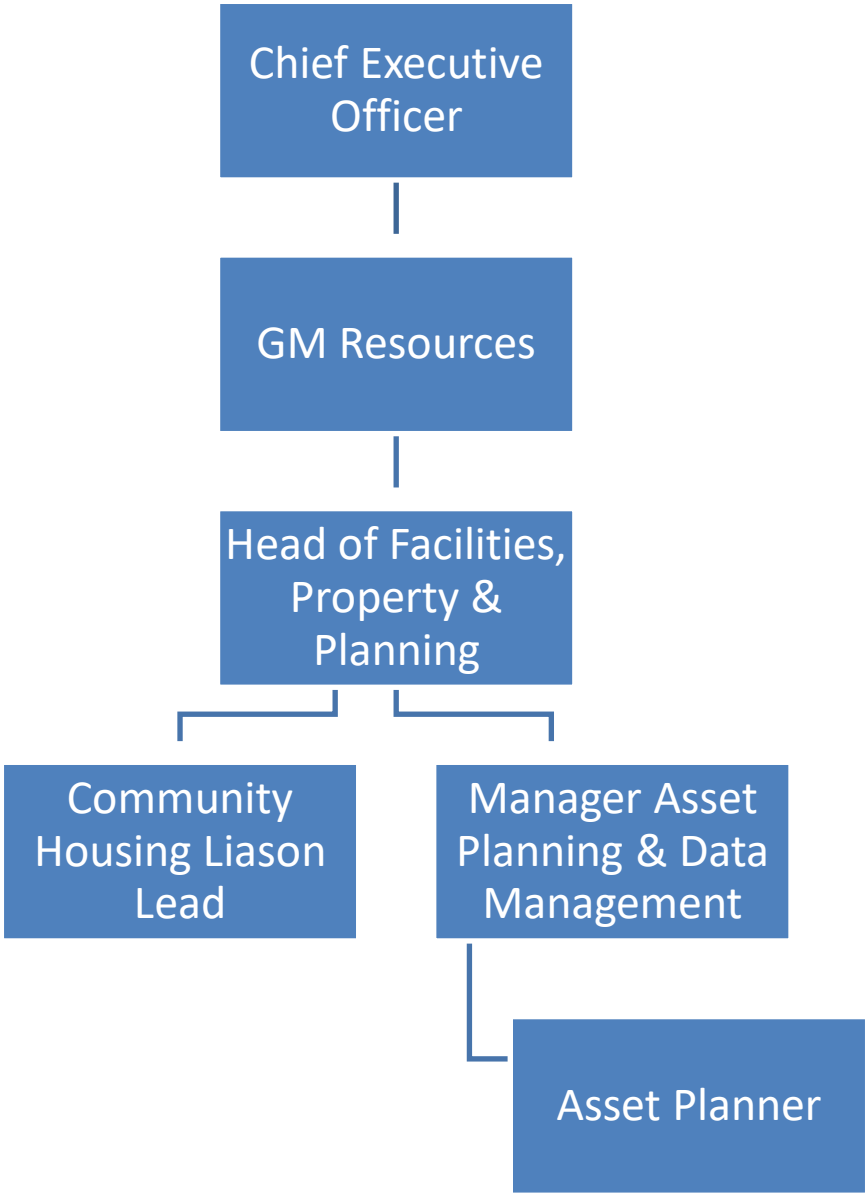


Figure 6-1: Internal Business Structure

Figure 6-2: Stakeholders and organisation structure

6.3 External Contracts and Partners

Council engages a number of contractors to help deliver social housing services. The use of external services takes advantage of provider economies of scale, cost control, area expertise, and breadth of experience.

The development and relationship with the Ōtautahi Community Housing Trust (ŌCHT) is outlined in Figure 6.2 and 6.3. The ŌCHT is the primary lead for property management and minor maintenance, and a number of initiatives have been developed to support this function, ranging from access to the IRRS to straight out asset transfer. A lease sits between Council and the CHP, with the CHP paying rent in order to have access to 'fit for purpose' social housing units. The rent paid is required to be at a certain level in order for the portfolio to be financially sustainable. This means the CHP will need to maximise IRRS uptake and set financially sustainable rent levels. Council will use the revenue from the CHP to provide fit for purpose units, providing there is sufficient revenue to do so. Some improvement tasks are required that will ensure greater financial efficiency of maintenance, as well as management of the portfolio as a whole. A key to this is collection of sufficient asset and condition data in order to develop works programmes and identity prioritisations in contract management.

The relationship between Council and the ŌCHT is outlined in the following diagram:

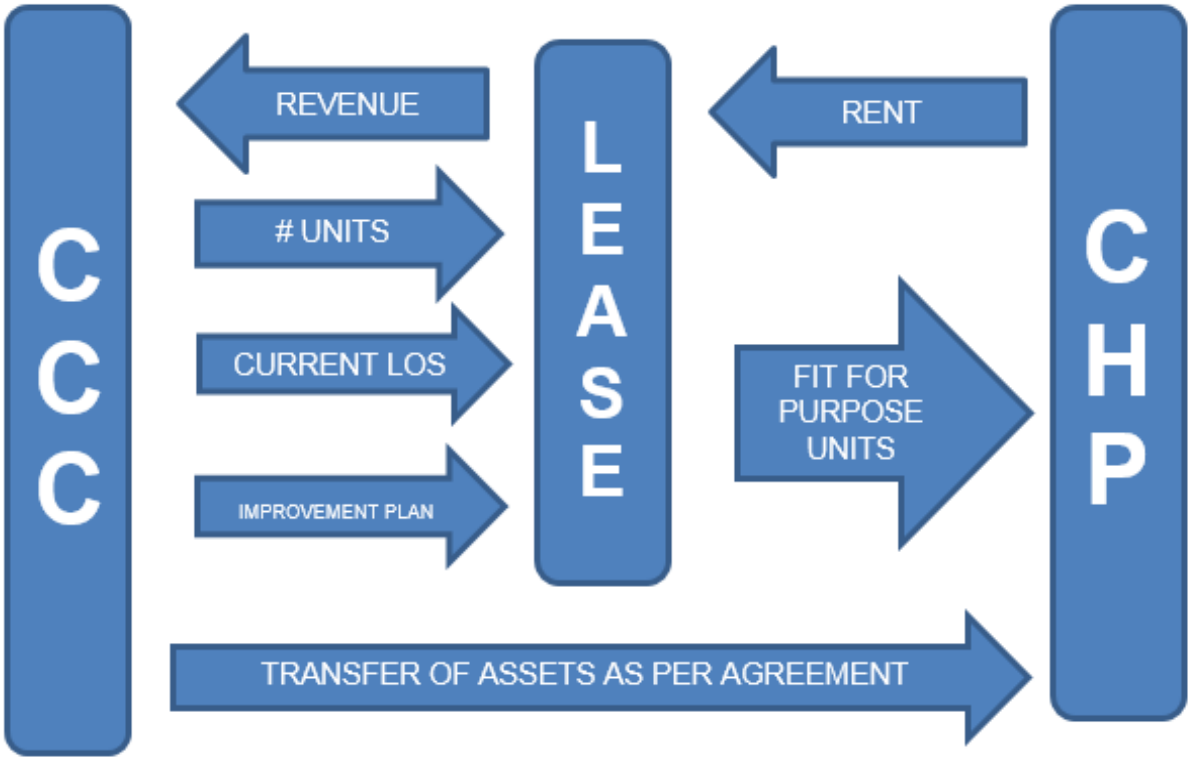


Figure 6-3: Council/ ŌCHT Lease

The Social Housing Team also maintains a relationship through the Facilities Maintenance Contract with City Care to provide asset related maintenance, including exterior painting, roof and spouting replacements and projects to refurbish or improve the warmth, safety and functionality of the social housing portfolio. The current maintenance contract was renewed in June 2019 for a two-year period plus one at which stage it will be tendered on the open market. The contract includes an element of asset data collection to help facilitate this tender process.

The main contracts are summarised in the following table:

Table 6-1: Major Contracts for Service Delivery

Service Type	Contractor	Type	Contract Management Approach
Planned & Reactive Unplanned expenditure	Citycare	Main Facilities Maintenance service provision. Covers pool water services, electrical, HVAC, plumbing and drainage, carpentry. Citycare undertake work internally or use nominated sub-contractors.	The contract contains a lump sum per annum, a schedule of rates for reactive works and a mechanism for providing quotes for planned works.
Scheduled maintenance programme (SMP)	Citycare	Includes clearing guttering, wash-downs, BWOF and HVAC checks. Safety inspections carried out as part of contractual obligations and further as requested.	Annually priced to a specific scope of works, regularly undertaken, scheduled maintenance works.

Reactive maintenance and repair work, Minor Capital works	Various Contractors	Ongoing	Fixed pricing or job estimates where appropriate or labour and materials basis.
Major Capital Works - Renewals/New work of a high cost or specialised nature.	Various Contractors	Ongoing	Contracts initiated predominantly by way of Competitive tender for large scale renewal and new projects as per the capital programme. In some instances a negotiated contract is adopted. Mostly managed by Council's Capital Delivery Team.
Security Services	VIP/ADT Armourguard		Security lockup, alarm monitoring and patrols
Building automation and energy management solutions	Setpoint		
Commercial Cleaning	OCS		
Building IQP Inspections	Plant & Building Safety		An independent inspection body holding IQP (Independent Qualified Person) certification for inspection of all systems under the Building Act and building regulatory systems.

6.4 Other Service Delivery Partners

Government agencies (Housing New Zealand and Ministry of Social Development) are the primary provision and enabling of social housing in New Zealand. A number of community trusts (other than the ŌCHT outlined in Section 6.3), several charities, and other agencies are also involved at varying degrees of scale in the social housing sector. Council has active partnership arrangements with several, as is outlined below:

Table 6-2: Partnerships

Service Delivery Agency	Role
Housing New Zealand	Central Government provider of social housing
Ministry of Social Development	Tenancy selection and welfare
Ka Wahine	Partnership housing
YWCA	Partnership housing

Service Delivery Agency	Role
South Baptist Church	Partnership housing (Lancewood)
Home and Family	Partnership housing
Various NGO's	Other social housing providers

Business Reviews Undertaken

- **Activity Management Plan (Act MP)** the Act MP summarises key information about each of Councils Activities for the upcoming 10 year LTP period as required by the Local Government Act 2002 (LGA). Aspects of the plan are described or referenced in this section
- **Community Housing Strategy 2020-2030** Currently under review
- **Facilities Better Business Management Project-** undertaken to review and define asset management data structures, define business rules for asset and condition information and advance the asset management maturity in terms of data management, analysis and reporting. Implementation of outcomes is now underway.

6.5 Significant changes planned for the activity

As described in the sections above work is underway in several areas to explore how Council can both improve the condition and supply of its own social housing complexes, as well as to enable creation of additional social housing in the wider sector. Significant changes are thus focussed in areas led by parties outside the scope of this AMP.

7 Portfolio Lifecycle Management Plan

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

For quality decisions to be made the condition of the asset must be well known and clearly documented. This area has been identified as needing improvement over the past 2 years. The Facilities Better Business Management project (FBBM) delivered an agreed system structure, hierarchy and set of defined business rules. An implementation project is now is underway to help increase the data confidence of Christchurch facilities by collecting asset and condition information against the agreed post FBBM structures. The next step is to use business tools that can interpret and manipulate data in order to support asset planning maturity.

7.1 Social Housing Assets

As at June 2021 Council is the owner of 84 Social Housing complexes, totalling 1944 units. Council is also in several partnership arrangements with third party organisations which provides 28 of these units as outlined at the end of the following table.

Table 7-1: Complexes owned by Council as at June 2021

Complex	Total Number of Units
Aberfoyle Courts	14
Airedale Courts	74
Aldwins Courts	15
Allison Courts	9
Andrews Crescent	36
Angus Courts	22
Aorangi Courts	26
Bartlett Street	9
Berwick Courts	15
Biddick Courts	16
Boyd Cottages	4
Bridgewater Courts	23
Briggs Row	4
Bruce Terrace Cottages	5
Bryndwr Courts	32
Carey Street	32
Cedar Park	20
Cleland Street	7
Clent Lane	36
Collett Court	6
Division Street	24
Dover Courts	26
Feast Place	29
Fletcher Place	68
Forfar Courts	24
Fred Price Courts	35
Gayhurst Road	4

Complex	Total Number of Units
GF Allan	7
Gloucester Courts	20
Greenhurst Courts	22
Guise Lane Courts	21
HP Smith Courts	23
Haast Courts	33
Hadfield Courts	21
Halswell Courts	15
Harman Courts	78
Harold Denton Place	20
Hennessy Place	16
Hillier Place - Andrews	1
Hornby Courts	22
Huggins Place	30
Innes Courts	38
Jennifer Manor Torquay	14
Jura Courts	28
Kaumatua Place	10
Knightsbridge Lane	25
Lyn Christie Place	30
MacGibbon Place	36
MacKenzie Courts	24
Manse Place	42
Margaret Murray Courts	18
Martindales Road	15
Marwick Place	26
Mary McLean Place	40
Maurice Carter Courts	51
Mooray Avenue	6
Nayland Street	5
Nelson Street / Picton Ave	16
Norman Kirk Courts	60
Osborne St	8
Palliser Place	24
Phillipstown Courts	16
Pickering Courts	25
Poulton Courts	12
Proctor Street	5
Reg Adams Courts	14
Regal Courts	20
Resolution Courts	19
Roimata Place	24
Rue Viard Cottages	3
Sandilands	24
St Johns Court	13

Complex	Total Number of Units
Thurso Place	4
Tommy Taylor Courts	25
Torrens Road	28
Treddinick Place	6
Tyrone Street	12
Veronica Place	36
Vincent Courts	18
Walsall Street	26
Waltham Courts	26
Weaver Courts	35
Whakahoa Village	20
William Massey Courts	14
Wycola Courts	30
Subtotal	***1916***
Ka Wahine/McGregors Rd	2
YWCA	9
Lancewood	11
Home & Family	1
Aldwins Courts - O/O	4
Perth Street/HP Smith O/O	1
Total	**1944**

Since the 2018 AMP the following complexes have transferred ownership to the ŌCHT (or other) and are no longer included in this AMP

Complexes and Red Zone Transferred to ŌCHT (or other) as at June 2021

Table 7-2: Complexes and Red Zone transferred to ŌCHT (or other) as at June 2021

Complex	Date of Transferee	Title/ Units
Airedale Courts (A & B)	29-Apr-19	Land
Alma Place	1-Mar-19	24
Arran Courts	1-Mar-19	14
Avonheath Courts	1-Mar-19	6
Barnett Ave	30-Jun-20	26
Brougham Village	22-Mar-19	4
Coles Place	1-Mar-19	20
Cecil Courts (to other)	19 Jan-21	20
Concord Place	30-Oct-19	52
Elm Grove	1-Aug-19	7
Guthrey Courts	1-Mar-19	32
Glue Place/Sparks Road	26-Nov-19	35
Gowerton Place	26-Nov-19	30
Halswell Red Zone	1-Mar-19	Land

Complex	Date of Transferee	Title/ Units
Hillsborough Red Zone	1-Mar-19	Land
Jecks Place	1-Aug-19	52
Mabel Howard Place	1-Mar-19	59
Maurice Hayes Place	27-Jun-19	19
Northcote Red Zone	1-Mar-19	Land
Papanui Red Zone	1-Mar-19	Land
Raleigh/Newmark Sts	1-Aug-19	12
Reg Stillwell Place	7-Aug-19	6
Templeton Courts	1-Aug-19	4
Thames Street (to other)	22-Nov-19	10
Willard Street	1-Aug-19	26
TOTAL		**458**

Social Housing decisions are made on a regular basis in relation to the current condition, age and location of a particular complex or unit. These decisions look at each site and decide if a building or part thereof is to be renewed, replaced, upgraded or disposed of.

7.2 Asset Lifecycle Approach

Council has established a lifecycle management framework, aligned to the *International Infrastructure Management Manual* as illustrated in Figure 7-1.

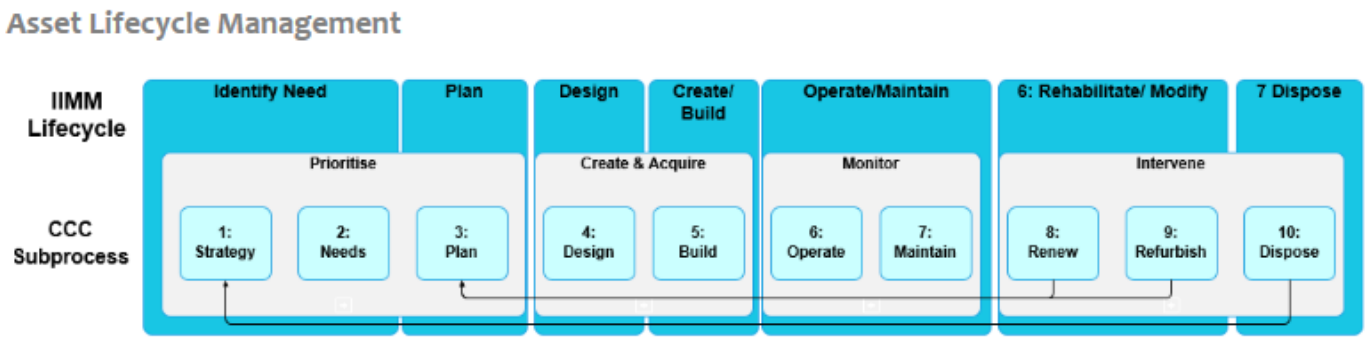


Figure 7-1: Asset Lifecycle Categories

In terms of housing lifecycles in New Zealand, a study by Johnson from 1994 places New Zealand building mortality, an indicator of useful life, at approximately 90 years. Mortality is defined as the age by which 50 % of buildings built at the same time will have been lost, i.e. replaced or demolished. It should be noted that the major factors in dwelling losses are the expansion rate of housing stock, linked to the process of subdivision and associated demolition, and obsolescence, a function of human perception of needs, values and future expectations. With the normal life expectancy of housing stock a complex statistical distribution function, the figure of 90 years can be used as a standard guide[1]. It is this guide of 90 years which forms the basis of replacement projections for units in the cost of consumption model used in the asset management of this portfolio.

A building can be physically, functionally and/or economically obsolete. Physical is the physical decay and deterioration of the building. Functional means the building no longer provides the required housing services, i.e. too large or too small,

[1] Johnstone, I (1994) *The Mortality of New Zealand Housing Stock.* Architectural Science Review, Volume 37, Issue 4

changed family types, and lifestyles. Economic factors include better use of the land that is currently used by buildings. Only half of demolitions are related to physical failure, the rest being re-development of the site for higher housing density, or a single house rebuild to a higher level of amenity.

The components of a building require different maintenance cycles, depending on the condition and materials used. The most common item is painting of surfaces, particularly the exterior in order to protect against deterioration caused by rain and sun. Major components such as roof, wall claddings and windows will need repair or replacement from time to time. These major replacements also presents opportunities to install measures that will improve the sustainable performance of the building.

A so called 'midlife spend' where major maintenance work is carried out is assumed to take place at 30-50 year intervals. The concept is underpinned by the idea that the tenant is moved out for a period of time where the unit/ complex is then taken apart and put back together with modern methodology and materials and is functionally fit-for-purpose for the remainder of its life. This brings together many major components lifecycles (such as roofs, bathrooms, kitchens, windows, etc.). It is beneficial to stretch or compress other adjacent cycles (such as redecoration, carpet, vinyl, etc.) in order to carry out those works during the midlife spend since it is usually more cost efficient to carry out the works as part of a complete package.

It is common to question whether to demolish and rebuild or to renovate to extend the building life. Each case is different, however a study in midlife renovations including added sustainability measures has shown that renovation and upgrade to extend the life of an existing building for another 30 years or more before replacement is the preferred option in terms of life cycle costs.

In order to undertake future maintenance, midlife spend and replacement of the asset capital must be available. This is normally done through a sinking fund. A sinking fund is revenue set aside over a period of time to fund a future capital expense. The sinking fund earns compound interest, increasing its size over time. This also ensures that the total life cost of a building is shared equally by generations, so called inter-generational equity. It is therefore important that part of the housing fund be treated as a sinking fund, which should fund future capital expenses and not considered available capital. The future health of the Housing Fund currently faces multiple challenges, including:

- Deferred maintenance
- Increased demand
- Ageing portfolio and related midlife refurbishments
- New legislation and standards relating to healthy homes requirements
- Earthquake repairs in the past 10 years
- Revenue streams- improving incrementally through IRRS uptake

Chapter 9 deals with financial modelling, options analysis and the impacts on expenditure requirements.

7.3 Our Asset Portfolio

7.3.1 Location and Value

In June 2020, Assets under direct Council Control carried a book value of $10 billion dollars.

The Social Housing portfolio value is summarised as follows:

Table 7-3: Asset Portfolio Value

Asset	Value
Social Housing - Buildings	142,694,585
Social Housing - Other	2,201
Social Housing - Land	109,238,443
Social Housing - Land Improvements	3,221,027
Social Housing Total	**255,156,257**

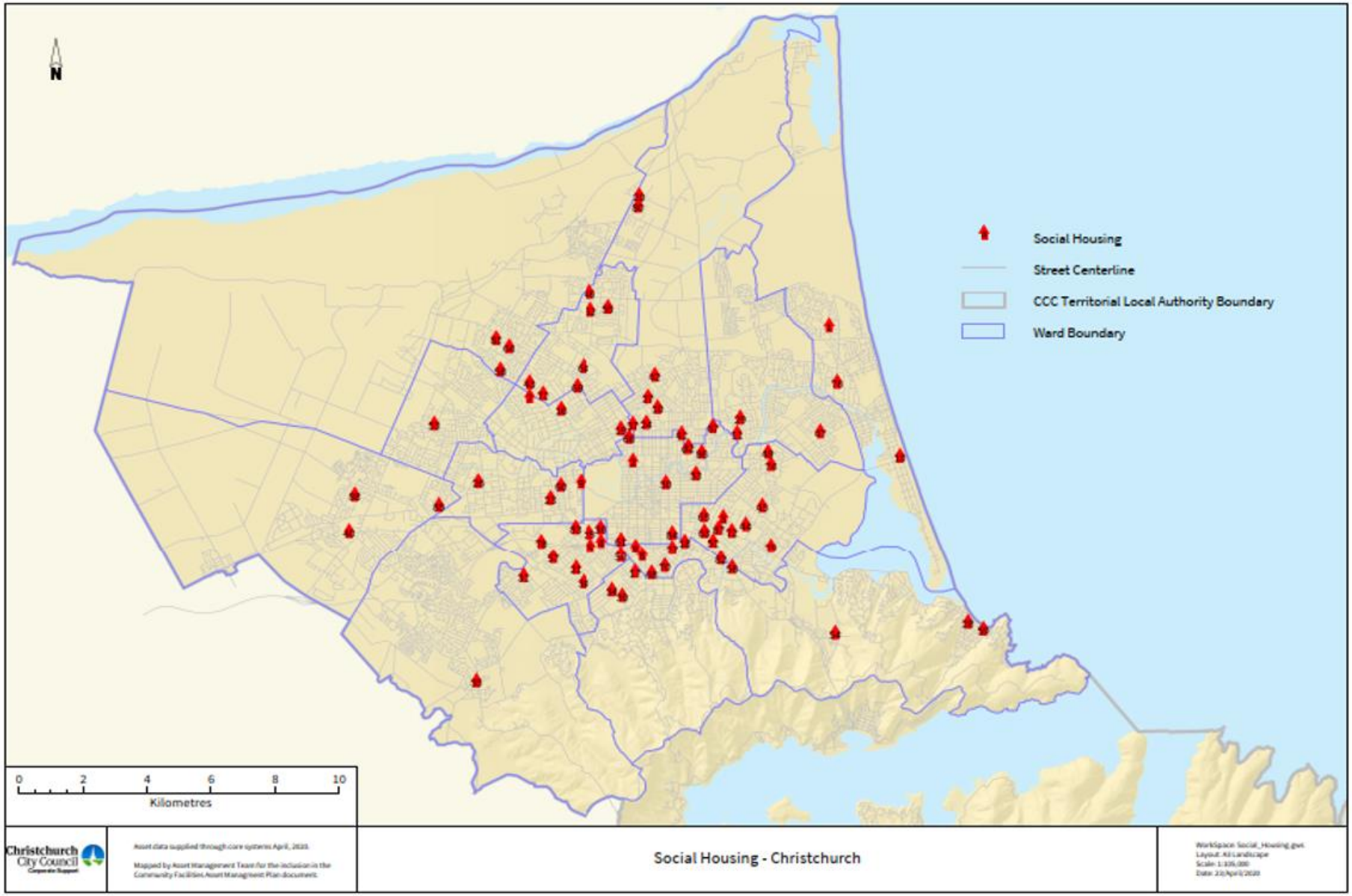


Figure 7-2: Map of Social Housing Complex locations – Christchurch

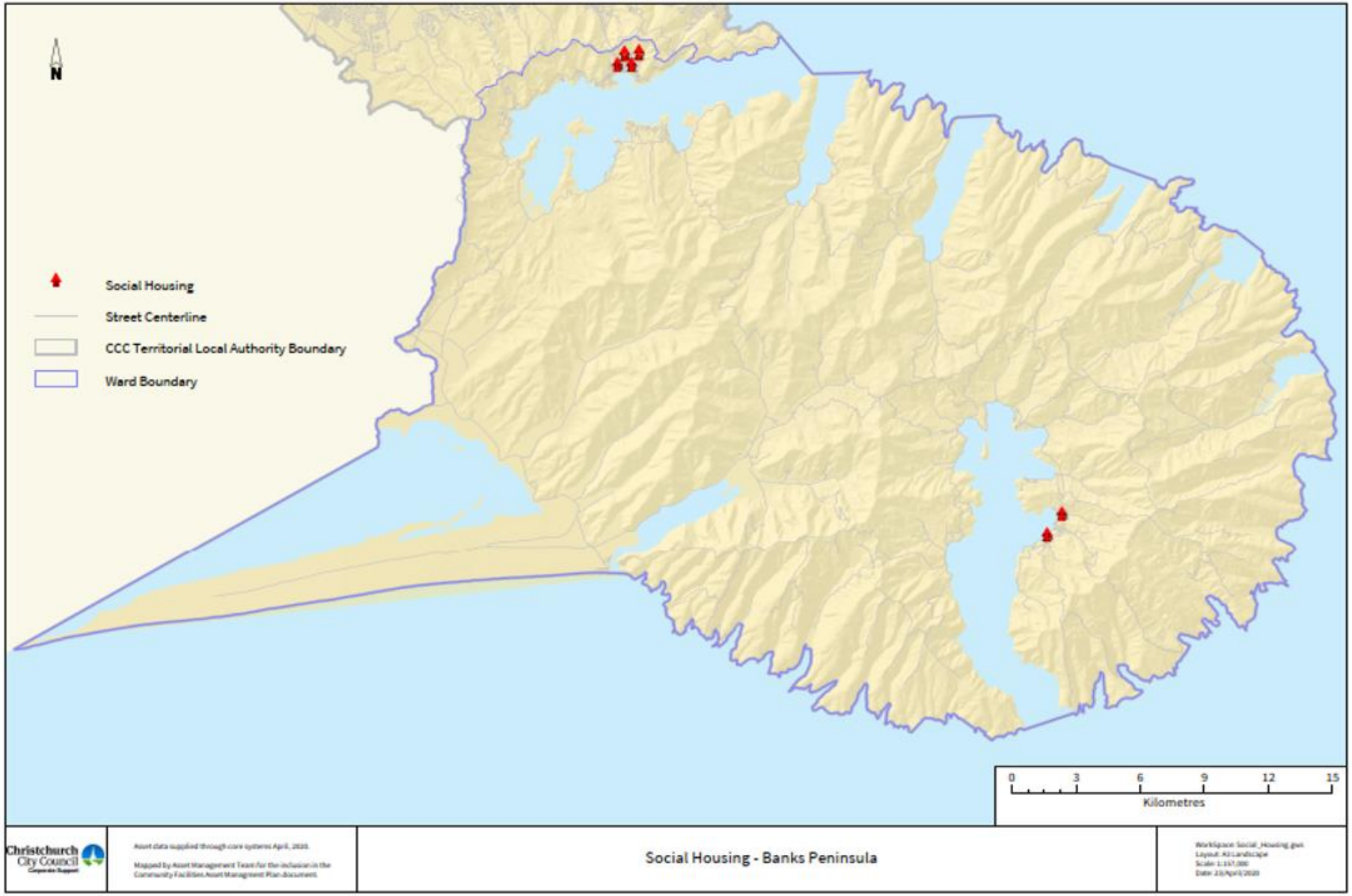


Figure 7-3: Map of Social Housing Complex locations – Banks Peninsula

7.3.2 Critical Assets

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

The criteria used for assessing the criticality of assets are as follows.

- Are they critical lifeline / Civil Defence disaster recovery assets
- Numbers of people adversely affected
- Significant business activity interrupted
- Consequential cost of failure

Using the above framework, there are no critical assets for social housing. However, it is important to note that in the event of closure to any social housing through maintenance requirements or adverse events that there is a need to disrupt and re-house tenants, whether it be on a temporary or more permanent basis. In terms of social impact, this is a matter that is planned for and contingency options are put into play where such needs arise.

With regard to cost of failure, there are general critical building related elements identified as follows. Having robust asset and condition data is important in order to understand and plan for these elements:

- ***Structural Integrity*** **-** The safe design and assessment of components and structures under load has become increasingly important since the 2010/11 earthquakes.
- ***Watertightness*** - Ensuring assets are impervious to water ingress through the building envelope so as to mitigate any negative impact on materials, structure or health of occupants is of prime importance
- ***Asbestos***- Asbestos containing materials (ACM) were common place when the majority of the social housing portfolio was constructed. A register has been developed and an Asbestos Management Plan framework applies to the mitigation and removal of risk replated to asbestos issues across the housing complexes.
- ***Plant, Equipment and Systems*** - Failure of these items may lead to unplanned downtime and tenant interruption.

7.3.3 Network Age and Lifecycle Stage

The age profile of the assets include in this AMP is shown in Figure 7.4.

Almost quarter of the Christchurch City Council social housing stock was developed during the 1960's and a half during the 1970s. Only 9% of the stock has been developed since 1990. Complexes built in the 1970's and before are due for their midlife refurbishments in the next few years. Almost 75% of the portfolio is built during this time, which means large capital expenditure requirements over the next decade.

Since the 2010/11 earthquake sequence an extensive programme of repairs has been applied on a prioritised basis across the portfolio. This has been funded by a combination of insurance payouts and Business As Usual (BAU) Capital out of the Housing Fund. This has gone some way towards renewing targeted complexes, both on a full or partial basis. Part of improvement planning is to review the work that has been carried out since the last rankings exercise and to integrate the impact of the repair programme into refreshed rankings. This will improve our information on asset condition and performance.

The more modern the unit the closer it will fit with current need, for example in terms of layout, style and insulation. The age of a complex also has a large financial impact as it determines when there is a large upcoming cost in the form of standard midlife refurbishments and replacements, particularly where issues related to functional obsolescence apply. The figure below shows the Christchurch City Council housing stock by decade built.

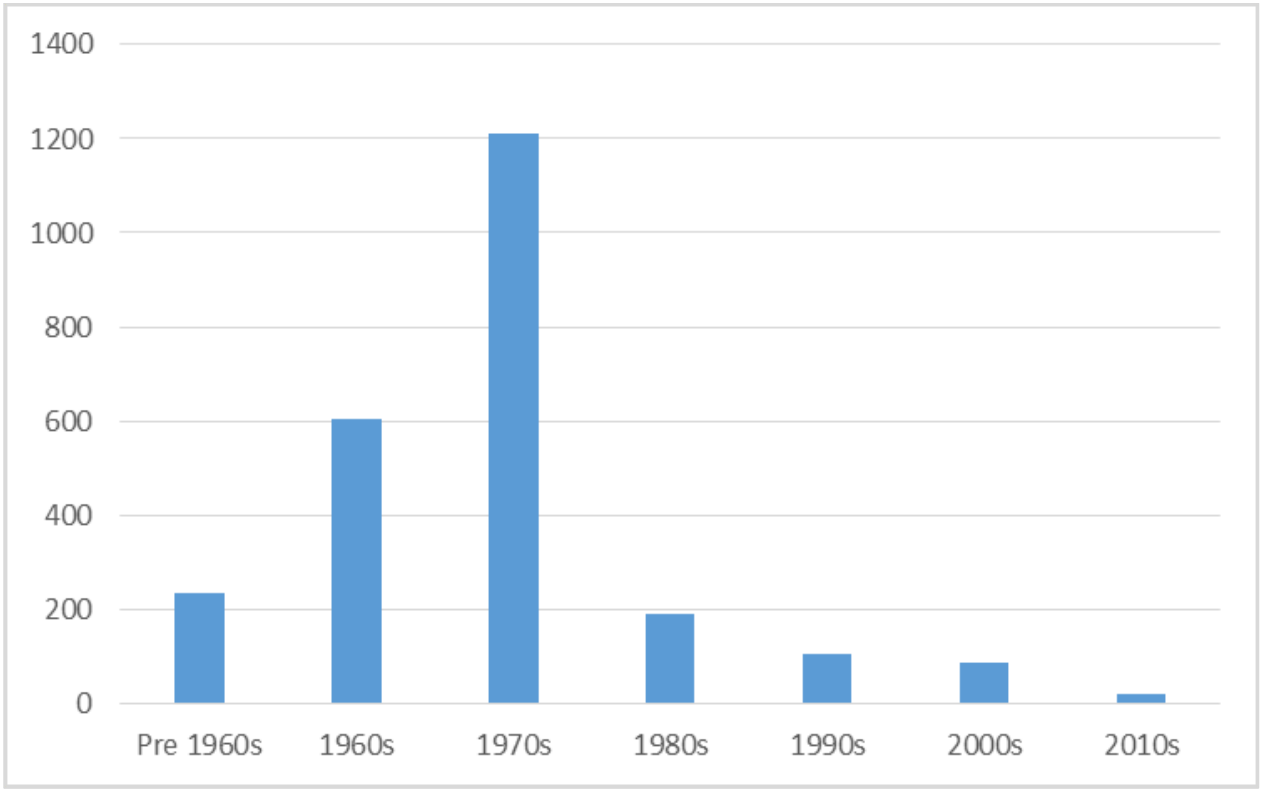


Figure 7-4: Asset Age Profile- Stock built by decade

The prevailing design of the housing portfolio has meant that most of the housing portfolio is single level multi-unit complexes. Only 29 complexes have second and or third stories.

The social housing portfolio also includes resident's lounges. Currently 15 complexes owned by Council have residents lounges used for social activities by tenants and, where practicable, other community groups.

Table 7-4: Complexes with Residents Lounges

Complex Name	
Aberfoyle Place	Aorangi Courts
Biddick Courts	Bryndwr Courts
Clent Lane	Forfar Courts
Fletcher Place	Harman Courts
Maurice Carter Courts	H P Smiths Courts
Hornby Courts	Jura Courts
Resolution Courts	Manse Place
	Vincent Courts

The Social Housing Portfolio has 4 complexes where commercial laundry services are provided. Most of the facilities have coin-operated machines, charging $2 for a wash and dry. The machines at Harman Courts are owned by Council. All other machines are owned by Gooder Equipment and leased to the Council/ ŌCHT. The coin mechanism is supplied by Power Systems and the coins are collected by ADT.

Table 7-5: Complexes with Communal Laundry Facilities

Complex Name	Year Built
Airedale Courts	1966 & 1976
Gloucester Courts *	1999
Harman Courts	1978
Tommy Taylor Courts	2001

**To be stopped*

Selected complexes in the portfolio provide garages and carports. Garaging was never a level of service that was provided for pensioner units. There was also little need, as many of the tenants historically did not have vehicles. The public rentals were built with a different target market in mind; therefore many of these complexes provided tenants with garaging for vehicles.

Over time society and technology has changed with a large number of tenants now owning vehicles. The newer complexes have been built with garages to meet this perceived need and a few garages have also been built on existing sites. Whether garages should be built or not is mostly a financial question where not only the capital cost of the new build is to be considered, but also the maintenance and disposal/replacement cost as well as the opportunity cost of the land. In the current environment the provision of garages is not a priority or stated LOS.

There are currently 15 complexes owned by Council that provide garages and carports. In total across the portfolio 269 garages and 45 carports are owned. The table below lists the number of garages and carports provided at each complex.

Table 7-6: Complexes with Garages and Carports

Complex	No. Garages	No. Carports
Aberfoyle Place	4	-
Airedale Courts	43	-
Aldwins Courts	-	18
Allison Courts	3	6
Cedar Park	17	-
Gloucester Courts	-	19
HP Smith Courts/ Perth St	2	-
Haast Courts	19	-
Halswell Courts	6	-
Harman Courts	29	-
Mackenzie Courts	24	-
Martindales Road	4	-
Maurice Carter Courts	18	-
Norman Kirk Courts	26	-
Proctor Street	3	-
Reg Adams Courts	2	2
Sandilands	23	-
Vincent Courts	4	-
Weaver Courts	6	-

Complex	No. Garages	No. Carports
Whakahoa Village	16	-
Total	**249**	**45**

Contamination and asbestos are further factors taken into consideration in terms of issues affecting the lifecycle and related costs/ prioritisations with Councils Social Housing portfolio. Management plans are prepared for contaminated sites, and a comprehensive Asbestos register and testing programme is in place and reported on through SAP.

Impact of Earthquake Repair Programme

Overall asset remaining life is difficult to capture due to a number of complexes receiving earthquake and related optimised repairs, which others have been damaged to the point of early exit or put on a "manage to tenantable basis" with only minor and essential maintenance applied. This allows time for a decision to be made on long-term strategies/ options. The total value of earthquake repair spend is around $70M since 2013. Differing scopes of work have been undertaken dependant on whether refurbishment of upgrades to bring to earthquake code. Typically earthquake damage repairs completed range from minor cosmetic internal and external repairs to significant structural and relevelling works.

Since 2013, 938 open unit and 133 closed unit repairs have been undertaken either as part of the EQ Repair and Renewal Programme or as part of the Vacant Unit Evaluation (VUE) process. A further 99 units were repaired prior to the commencement of this programme. This brings the total overall number of closed or open units either repaired or under repair to 1170 as at 31 December 2019. A total of 367 demolitions have been managed under this programme.

A total of 66 new units have been built to increase stock and replace units damaged beyond viable repair. At the commencement of the programme in 2013 some BAU maintenance was undertaken along with the EQ repair scoped works. As the programme evolved and the intensity of repairs increased during the 2016-2018 programme, pressure was placed on the housing budget. This resulted in the necessity to decrease the scope of additional BAU and modernisation works undertaken.

Some electrical, re-wiring and plumbing works have been required to ensure compliance standards have been met, along with insulation

During the 2019 work programme the scope of works were increased to ensure compliance to the Healthy Homes Legislation (2019). This resulted in the completion of varying additional works across complexes such as window replacements, mechanical ventilation, insulation upgrades, interior re-paints, and curtain and flooring upgrades.

All of the factors discussed in the preceding paragraphs build to pinpointing a need to refresh the rankings of complexes. This is identified as a high priority improvement plan task in order to better understand the any refreshed age profiles based on EQ Repairs and Warm and Dry programme work, and will allow the best allocation of limited capital R&R resources.

7.3.4 Asset Data Confidence

Hard data on the condition of social housing is currently in a mixed state in SAP. Recently held data exists in SAP in relation to exterior paint, and more recently in 2018/19 Council Housing staff have been collecting updated exterior condition data using the FULCRUM app. This brings data in that is aligned with Councils agreed post-FBBM agreed data structure. City Care have now also been tasked with collecting asset data with the FULCRUM application. This will be invaluable information in identifying what is required to keep the assets up to an acceptable standard in future works programmes.

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.

Figure 7-5: Data Confidence Grading System

Condition assessment captures and assesses asset information so that an estimate can be made of where the asset sits in its lifecycle. The output is a 'snap shot' of the asset condition at a point in time. Condition however is not static and the 'snap shot' can quite quickly become out of date and therefore unreliable.

ŌCHT also inspect all properties on a regular basis. When available and in a format that can be consumed this will feed particularly into the knowledge base of asset and condition information in relation to the interiors of social housing complexes. Information associated with asset condition is vital in developing accurate maintenance plans, quantifying lifecycle costs, ascertaining asset performance, ensuring compliance with standards, regulations and legislation, maximising contractual arrangements and optimising asset ownership. The following complementary approaches to condition monitoring are available:

- Formal Condition Assessment
- Scheduled Inspections
- Customer Feedback
- Asset Condition & Age Profiles

A range of options exists for each of these. They are often dealt with in isolation and viewed as date specific. They should however be seen as composite inputs to a larger profile or projection for the portfolio. The various inputs challenge, validate or vary the confidence in the accuracy of the lifecycle projection, leading to an evolving profile as the 'reader' gets closer to future forecast events or as confidence in certain parameters are enhanced. Condition monitoring can contribute to the assessment of the remaining life of an asset. This can influence depreciation assessment, a key funding mechanism.

Condition information once updated takes precedence over the planned works. As data collection moves forward it will provide more robust asset and condition data in SAP, which will assist the development of condition assessment captures and assesses asset information so that an estimate can be derived of where the asset sits in its lifecycle. The output is a 'snap shot' of the asset condition at a point in time. Condition however is not static and the 'snap shot' can quite quickly become out of date and therefore unreliable.

The Ōtautahi Community Housing Trust who lease the majority of the portfolio provides condition assessments to the Councils asset team in order to assist them to create an appropriate maintenance programme. This work has been assessed on a limited basis as outlined below.

The exteriors of buildings are condition assessed by the Housing and Asset teams at Council. At this time (November 2020) only the exterior paint condition of the complexes has been recorded in SAP. There are notes in regards to windows and

roofs on the assessment forms, however no formal assessment has been undertaken at this time. The longer life expectancy of these components means the condition assessment is required less frequently, unless imminent failure is indicated. 75% of the portfolio is due to reach its midlife in the next decade which will require use of formal condition assessments for all major components of these buildings, in particular roofs and windows.

The condition of interiors and exteriors of the buildings are assessed using a scale from 1 to 5. The scale and assessment tool is presented in the table and figure below.

Table 7-7: Asset Data Confidence

Asset Category	Material / Size/type	Asset Value	Asset Age	Asset Condition	Asset Criticality	Asset Capacity
Social Housing Complexes	95% / B	90% / B	100% / A	50% / C	70% / B	90% / A

More recently, the ŌCHT has carried out collection of formal condition assessment data on exterior and interior walls, floors and overall unit level condition. The results of this assessment are as listed below:

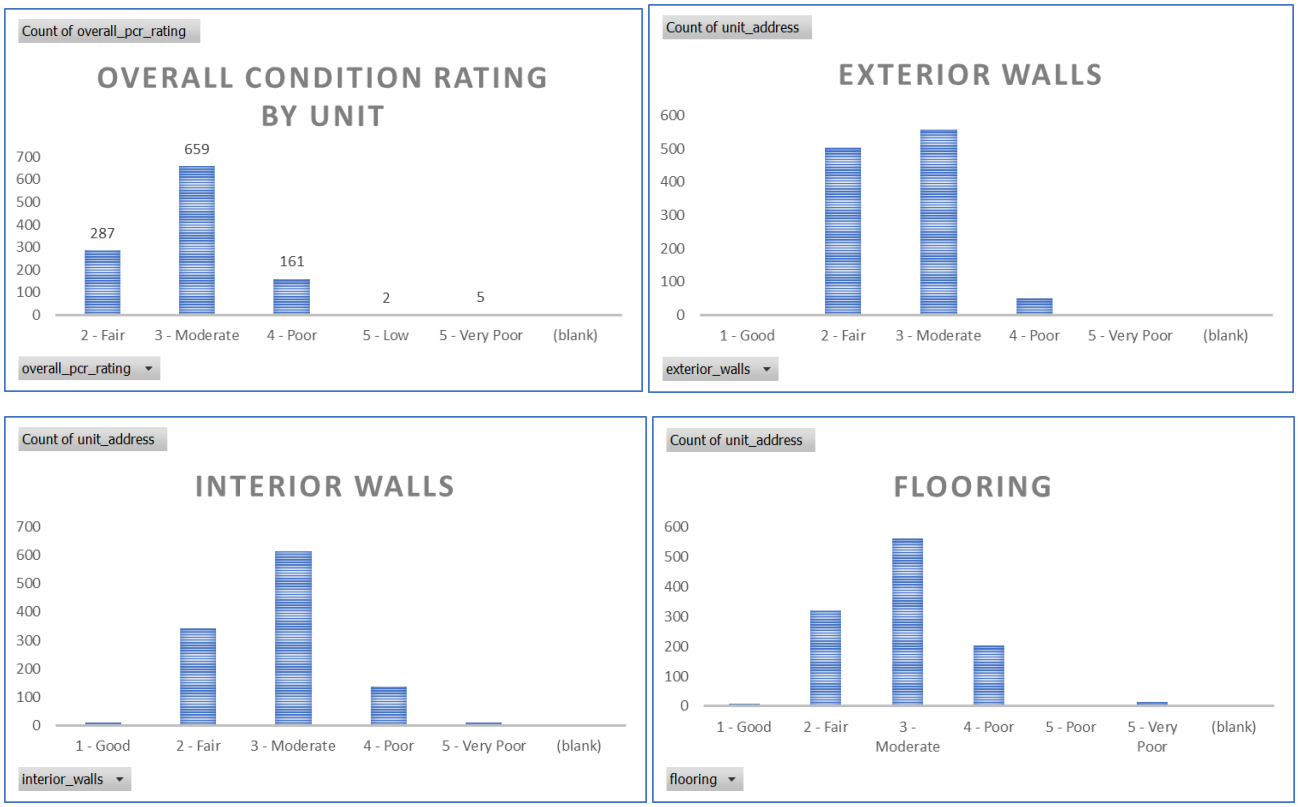


Figure 7-5: ŌCHT Condition Data 2020

Further detailed asset information and condition assessment work is now being carried out by City Care using the FULCRUM tool and will continue through the later part of 2020 and continue into 2021.

7.3.5 Asset Data Improvements

Asset and condition data that is collected will be used by the Strategic Property Analysts alongside key asset stakeholders in order plan the timing of refurbishments and replacements. Condition assessments undertaken when the lifecycle of the complexes reach mid or end of life are of particular benefit. Depending on the condition, the cycles can then be moved forward or pushed back. The condition assessments will help improve the lifecycles of the different asset subcomponents, making them more accurate.

Implementation works stemming from the outcomes of the Facilities Better Business Management Project are addressing gaps in asset and system knowledge. There has been increased importance placed on resourcing Asset Management function and data collation within Council after a review of Asset Management maturity at Council was completed by Consultant Kathy Dever-Tod in 2018. This review reiterated the importance of data to the Asset Management process and was part driver in the establishment of the Asset Management Unit and the Asset Systems & Information Team whose responsibilities are for capture, integrity, retention and reporting on asset data.

Data collection sits both with Council and ŌCHT and an important step to take is to ensure alignment and QA of asset and condition information collected in order to maintain fit with the agreed data structure. Council is currently (as at 2020/ 21) commencing an asset information and condition data collection exercise for social housing, using the FULCRUM app as an extension to similar activity in the Community Facilities and Libraries space in 2020.

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

- Ongoing condition assessment of building condition
- Betterment of SAP and data storage applications
- Solutions as to how maintenance works completion updates asset condition
- Facilitate more advanced data analysis as data is captured- including data from ŌCHT

7.4 Asset and Network Planning

7.4.1 Asset planning strategies

Table 7-8: Planning Strategies

Plan, Strategy, Model	Content	Next review
Scheduled Inspections, condition and age profiling	Use of asset and condition data to build works programmes	Ongoing
Facilities Infrastructure Design Standards	Creation of as-builts for asset design and data capture	Currently at definition stage
Residents survey	Use of tenant information	Annually
Site Capacity	Improving site utilisation	Ongoing
Prioritisation and Portfolio Ranking	Update 2015/16 Ranking and Optimisation project	2020/2021

Scheduled Inspections, condition and age profiling

A key output of the scheduled inspection by City Care is the confirmation of the proposed works program for the following 12 to 18 months and a review of the forecast works program for the 3 to 5 year horizon. Legitimate debate over the timing and extent of works may exist between the technical opinion of the maintenance provider, the budget and lifecycle perspective brought by the asset manager and the operational imperatives raised by the activity manager. Refreshing the rankings exercise based on works undertaken in the past few years, along with asset and condition data collected will allow better analysis on age profiling and capital prioritisation from what will be limited funding options in the short and medium term from the Social Housing Fund.

The result of the debate needs to be documented and signed off by a delegated role within the Social Housing Team. If the variation is significant this may require Executive Team consideration and / or Council approval especially where a substantial budget variation occurs or where a level of service is substantially increased or decreased in variance to that established through the LTP process. The decision can then be recorded in SAP, providing an auditable trail, with the event moved or varied as specified.

Facilities Infrastructure Design Standards

The Facilities IDS project is currently at the implementation stage, with an end output of contributing consistent standards and as-built requirements to new builds. Consistent standards are also now able to be applied to data collection for consumption under the agreed SAP data structure that has been implemented by the FBBM project.

Resident and Tenants Surveys

The annual resident's survey by Council is a key tool for prioritising background information when considering forward works programmes. Feedback from our lease partners also provides intimate knowledge on our social housing units from both operational knowledge, and from scheduled tenancy surveys.

Site Capacity

Older units generally have a lot more green space around each unit, tend to be single level and adjoined including four to six units. Over time influences on site layout have changed, combined with underlying zone changes, and it is now acceptable to have housing units that are multi-storey and higher density. These factors need to be considered alongside the negative social aspects that higher density may produce when sites are being redeveloped and/or intensified. The sites that have been identified since the earthquakes with intensification potential are:

Table 7-9: Potential Intensification Sites

Charles Street (Transferred to ŌCHT 2015)	Airedale Courts A & B (Transferred to ŌCHT 2019)
Andrews Crescent	Veronica Place
Willard Street (Transferred to ŌCHT 2019)	Fletcher Place
Coles Place (Transferred to ŌCHT 2019)	Palliser Place
Carey Street	Mabel Howard Place (Transferred to ŌCHT 2019)
Elm Grove (Transferred to ŌCHT 2019)	Cecil Courts (to be disposed)
Guthrey Courts (Transferred to ŌCHT 2019)	Haast Courts
Glue Place / Sparks Road (Transferred to ŌCHT 2019)	Jecks Place (Transferred to ŌCHT 2019)
Feast Place / Poulson Street	Raleigh / Newmark Streets (Transferred to ŌCHT 2019)
Gowerton Place (Transferred to ŌCHT 2019)	

Prioritisation and Portfolio Ranking

A major exercise in ranking the portfolio by complex was undertaken in 2015/16, which allowed meaningful science to be applied in allocating limited budgets to repair and renewal budgets. This allowed for smart prioritisation in planning forward works.

Since that exercise the development of the ŌCHT, subsequent improved asset information, and transfers of assets to ŌCHT have changed the makeup of the portfolio.

A revised ranking exercise will be undertake in 2020/21 in order to refresh prioritisations for decision making that is ahead.

7.4.2 Asset Planning Improvements

The following improvements to asset planning processes are included in the AM Improvement Plan in Section 9.

- Interpretation of asset data to inform advanced and prioritised works programmes
- Prioritisation and ranking based on age and condition of assets, alongside demand, demographic and locational factors.

- Facilities Infrastructure Design Standards Project to assist building specifications
- Planning for resilience to climate change, sea level rise and natural disaster events.
- Options and analysis around the application of a potential stimulus package for Social Housing in the post COVID economic situation
- Options and scenarios for growing the number of social housing units in Christchurch, and potential funding sources including loans.

7.5 Asset Creation (Design and Build) and Acquisition

7.5.1 Identifying and recording capital projects

New works are those works that create a new asset that did not previously exist, or works that upgrade or improve an existing asset beyond its existing capacity. Alignment and optimisation with routine social housing Renewal and Replacement (R&R) budgets has been facilitated as best possible within fiscal envelopes (insurance and capital budgets), as outlined in section 7.4.

In this AMP, a number of projects have been identified through consideration of:

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

The Capital Delivery activity at Christchurch City Council is managed within the Capital Programme Management System (CPMS) details how projects are initiated and managed to deliver the benefits outlined in the Councils approved Long Term Plan (LTP) and Annual Plans (AP).

7.5.2 Selection criteria

The past decade has seen a majority of new construction completed as a direct result of earthquake asset loss. Councils' Social Housing portfolio has been particularly affected by this situation.

As with other Council Facilities, the following criteria are important in aligning with projects:

- **A proven identified need:** Analysis that is evidence based detailing demand, who the users are and their needs and what alternative options are available.
- **Alignment with community outcomes and strategic priorities:** Demonstrate the works will contribute to achieving the community outcomes in a measureable way
- **Financial Sustainability**: Inclusive of the capital costs of provision of new facilities and the operational costs of ongoing management and maintenance. The 'whole of life' cost of the assets needs considering.
- **Environmental Considerations:** Consideration of energy efficient ,materials and operations, alongside carbon footprint, greenhouse gas emissions and resilience (see Chapter 5)
- **Social Sustainability:** Fairness, social justice and equity

7.5.3 Asset Design

The design phase is where a lot of value can be added to the project. The aim is to report whole-of life costing (Capex + Opex) for the whole project when considering design options. We use todays' dollars to report, for the purposes of simplicity.

Sustainability, Energy Efficiency, Healthy Homes, and Government Standards

As outlined in Section 3, the New Zealand Government has set standards for warm, dry and well insulated homes that have a means of heating. Sustainability is a key cornerstone of asset design for social housing. Councils are obliged through legislation to take a sustainable development approach, taking into account the needs of future generations socially, economically and culturally. This also ties in with the current practice of moving to including wellbeing into Council's service delivery.

As housing is a durable asset with a life of approximately 90 years requiring large capital expenditure during this life, the development of new social housing incurs cost not only for this generation, but future generations all the same. The use of demand forecasting when deciding on future investment for social housing is therefore needed in order to ensure intergenerational equity and thereby meet the requirements for sustainable communities.

The table below explores actions that the activity can take in order to follow the five sustainability criteria:- efficient, cyclic, solar, safe and social.

Table 7-10: Sustainability Criteria

Criteria	Meaning	Principles	Action
 Efficient	Being economic while being sustainable	To use products and services that uses fewer resources to achieve at least the same benefits. Must be economically viable. Finding balance between economic viability and non-financial sustainability principles	Energy efficiency measures are considered where appropriate Cost of Consumption - Cost modelling
 Cyclic	Being responsible not only through-out lifecycle but with end of lifecycle	Good quality product that lasts a long time. Use products that are non-toxic to the earth or can be recycled or returned to earth e.g. fuel, water	Removing and disposing of toxic materials, such as materials containing asbestos, where appropriate Use good quality and non-toxic products where appropriate
Solar	Looking at efficient ways of using renewable power and aiming towards being carbon neutral society	Goods and services is powered from renewable sources and our society is carbon neutral (emissions are first reduced, then offset) Sustainable energy strategy for Christchurch	Renewable energy sources are considered where appropriate
 Safe	Negating impacts on people and the earth's life supporting systems	All releases into the air, water, soil are non-toxic, food and fibre are harvested from sustainable managed populations and indigenous biodiversity is protected	Ensure legislative requirements, by-laws, etc. are followed
 Social	Obtain quality of life while thinking about future resources etc. for future generations	Good quality product that lasts a long time. Incorporates a lot of the abovementioned principles	Cost of Consumption - intergenerational equity Use long lasting, good quality products where appropriate

The Government has updated the legislation and standards around housing which provide guidance for best practice, along with minimum requirements for warm and dry housing provision by landlords, including within social housing. Possible physical sustainability features that can be incorporated in an existing dwelling include:

Space conditioning

- Ceiling insulation
- Wall insulation accessed either externally or internally

- Timber floor sub-floor insulation
- Double glazing
- Secondary fitted glazing/efficient heaters (solid fuel, pellets, heat pumps, etc.)
- Draught proofing

Warm and Dry Programme

Much of the work required in this space has been picked up in the Warm and Dry Healthy homes project, which is currently expending $16M in a programme of works across 2020 and 2021 in order to bring the portfolio to the required Healthy Homes Standards.

This major programme of works is installing in order to improve the thermal properties and heating of units across the portfolio:

- heat pumps
- ventilation
- insulation
- doors, windows and draught stopping upgrades in.

The forward works capital programmes have been altered to allow for renewal cycles of 15 years for the heat pumps.

Funding for this programme is being supported with a $10 Million lending facility in order to prevent the Housing Fund from falling below sustainable levels. This loan has been built into modelling and will be repaid as fast as the housing fund is able to sustain repayments. The currently modelled timeframe for repayments of the loan and interest charges is 10 years.

This is a significant programme of works that will benefit both tenants and Council, but also will allow for the assets themselves to benefit from less mould, dampness and related early degradation.

Water efficiency

General factors to be considered in further renewal and replacement works:

- Efficient showerheads
- Tap flow economisers
- Dual flush cisterns (being done)
- Pipe and hot water cylinder wraps (complete)

Other

- Ground polythene sheet cover
- Kitchen and bathroom extractor fans
- Efficient light bulbs (standard practice now in Council properties)

The net benefits for various retrofit sustainability measures vary greatly. According to a New Zealand study, the most cost effective retrofit is simple low cost measures such as lagging, wraps, low flow shower heads, draught proofing and efficient

lights. The more expensive retrofits such as ceiling insulation (where none or little exists), and floor insulation retrofits are also very cost effective. Wall insulation retrofitting and double-glazing are cost effective outside of Auckland.[2]

The study was mainly based on cost savings for owner-occupier dwellings. Introduced on Council's housing stock these measures would lead to a decrease in tenants' costs.

There is no doubt that energy efficient houses are healthier for occupants. They also have a reduced environmental impact and cost less to maintain comfortable temperatures in than houses that are poorly insulated. In addition, the location of houses, their materials, design, use and maintenance all contribute to sustainable use of resources, and energy efficiency.

Government initiatives such as the New Zealand Energy Efficiency and Conservation Strategy (NZEECS) consider the environmental, social and economic impacts of energy on productivity and health. Administered by the Energy Efficiency and Conservation Authority (EECA), the Strategy is improving the energy efficiency of New Zealand's houses through tangible programmes such as EECA's Warm Up New Zealand grants and Housing New Zealand Corporation's Energy Efficiency Retrofit Programme. As per the Energy Strategy 2011 - 2021:

"*Heat Smart provides a subsidy to homeowners to install insulation and clean heating devices in their homes. This programme is proving successful at overcoming reluctance to invest and leveraging a significant investment by homeowners in better insulation. It has boosted the insulation industry and lifted the game for insulation practice. The programme aims to improve productivity and health outcomes, reduce energy costs and stimulate the economy by generating jobs for New Zealanders involved in producing and installing insulation and clean heating.*" PG 12, NZES 2011 - 2021 Developing our Energy Potential.

What Does Sustainable Design Mean for Capital Expenditure and Asset Management?

Homes of the future could provide greater diversity and flexibility of size and design, lower ongoing maintenance and lifecycle costs, and incorporate more sustainable materials and building techniques.

The Building Act 2004 aims to improve control of, and encourage better practice in, design and construction so that buildings are designed and built right. Some industry analysts believe that low cost does not have to mean poor quality, but requires more innovative design and use of materials.

Reviewing and optimising the effectiveness of building practices, could achieve both environmental and financial benefits. Actions may include smart lifecycle optimisation, better future proofing around design capacity and adaptability to combat the impact of functional obsolescence or the use of alternate power strategies for heating. These initiatives should however show economic benefits such as cost savings as well as being a sustainability exercise.

There is a very close alignment between sustainability and advanced asset management practices. Formal asset management methodology of infrastructure assets has for many decades sought to identify short and long-term implications of alternate asset design, construction and operational solutions. Both face the challenge of current and future requirements alongside fixed asset decisions from the past that substantially commit stakeholders to a less than optimal future. Formal asset management as a disciple within the property asset sector is relatively new. The role of the business activity is much higher than for infrastructure, as is the potential volatility of future demand. These provide a challenging environment in which to apply asset management and sustainable solutions and practices.

As an organisation however, governance, policy and management support exists. While many sustainable solutions have common themes the application will vary across different Council activity areas. Equally, the challenges presented by each property are unique in terms of the interplay of design, condition and operation with functional and aesthetic requirements.

7.5.4 Asset Creation and Upgrade Improvements

Renewal expenditure is major work that 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.

[2] Page, I C, and Fung, J (2008) Housing life cycle and sustainability, Part 1.

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

- Warm and Dry programme across remaining units to be completed
- Investigation into post COVID stimulus work

Investigation into options to grow the portfolio back to pre-earthquake numbers of units (partnering/ enabling in particular)

7.6 Operations and Maintenance

7.6.1 Portfolio-level O&M Strategies

Simple and lower cost planned works for Social Housing are primarily delivered via contracts that the ŌCHT hold for the Facilities Maintenance (FM). The FM contract provides for planned preventative and reactive maintenance for most of Council's housing stock.

Maintenance work is the day-to-day running or operation of the facilities that keeps the assets operating at required service levels, and falls into two broad categories:

- **Planned (Proactive) Maintenance**: Proactive inspection and maintenance works planned to prevent asset failure
- **Unplanned (Reactive) Maintenance:** Reactive action to correct asset malfunctions and failures on an as required basis (i.e. emergency repairs)

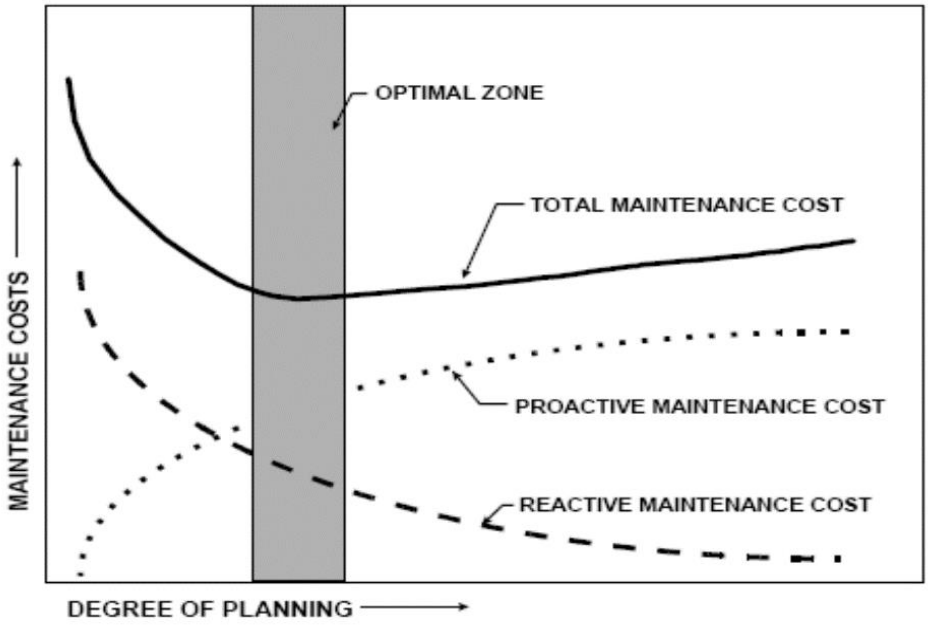


Figure 7-7: Balancing Proactive and Reactive Maintenance

The housing portfolio, being low on funds, has been dealing with more reactive maintenance than ideal due to the level of deferred maintenance for a number of years, and in particular since the earthquakes. The intent is to move towards a more effective maintenance strategy with the right level of proactive and reactive maintenance (including component renewals). This strategy has formed the basis of the repair and renewal programmes, subject to available Housing Fund balances which are reliant on the relationship between income, operational overheads and the resultant envelopes available for capital spend.

Since 1 July 2017, Ōtautahi Community Housing Trust is responsible for providing minor maintenance of the units. This means a significant reduction in the amount of minor maintenance provided by Council for the social housing portfolio. Reactive maintenance is in some cases incorporated in minor maintenance and in some instances as a variation to the minor maintenance schedule. The ŌCHT led and Council led programmes under the lease for minor maintenance attached as **Appendix 1.**

O&M Historic Trends

In the past few years operational expenditure at portfolio level has been led by significant post-earthquake works. A significant amount of work has been actioned in the post-earthquake environment in line with capital and repair programmes, which has also captured some elements of deferred maintenance. The full extent of this capture however is unclear and requires truthing through the asset information and condition data collection work. The earthquake insurance pay-out post-quake added to normal funding streams, but did not fully fund for the repairs as the settlement was achieved as a lump sum.

Planned / Preventative Maintenance

The significant planned maintenance activities for this asset class are shown in Table 7-11

Table 7-11: Social Housing Planned Maintenance Activities

Activity	Purpose	Frequency
Painting Service Contracts Insurance Security	Prevent deterioration Identify deterioration/defects Overhead Asset Protection	10 yearly Criticality based/ Scheduled Scheduled Criticality based

Reactive Maintenance

Reactive maintenance makes up about 40% of our annual OPEX costs. The most common failures and causes for this asset class include:

- Additional wear and tear from increased usage
- Vandalism/ tenant damage
- Out of date or incomplete asset condition data
- Keeping functionally obsolete complexes open longer than planned

Our strategies for addressing these reactive maintenance issues are:

- Improved Asset data collection
- Robust condition data for buildings, to relevant component level for Social Housing
- Implementation of the Facilities Better Business Management project and related structures and business rules

Summary of future operations and maintenance expenditure

Expenditure will continue to be funded through the Housing Fund, which is ring fenced from rates. Income received in the form of lease payments by the ŌCHT gets paid into the fund monthly (base lease payment) and annually (additional lease payment). The table below includes the projected income, based on current model inputs.

Chapter 8 outlines financial projections.

The following programmes of works are the most significant in the next years delivery package and are included in the capital programme, prioritised annual according to budget availability. In the short term there is pressure on the Capex budget but beyond FY22 there is sufficient room to speed priority works up

- Heat Pumps- currently being installed through the warm and dry programme, renewal cycles are factored into future years in the modelling for 15 yearly cycles.
- Hot Water Cylinders- A significant spike in renewals has occurred in the past 12-18 months and will begin to recede in scale as old / damaged cylinders are replaced. This has been factored into the lifecycle modelling with 20 year renewals factored in.

- Insulation improvement programme and mechanical ventilation- will be completed in 2021 alongside Warm & Dry programme.
- Exterior paths and driveways- programmes of works are prioritised to take account of health and safety issues including trip hazards.
- Asbestos Programme- Both opex and capex budgets are frontloaded with funding for the next 2-3 years to deal with asbestos testing, management and remediation requirements.
- Roof replacements and spouting- in terms of assessed condition there is provision for dealing with roof replacements, but the primary focus for these will be in the medium to long term.

7.6.2 Operations and Maintenance Improvements

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

- More detailed scoping of the annual R&R breakdowns to fit around a refreshed ranking and prioritisation exercise based on updated asset and condition data on remaining complexes that have not been transferred out of the portfolio.
- Monitor, verify and modify maintenance cycles- in line with data from both ŌCHT and SAP, using Power BI financial analysis software

7.7 Renewals

7.7.1 Portfolio Renewal Strategies

Renewal expenditure 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. Where possible, renewals planning uses a risk-based approach that considers the condition and criticality. For the Social Housing Portfolio this is captured in the Repairs and Renewals capital expenditure project (refer CPMS Project).

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 Level of Service. The monitoring of asset reliability, capacity and efficiency during planned maintenance inspections and operational activity helps identify excessive maintenance requirements, ineffective and/or uneconomic operation or obsolescence

In the absence of condition information which in general is currently under development for collection using the FULCRUM app, the theoretical life expectancies and replacement costs of asset components are used for financial projections.

Renewals approach

Table 7-12: Renewals approach

Activity	Approach Used	Criteria
Renewal forecasts 1-90 years	Age / remaining life based.	Assessed age
Renewal scheduling	Condition and Criticality	Condition and Criticality
Cost Estimation	Volumetric / standard rates applied / tailored for major project	Use of QV Cost Builder/ Rawlinsons alongside portfolio knowledge and history

The semi-reactive capital maintenance items and the number of average replacements for the period FY19/20 to FY21/22 are presented in the table below. A similar replacement pattern is expected for the years that follow.

Table 7-13: Average Replacements per FY, Semi-Reactive Maintenance Items, FY19/20 to FY21/22

Maintenance Item	Average Replacements per FY
Stove	100
Carpet	103
Vinyl	50
Hot Water Cylinder	58
Bathroom Heater	240
Blind	30
Curtains	110

Midlife refurbishments

A so called 'midlife spend' where major maintenance work is carried out is assumed to take place at 30-50 year intervals. The concept is underpinned by the idea that the tenant is moved out for a period of time where the unit/ complex is then taken apart and put back together with modern methodology and materials and is functionally fit-for-purpose for the remainder of its life.

It has been identified over many years that, due to the age of Council's stock, internal refurbishment and redecoration is paramount to sustaining the functionality and quality of the condition of the units. This brings together many major components lifecycles (such as bathrooms, kitchens, windows, etc.). It is beneficial to stretch or compress other adjacent cycles (such as redecoration, carpet, vinyl, etc.) in order to carry out those works during the midlife spend since it is usually more cost efficient to carry out the works as part of a complete package.

We also note that the painting of exterior surfaces, in order to protect against deterioration caused by rain and sun is necessary. Some additional major components such as roof, wall claddings and windows also need repair or replacement from time to time. These major replacements also present opportunities to install measures that will improve the sustainable performance of the building.

Renewing complexes through their midlife can extend the life of building structures, increase sustainability and improve functionality, particularly for those complexes built before the 1990's. Extension of life for those complexes sitting at midlife has both financial and social benefits.

As outlined in this AMP, 25% of the Council Housing portfolio was built in the 1960's, and a further 50% in the 1970's. This represents a significant bow wave of renewals falling due in the coming few years. This implies a large capital spend over the next decade. At the current time the Housing Fund carries insufficient resources to fully renew everything of this age profile at midlife.

The financial benefits will been seen through the extension of the life cycle of existing housing, while also ensuring that housing stock is safe, warm and dry, and fit for purpose and meets the needs of the City's changing demographics. At the present time these works are prioritised on the basis of the 2015-16 rankings exercise, along with subsequent information gathered through EQ repairs, generic condition/ performance and investigations to upgrade strategies on a complex by complex basis.

Financial implications are examined in Chapter 8.

7.7.2 Renewal Process Improvements

The following improvements to asset renewal processes are included in the AM Improvement Plan in Section 9.

- Better capture of data through SAP, along with use of business tools to better interpret, manipulate and analyse asset data

- More detailed planning and allocations of medium term renewal programmes based on the interpretation of asset data collected.
- Update of 2015-16 Rankings exercise in order to best allocate and prioritise limited capital resources.

7.8 Asset Disposal

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Any revenue gained from asset disposals is accommodated in Council's long-term plan.

The ***Asset, Equipment and Materials 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 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 decision-making once a decision to dispose has been taken by the appropriate asset owner, in accordance with any specific statutory or Council processes.

Social Housing is facing a number of decisions on complexes that are approaching the end of their life. Background work is being prepared to move into actively making decisions regarding exits or renewals of particular complexes in order to reduce financial stress on the portfolio, and to create better opportunities to develop new modern social housing.

As outlined in this plan, a number of complexes have been transferred into the ownership of the ŌCHT Trust, to provide opportunities for ŌCHT to contribute to renewal and growth of the portfolio.

8 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.

8.1 Operating Forecasts

8.1.1 Financial Projections

In order to provide reasonable projections, it is useful to view maintenance and operational expenditure from a number of methods, taking into account key assumptions. The methods include:

- Financial and asset data in SAP. Detailed and sometimes difficult to extract, tools are currently being developed to better manipulate asset information and data for facilities.
- Independent quantity surveying – an exercise in the previous Housing AMP's development that benchmarked and supported the figures in that AMP, which have provided the base for this revision.
- Based on recognised science- some asset owners use a model of 0.7% to 4% budget based on asset value. For social housing this would be reasonable to assess as 1.5%-2% for Capex.
- Historic review of works can provide trend analysis and gives a non- strategic baseline for moving forward during times of financial constraint.

8.1.2 Key Assumptions

General assumptions in preparing this forecast include:

- No budget levelling has been undertaken.
- Within the Housing Fund Model, drawdown and subsequent repayment of a $10M loan facility in relation to the Warm and Dry programme has been factored in. It is anticipated the loan facility will be called on in early 2021. In the modelling this is a vital factor in keeping the Housing Fund solvent in the next few years. Until such time as the loan is activated it does not appear in Council SAP accounting projections, however this will be treated as a 'cash injection" to the fund at that time- as the model projection have already done.
- Social Housing is not rates funded, and receives all income via tenancy rents (ŌCHT Lease).
- Renewal in assets to provide for the activity have been allowed for as detailed in Section 7.
- Currently 2 years of the R&R programme is scoped and allocation on the basis of prioritisations identified between planning and operations. The R&R programme for the following years is designed to deal with midlife refurbishments as well as ongoing maintenance of the portfolio, subject to the ability of the Housing Fund to pay.

Opportunities associated with these assumptions include:

- The Income Related Rental Subsidy provides increased revenue through the ŌCHT lease model. Over time the gradual capped uptake of this on new tenancies allows growth in the Housing Fund to prepare for prioritised capital renewals.
- The current economic framework is supported by extremely low interest rates, which allows consideration of borrowing to invest in infrastructure and renewals.
- Partnership options may present themselves with Community Housing Providers or NGO's outside Council along the lines of current rebuild projects that are in progress between Council and ŌCHT.

Significant risks associated with these assumptions include:

- There is no allowance for financial constraints attributed to the economic impact of the COVID 19 crisis, in terms of general economic impacts or funding streams. Note that as Social Housing is ring fenced and separate to rates then the focus may shift to what stimulus packages may exist to address any demand implications.
- Price increases of building materials and labour have increased at a higher rate than the consumer price index therefore there is a risk that continued increase of these building costs means future years budgets have less net useable value.
- The age profile of the Housing Portfolio is such that significant decisions need to be made with regards to mid life refurbishments, functional obsolescence and hard decisions around early rebuild strategies for some sites.
- The Social Housing Fund is under pressure in the next few years and is not resilient enough to cope with any additional new information that leads to new spending requirements

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 caution that economic impacts are "highly uncertain").

What does this mean for Social Housing?

- As housing is not rates funded there may be less COVID-19 related budget pressure. Social Housing has different drivers relating to the provision of warm, dry and safe housing, along with the impetus to assist in meeting for increased demand and provision of housing.
- An initial focus 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 projects).
- 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.
- Medium term (LTP years 4-6): 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.

8.1.3 Significant Changes

The significant changes in expenditure are shown in Council's strategic framework and general implications for the activities are presented in Council's Strategic Asset Management Plan. 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

	Relevant Community Outcomes for Community Facilities	How the activity effects the Community Outcomes
Primary Outcome	Sufficient supply of, and access to, a range of housing	Sufficient supply of, and access to, a range of housing: By providing social housing, and supporting the efforts of other providers, Council contributes to the supply of housing for those in need and those who would otherwise find it hard to access housing. This activity will help meet identified community housing need as noted in the Greater Christchurch Settlement Pattern Update.
	Safe and healthy communities	Our social housing is designed, built and located so as to contribute to safe neighbourhoods and communities. Our social housing is built and located to take into account the impacts of climate change and the risk of natural hazards.
Secondary Outcome	Strong sense of community	Having access to secure housing is a major key to a sense of community as it enables people to take part in the community and access services and facilities. Community housing provides stable long-term benefits to both the people it houses and the surrounding community.
	An inclusive, equitable economy with broad-based prosperity for all	Housing is a key area through which social and economic well-being is influenced. Adequate housing is strongly linked to economic performance.

Table 8-1: Activity Operating Costs – Significant Changes

Item	Movement	Rationale for change
Personnel	Steady ↔	Current CCC wage freeze post COVID
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. Since July 2017 the ŌCHT is responsible for minor maintenance provision for the units that they lease. This has a significant reduction in Council costs and is picked up through the lease payment.
Construction Materials and Labour	Increase ↑	There have been steady increases in building material and labour rates as reflected in The Capital Goods Price Index. Construction costs have increased by 30% over the last decade. Acute labour shortages, growth in construction demand and capacity constraints suggest construction cost inflation is forecast to be in the vicinity of 3.5% annually over the next five years.
Energy	Increase ↑	Electricity prices are generally increasing to reflect the substantial cost to build, finance, maintain, and operate power plants and the accompanying electricity transmission and distribution lines. While tenants pay for electricity independent of Council, Council's commitment to investigating

Item	Movement	Rationale for change
		sustainable energy options means if adopted they could require substantial initial financial investment.
Insurance	Increase ↑	Post-earthquakes insurance costs have steadily increased to represent a move by insurers to more risk based pricing to reflect seismic, flooding and climate change risk. There is an awareness by entities that there was an historic element of underinsurance. Where assets are unable to be commercially insured Council will need to make financial allowances for self-insurance.

8.1.4 Financial Projections

Financial projections are based on the Housing modelling as described which includes the impacts and flow on effects of the Warm and dry programme and related expenditure and borrowings. This section outlines the assumptions and calculations that the modelling provides as output accordingly.

Operational expenditure for social has been modelled based upon current actuals and known maintenance requirements. The modelled projections include the requirement to pay back the $10M loan facility. From the model the 30 year projection is outlined as follows (uninflated). The spike in FY 21 is representative of the Warm and Dry programme concluding.

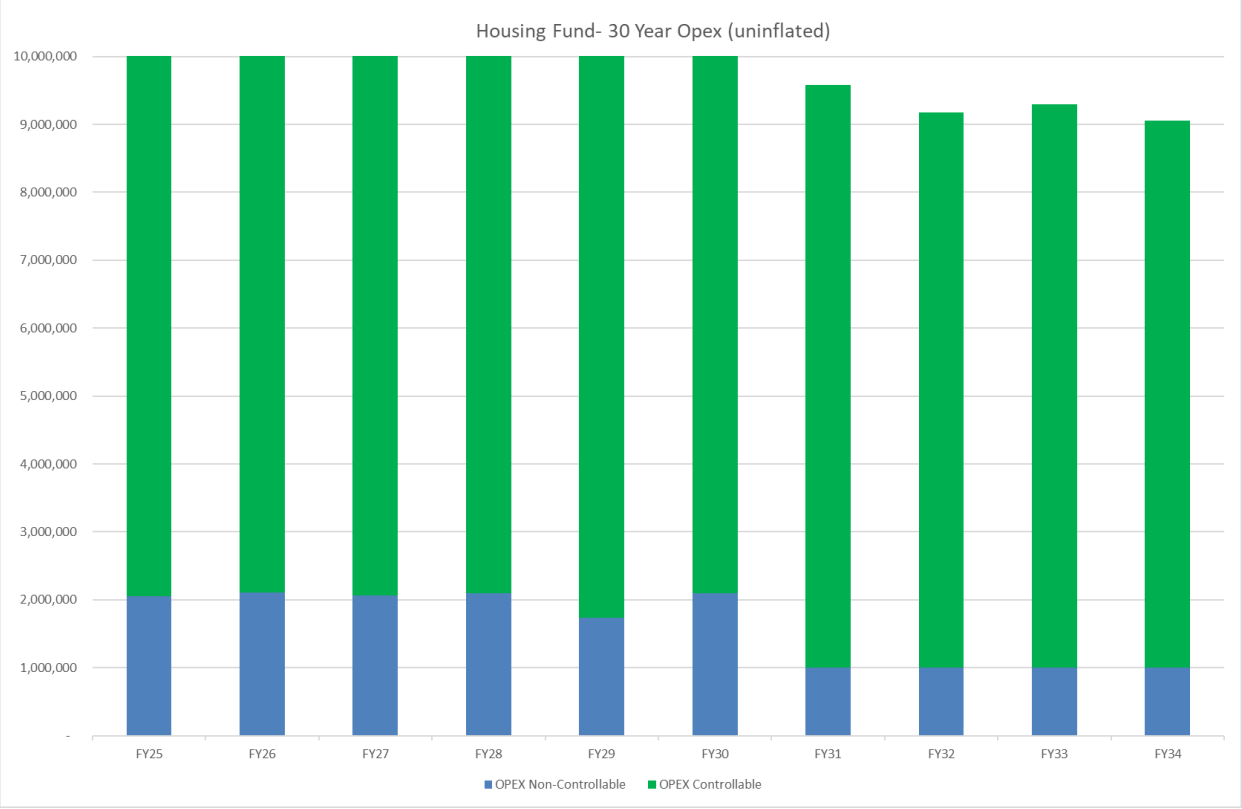


Figure 8-1: Operational Expenditure projection (Source: Social Housing Fund Model)

Capital investment requirements to address renewal, level of service, growth and resilience requirements are detailed in the Lifecycle sections. These are compiled and presented in Figure 8-2. The capital delivery is incorporated in the R&R programme that is carried out by Council and includes roofs, windows and exteriors of complexes. This graphic highlights the weight that the building replacement programme carries due to the aging asset profile.

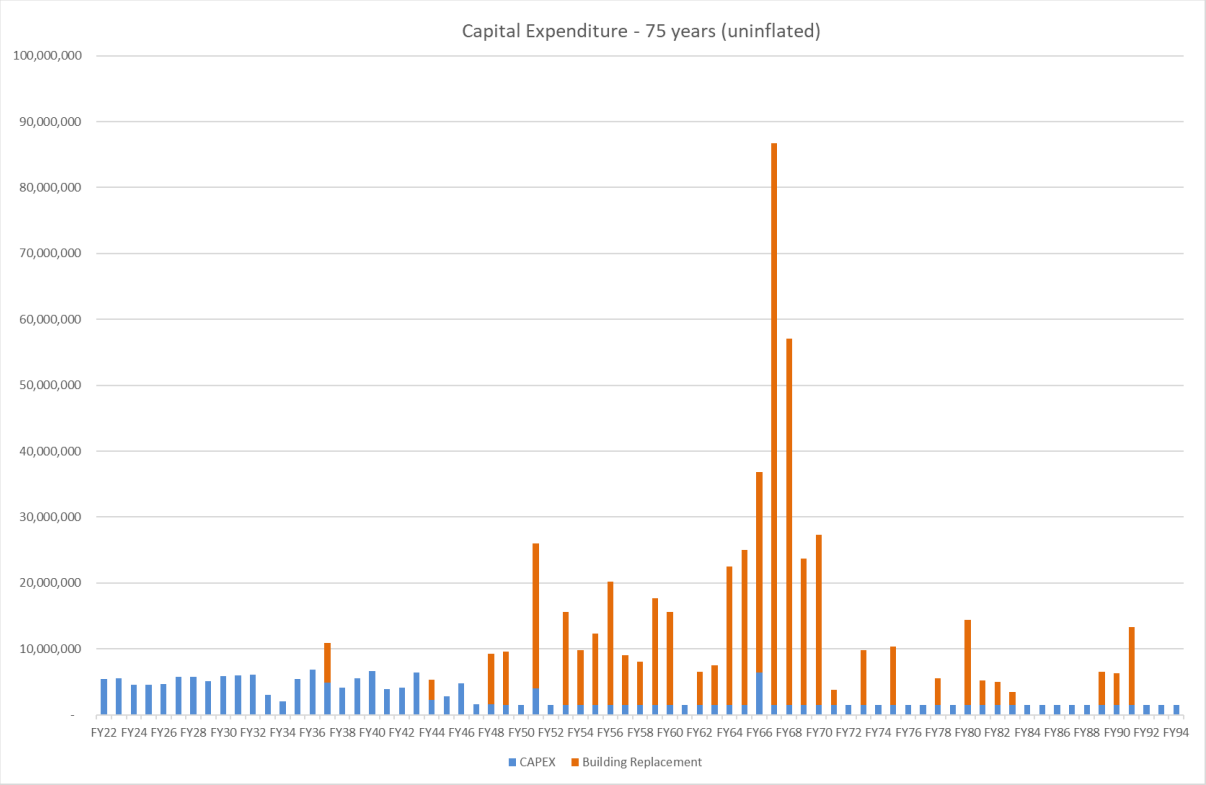


Figure 8-2: Whole of Life Capital Forecasts (including Building Replacement Programme) Source: Social Housing Model

The following graphic outlines the whole of life capital spend as presented in the LTP and Infrastructure figures. This verifies with the modelled amounts. From 2035 we begin to see the impact of building replacement programme requirements as complexes built in the 1960's/ 70's reach expected end of useful life.

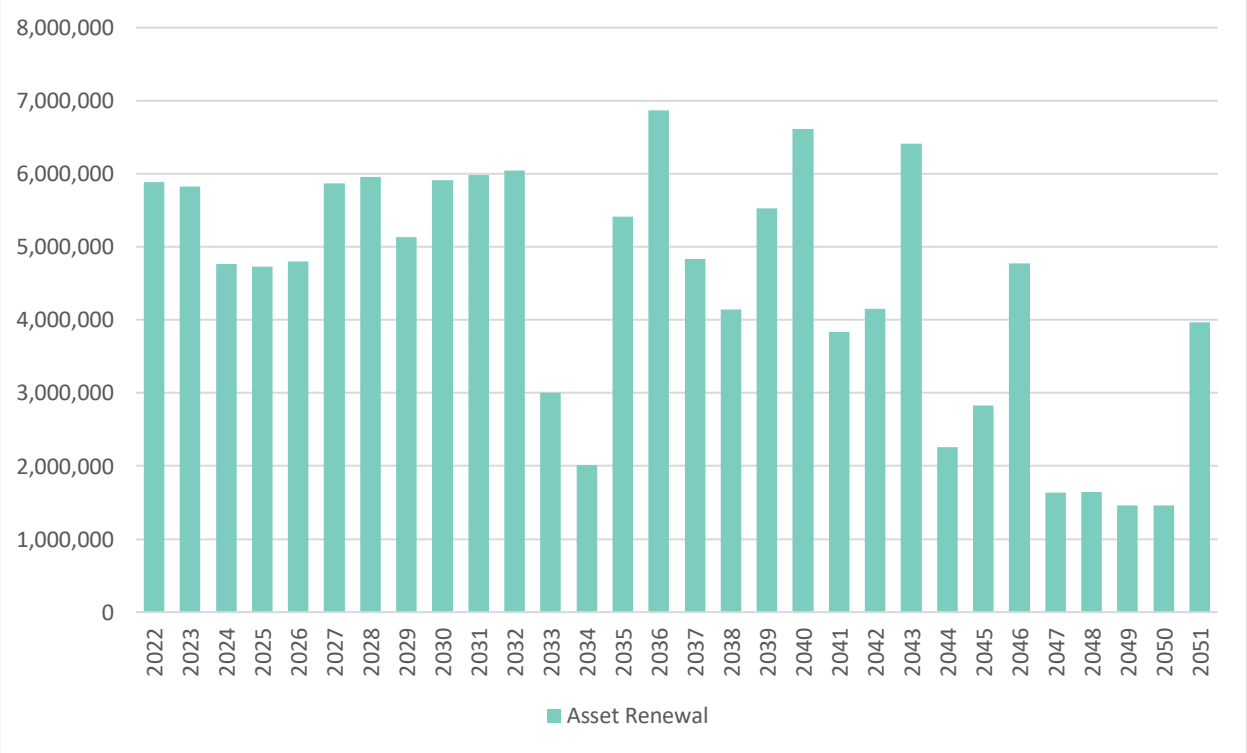


Figure 8-3: 30 Year Capital Projections (Source LTP / infrastructure Strategy) (uninflated)

The most significant projects and programmes coming up for Social Housing include:

- **Building Replacement Programme**- projected cash flow allows for growth of the Housing Fund to allow for replacement of assets when they reach the end of their functional and economical life. A large proportion of the portfolio will become obsolete in the years 2050 to 2080, and it is important that there is sufficient capital in the Housing fund to replace these units. Smoothing and stretching of the life of some assets may need to be proposed. In terms of delivery, the 1960's – 70's age complexes present a very large building programme that would crash the Housing Fund into borrowing in the mid 2060's. It is proposed that a smoothing of the Building Replacement Programme over a longer period of years will buffer the Housing Fund and keep it solvent in the later years of this projection (see Fig 8-5 and related discussion)
- **Warm and Dry Programme**- currently underway in FY20, to be completed in FY21, $16M programme to improve the standard and warmth of social housing. A $10M Loan facility has been established to deliver this work, and is modelled a s a cash injection into the Housing Fund, to be paid off over 10 years, with total interest and repayments amounting to $11.04M in that timeframe .
- **Prioritised Mid Life Refurbishments**- aligned with the previous optimisation programme and prioritised projects according to functionality moving forward. This work provides extension of life for those complexes sitting at midlife, which has both financial and social benefits. It also meets the needs to bring units to functional modern warm and dry standards. Ensuring continuity and supply of low cost housing is imperative to keeping people in place, to community sustainability and to the long-term viability of the Social Housing Portfolio.

The financial benefits will been seen through the extension of the life cycle of existing housing, while also ensuring that housing stock is safe, warm and dry, and fit for purpose and meets the needs of the City's changing demographics.

Any exterior upgrades including cladding, roofing and painting that are identified during the scoping of works for an upgrade programme would need to be incorporated into costings and budgets for those complexes.

Costs have been identified based on works undertaken during the planned works programmes and the EQ repair programme. The options below have been developed to provide information on potential costs through both a partial or full redecoration and upgrade programme.

The options table below shows these itemised average costs for both partial and full upgrades to units and the components of those upgrades of Council owned complexes.

Table 8-2: Mid-Life Costs per Unit

Average of costs per unit for upgrade works	Partial upgrade Option 1	Full upgrade Option 2
Component	Average cost per unit	Average cost per unit
Kitchen minor alteration	$1,860.00	
Kitchen total refit		$6,820.00
Bathroom total refit	$7,960.00	$7,960.00
Interior redecoration	$6,670.00	$6,670.00
Carpet replacement lounge & 1 bedroom	$1,850.00	$1,850.00
Vinyl replacement kitchen & bathroom	$1,795.00	$1,795.00
Full electrical rewire - TRS		$5,000.00
Electrical upgrade switchboard; sockets and switches; LED lighting	$1,328.00	
LED lighting only	$500.00	
Curtain & blind replacement	$1,000.00	$1,000.00
Per Unit Total	$22,963.00	$31,095.00

The total indicative portfolio spend for options 1&2 outlined above, assuming all units would require partial or full upgrade as listed, is shown below:

Table 8-3: Midlife Refurbishment Options (Council Owned)

Indicative Upgrade Costs - Social l Housing Portfolio	Partial	Full
Option 1 poor to mid (462 units)	$10,608,906.00	$14,303,700.00

Option 2 best (462 units)	$10,562,980.00	$10,562,980.00
Total option 1 option 2	$21,171,886.00	$24,866,680.00

These costs do not include buildings transferred to ŌCHT. Staff are aware that most of these complexes are ranked in the poor to mid-range. Additional funds would be required to undertake similar works on these properties should Council decide to include these in this work programme. Indicatively these complexes would require $10-13M in addition to the above.

- **Asbestos Remediation** - Asbestos Management Plan recommendations for mitigation and removal works will be a significant cost in the upcoming years as Asbestos testing continues. Both Opex and Capex sums have been allowed for in the forecasts to carry out Asbestos Remediation works. There is some uncertainty in precisely what asbestos testing will reveal, however it is expected this will become clearer as the resultant Asbestos Management Plans process is put into place over the next couple of years.

- **The Housing Fund**

  The Housing Fund is facing significant pressure to remain solvent in the next 2-5 years. Careful prioritisation underscored by strong evidence based analysis of where the most efficient spend can be found.

  The implications of the programmes of work outlined are measured in Figure 8-4 in terms of annual expenditure and closing Housing Fund balances. This projection indicates extreme pressure on the Housing Fund over the new 5 years, with a gradual increase in revenue (through IRRS uptake) improving the position to above a $10M balance by 2029.

  While this shows a positive trend, it is of high importance that the continued careful management in growth of the Housing Fund is maintained as a matter of highest priority. Significant building replacement programmes will follow from 2030 onwards, and as the figure below shows, we require significant investment over a 20 year period from 2050 as the 1960's and 70's era builds reach end of life.

Table 8-4: Housing Fund- 10 Year projections (uninflated)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
OPEX Non-Controllable	1,998,005	2,076,892	2,026,663	2,053,429	2,109,163	2,067,793	2,096,040	1,731,216	2,096,040	1,002,924
OPEX Controllable	9,114,894	9,277,607	9,153,781	8,676,927	8,562,090	8,417,809	8,310,371	8,557,891	8,411,461	8,582,173
CAPEX	5,476,477	5,532,699	4,594,952	4,554,038	4,622,547	5,697,745	5,779,705	5,132,154	5,912,715	5,978,855
EQ Programme										
Building Replacement	-	-	-	-	-	-	-	-	-	-
Income	15,594,202	15,887,225	16,206,643	16,481,937	16,772,767	17,018,087	17,211,299	17,359,593	17,462,566	17,504,245
Interest	79,174	72,680	54,360	35,814	45,526	70,193	100,683	118,782	141,299	182,441
Opening Housing Fund	3,633,994	2,717,995	1,790,701	2,276,308	3,509,666	5,034,159	5,939,092	7,064,958	9,122,072	10,305,721
Closing Housing Fund	**2,717,995**	**1,790,701**	**2,276,308**	**3,509,666**	**5,034,159**	**5,939,092**	**7,064,958**	**9,122,072**	**10,305,721**	**12,428,456**
Housing Fund Movement	- 916,000	- 927,294	485,607	1,233,358	1,524,493	904,934	1,125,866	2,057,114	1,183,649	2,122,735

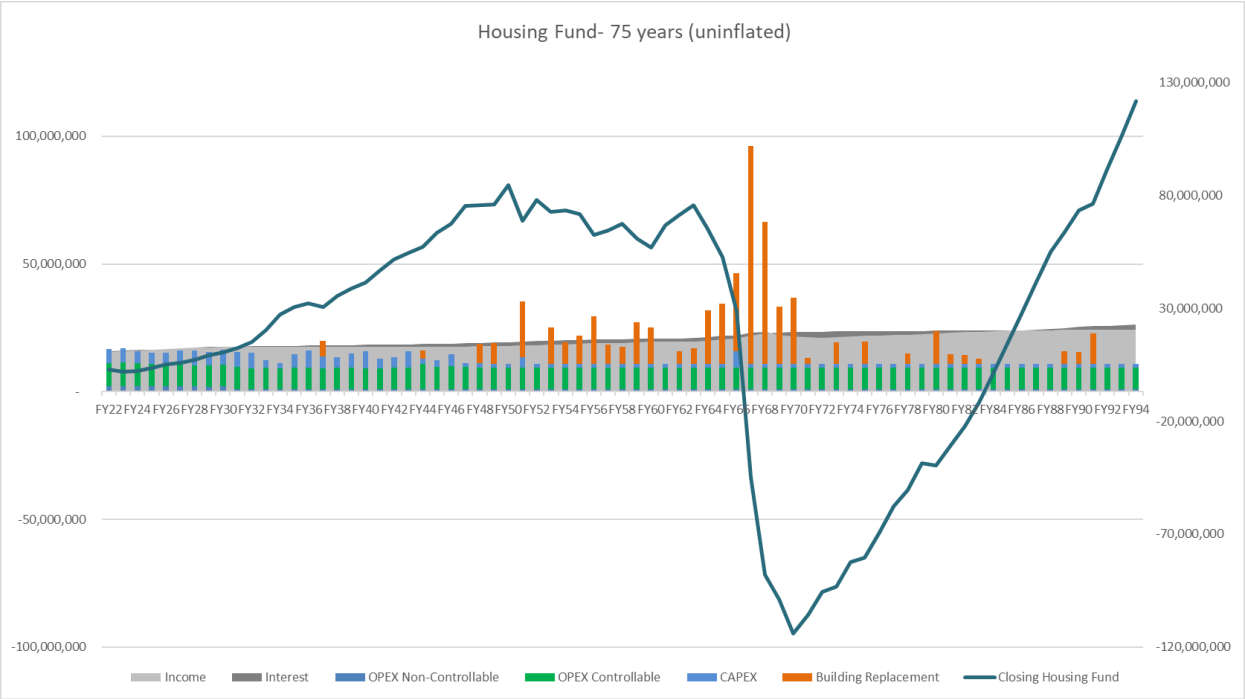


Figure 8-4: Housing Fund- 75 Years Projection (uninflated) Source: Social Housing Fund Model

Building Replacement Programme- Smoothing the replacements

In terms of the mid-century rebuild programme, it is recognised that building large amounts of units back in a short time is neither feasible nor realistic to programme, both in terms of project logistics and in terms of tenancy interruptions. A logical response is to therefore smooth the building replacement programme over a much longer timeframe, and carefully prioritise rebuilds first to those sites that are the largest financial drains and most functionally obsolete in terms of design. This allows a much great smoothing of capital required for rebuild, and allows a scenario that keeps the closing Housing Fund clear of negative territory. A key assumption of this approach however is careful investment and stewardship of the Housing Fund balance as it grows towards the beginning of the rebuild cycle throughout the next 20 years. Figure 8-5 overleaf outlines the potential impact of such capital smoothing, and the maintenance of the Housing Fund as a solvent entity.

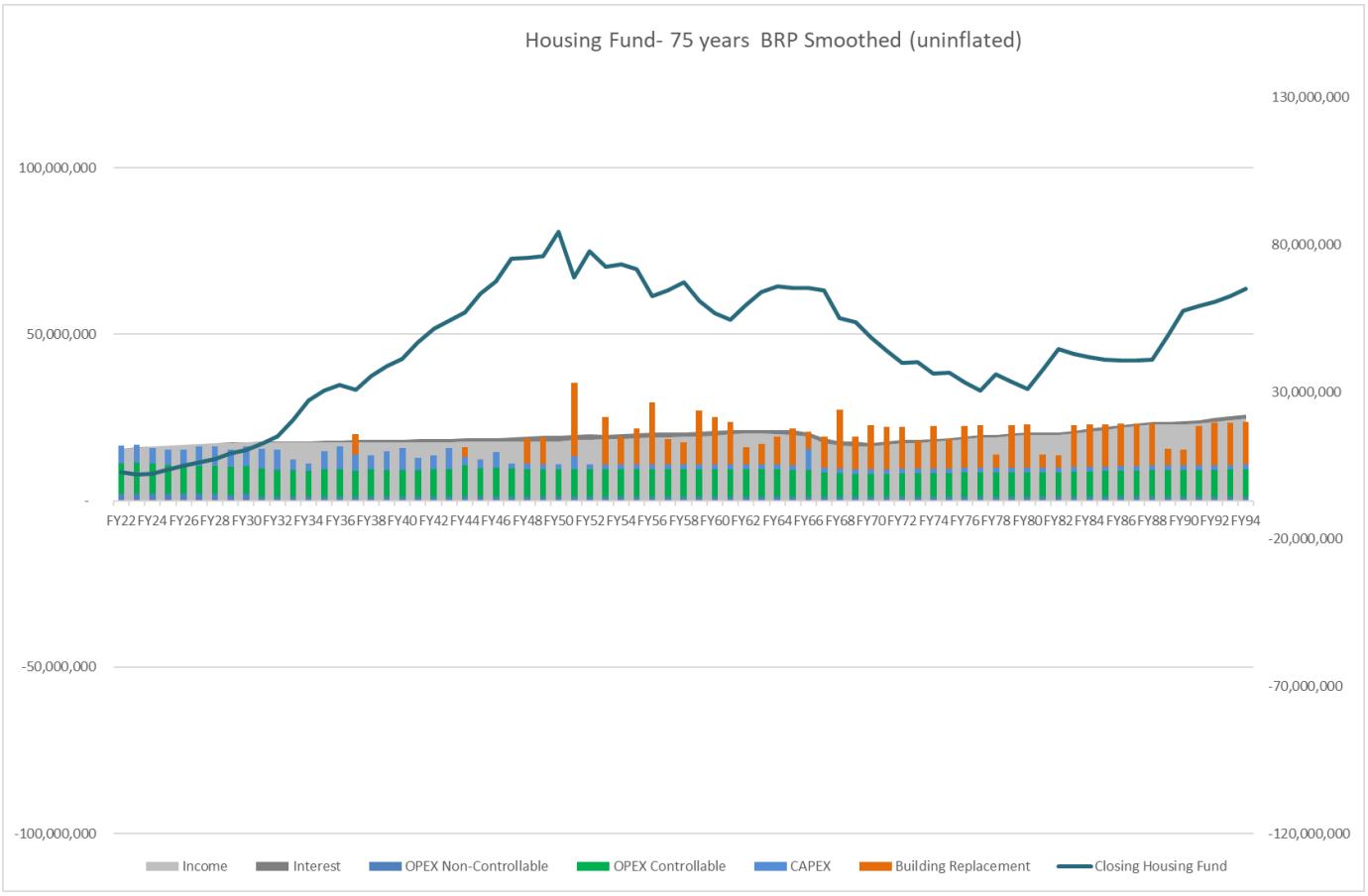


Figure 8-5: Housing Fund- Building Replacement Programme smoothed over later years (Source: Social Housing Fund Model)

8.1.5 Key Assumptions

General assumptions in preparing this forecast include:

- The Housing Fund is not rates funded
- Capital funding is prioritised on the basis of optimisation/ complex rankings- to be updated in 2021
- The Housing Fund model scenario includes the drawdown of the $10M loan facility, with repayments projected across 10 years to 2031.
- Scoping of capital programme for FY20-FY25 is in the order of around $5M per annum
- The ŌCHT lease model continues to uptake IRRS at the currently modelled ratio, approximately 4% p.a.
- There is currently no approved new asset expenditure. Options for growth may be explored as an improvement plan task once the lie of the land is known beyond the COVID-19 pandemic.

Significant risks associated with these assumptions include:

- The age profile of the portfolio presents a significant building replacement spike in the medium and long term horizons
- Uncertainties due to the economic and political climate after the COVID 19 pandemic will need to be analysed and implications built into the planning

8.2 Input Data Confidence Levels

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5-level scale in accordance with Table 8-6.

Table 8-5: 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.

Overall for the Housing Portfolio the confidence in input data can be assessed as medium. There is an amount of improvement plan work to be undertaken to take SAP and condition data into a format where it can be analysed and manipulated in a manner that assists advancing asset planning based on a deeper understanding of asset information.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 8-7.

Table 8-6: 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 detailed analysis of current contracts, actual work invoices, SAP data and localised site knowledge, and examined by Finance Business partnership, AM/ FM Team analysts and business Team Leads
Maintenance expenditure	B- Reliable	Forecasting is undertaken by the analysis of previous years spend, with an overlay of structured prioritisation based on financial performance, age, over all condition, site utilisation, demand, and location. Given the Social Housing portfolio has been subject to detailed financial modelling over the past 15 years a sound understanding is made of financial assumptions and drivers for expenditure.
Renewals (asset value, lives, condition, performance)	C -Uncertain	Analysis of asset condition inspection data has yet to be undertaken as it is currently under collection. Standardised cyclic renewal events have been built into a model using Rawlinsons/ QV Cost Builder guidance, costed and applied individual assets to gain an appreciation of anticipated renewals expenditure over a 90 year period for social housing buildings.
Upgrade/New expenditures (level of	C- Uncertain	As per Renewals comments

service, demand, resilience projects)		
Disposal expenditure	B - Reliable	A number of complexes have transferred to the ŌCHT Trust over the past 2 years. Standard market values have applied to these transfers. Council is not planning to dispose of complexes in any other manner

8.3 Valuation and Depreciation

8.3.1 Valuation Basis

Council's building portfolio was revalued as at 1 July 2020. The methodology below outlines the approach:

Replacement costs have been assessed with reference to actual construction costs where known, published quantity surveyor data, analysed building contracts and Bayleys construction cost database.

Indemnity values have been based on age of structures and physical condition where known, bearing in mind the requirement to produce values on a desktop basis without inspections.

Quantity surveyors, Rawlinsons, have produced replacement costs for specified structures.

Values have been calculated using the Council supplied information including description of buildings, addresses, floor areas, age and previous valuation

The Local Government Act 2002 and the Financial Reporting Act 2013 requires Council completes a full valuation of its assets every three years and a desktop valuation in each of the two years between these full valuations. These valuations are required to be completed by an independent registered valuer.

Valuations are assessed on the replacement cost valuation methodology being the cost to replace an item or structure at its existing condition at the time of appraisal. When the replacement cost, useful life, remaining useful life and residual value have been established as part of the valuation exercise, the depreciation for the asset is calculated. The asset is depreciated and a book value is established so that:

- Only the remaining service potential of the asset is reflected in its 'book value'
- To recognise the expense for financial accounting requirements

Table 8-7: Valuation and Depreciation Forecasts

Asset Class	Replacement Cost	Book Value (excl. Land)	Land	Annual Depreciation (FY22)
TOTAL SOCIAL HOUSING ASSETS	$378,201,333	$142,696,786	$112,459,471	$5,966,358

As the replacement cost valuation assessment is the amount of money required to replace an existing asset with an equally valued or similar asset at the current market price, in other words the cost of purchasing a substitute asset this amount will increase in line with building materials and construction labour rates. The most applicable indexes are the Producers Price Index and Capital Goods Price Index which suggest a forward moving increase in excess of 3% per year.

Figure 8-6 outlines the 10 year depreciation forecast for the Social Housing Portfolio.

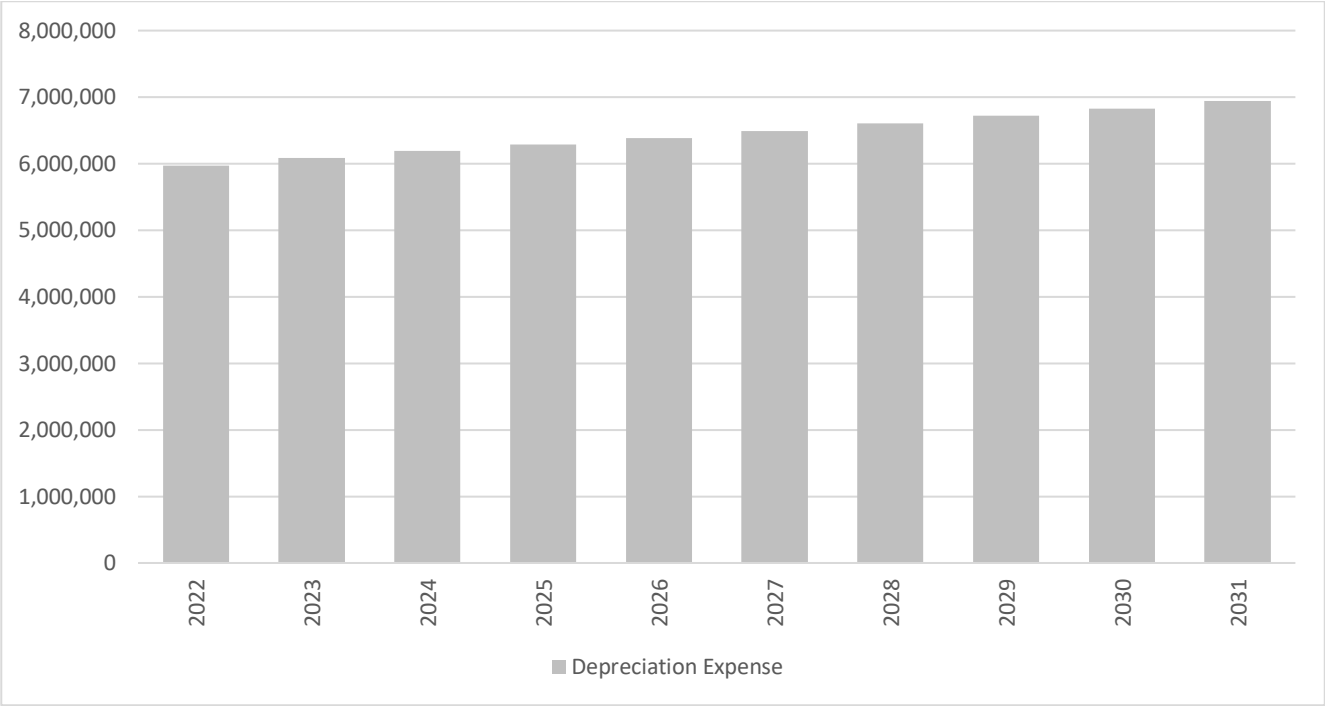


Figure 8-6: Depreciation Forecasts 2021-31 (uninflated)

Figure 8-7 shows the proposed renewal forecast required to manage the social housing asset portfolio to the stated levels of service. Depreciation projections have been developed by calculating amounts using the current asset register, simulating amounts from proposed capex and applying future assumptions of assets additions and disposals. These forecasts are subject to change as the LTP moves towards adoption

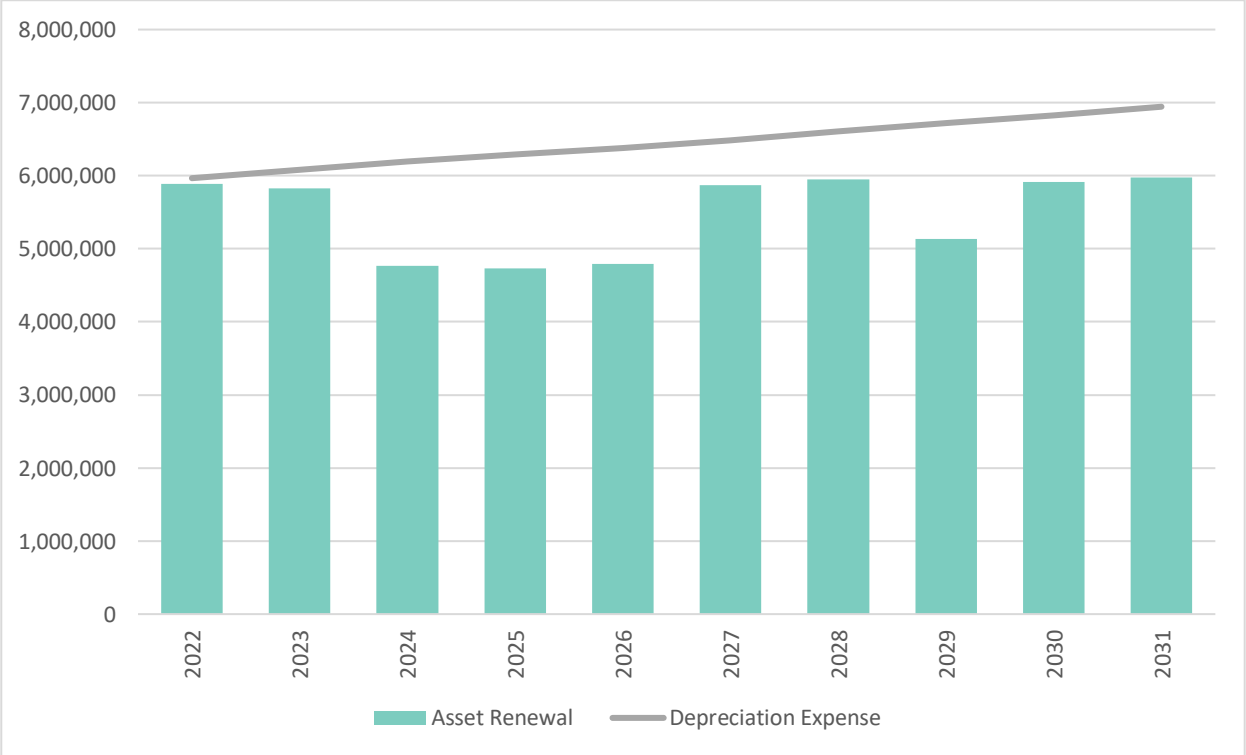


Figure 8-7: Depreciation/ Capital Renewals comparison for Social Housing Assets 2021-31 (Uninflated)

8.4 Implications of approved ten-year budget

8.4.1 What we cannot do

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

There are some operations and maintenance activities and capital projects included identified in this AMP that are unable to be undertaken within the next 30 years. These include:

- Budget constraints could limit the work that can be undertaken, especially in the context of the COVID-19 pandemic. The building renewal planned lifespan is 90 years for Housing. Given the age profile of the complexes, it is expected smoothing of the building replacement programme will be required in order to keep the Housing Fund viable, especially in the longer term where many complexes reach end of lifecycle decisions

Service consequences

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

- Potential for reduction in LOS i.e. challenging the provision number of units service level, that may take pressure off the housing fund.
- Reduction in upgraded/ best located facilities where population growth/ demand is strong.

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 warm dry social housing that supports the development of strong, connected and resilient communities. Demand for housing may not be met
- Inability to maintain assets to a level that they are fit for purpose and suitably maintained so as to provide an appropriate level of health and safety and safe, warm dry tenancies.
- 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 council image as complexes deteriorate.
- 'Front page test' of the Press – negative publicity.

9 Continuous Improvement

9.1 Overview of the Improvement Programme

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

Council's overall AM improvement process is outlined in the SAMP. This section details the Social Housing improvement programme.

9.2 Current Asset Management Maturity

An independent assessment of current Asset Management practice was undertaken first in 2016 and then refreshed internally in 2018. This was completed at a high level encompassing all Facilities (Social Housing, Community Facilities, Recreation & Sport, Art Gallery, and Libraries.)

The baseline maturity assessment was predominantly achieved through onsite workshops and interviews, with a good cross-section of participants including representatives of asset owning groups, the respective Facilities leads and Strategic Property Analyst representatives. Future maturity level was also set based on appropriate best practice and considering the agreed business drivers. Future maturity level was set as aspirational targets which combined the desire to achieve appropriate best practice and considering the agreed business drivers. It should be noted that the approach taken for the Facilities portfolios in rating Future or aspirational levels was determined as those that could realistically be achieved with available resources over the three year life of the AMP. Strengths and opportunities for improvement are summarised alongside the results to acknowledge the baseline achievements.

The appropriate level of Asset Management practice for this Activity has been defined in our Asset Management Policy as 'Core'.

The AM maturity assessment presented as a 'spider web' diagram is included below in Figure 9.1. This highlights a number of key issues:

- Significant gaps between Current and Target (Future) in several areas including:
  - Improvement Planning – largely due to no specific resources (people and budget) being identified to progress identified Improvement tasks;
  - Demand Forecasting – largely due to difficulty in assessing demand in a changed city given the relatively short period the Gallery had been open following post-earthquake closure; and
  - AM Plans – at the time of review, the AMP preparation process was under pressure but this has been improved significantly with a more integrated and consistent approach followed in 2019.
- We are close to achieving our target in several areas including:
  - Risk Management – largely through the adoption and application of ProMapp;
  - Maintenance Planning – largely due to the progress made in Facilities Better Business Management (although this has not been without its own challenges); and
  - Operational Planning and Reporting – largely due to the much more frequent meetings which are held at an operational level (and also at a capital planning level as well).
- It is worthy of note that we have given low levels of performance and aspiration in the area of Quality Management – largely due to Council not having any formal Quality Management processes and programme, and this is unlikely to change in the near future. However, a specific Improvement Plan task has been included to progress appropriate Quality Management initiatives – identified as Task C in Table 9 – 2 below.

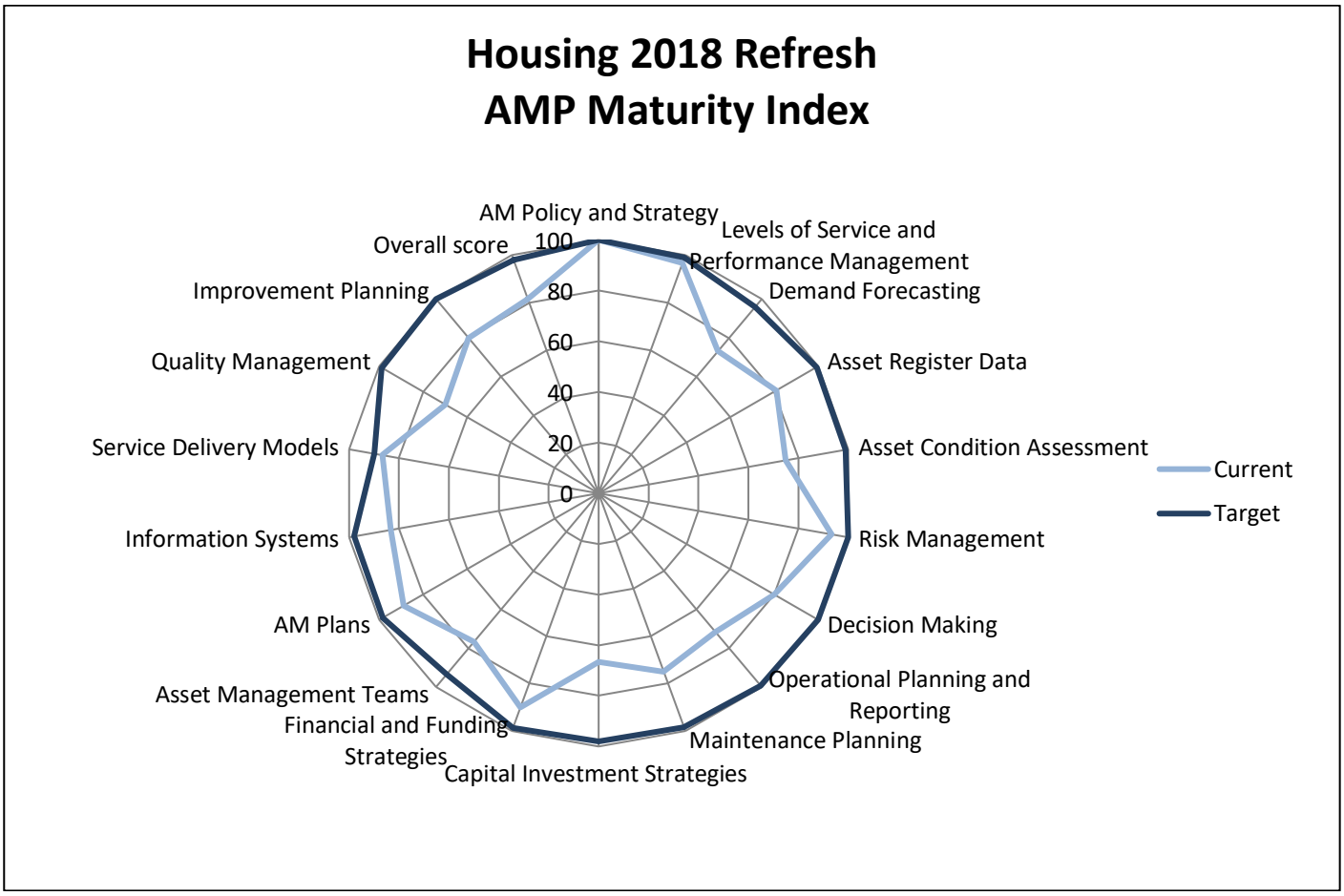


Figure 9-1: 2018 Asset Management Maturity Assessment for Social Housing Activity

9.3 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 9-1 provides an update on the status of the improvement programme items as at June 2021.

In addition to the items within the improvement programme, the following improvements have been made to the asset management of the Social Hosing activity since the last AMP:

Table 9-1: Progress against 2018 Improvement Plan

Task ID	Action/Task	Timeline	Progress and Action
Item 1-1	Key locational feature list dates back to pre-earthquake	1/12/19	In progress, 90% complete, expected to be complete by March 2020.
Item 2-2	Portfolio ranking out of date	30/6/19	No progress, reprioritised-carry forward
Item 3-3	Current demand forecasting models are not fit for purpose	30/6/19	In progress, 75% complete, carry forward.
Item 4-4	Maintenance cycles need to continuously be monitored, verified and modified	Ongoing	In progress, 70% complete, carry forward.
Item 5-5	Continuity in risk registration- develop register	Ongoing	In progress, 75% complete, carry forward.
Item 6-5	There is no review of how the housing portfolio can be "Alpine Fault 8 Event ready". Review readiness	1/12/18	In progress, 90% complete (EQ Repairs), carry forward.
Item 7-6	The R&R programme scope for FY19/20 and FY20/21 is not finished	1/12/18	Complete
Item 8-6	There are no projects identified for the R&R programme for FY21/22 to FY22/23	1/12/18	In progress, 75% complete, carry forward.
Item 9-6	There are no projects identified for the R&R programme for FY23/24 to FY28/29	1/12/18	In progress, 50% complete, carry forward.

9.4 Asset Management Maturity Assessment

This most recent Asset Management Maturity Assessment report has been completed by Infrastructure Decisions Limited.

The report summarises the findings of an Asset Management Maturity Assessment (AAMA) across all of Council's asset management activities. This section of the AMP focuses on 'Section 5.5 Facilities' contained in the Report. It identifies improvements made since previous assessments in 2016 and 2018 and makes recommendations to support further improvement to levels of 'appropriate' asset management maturity.

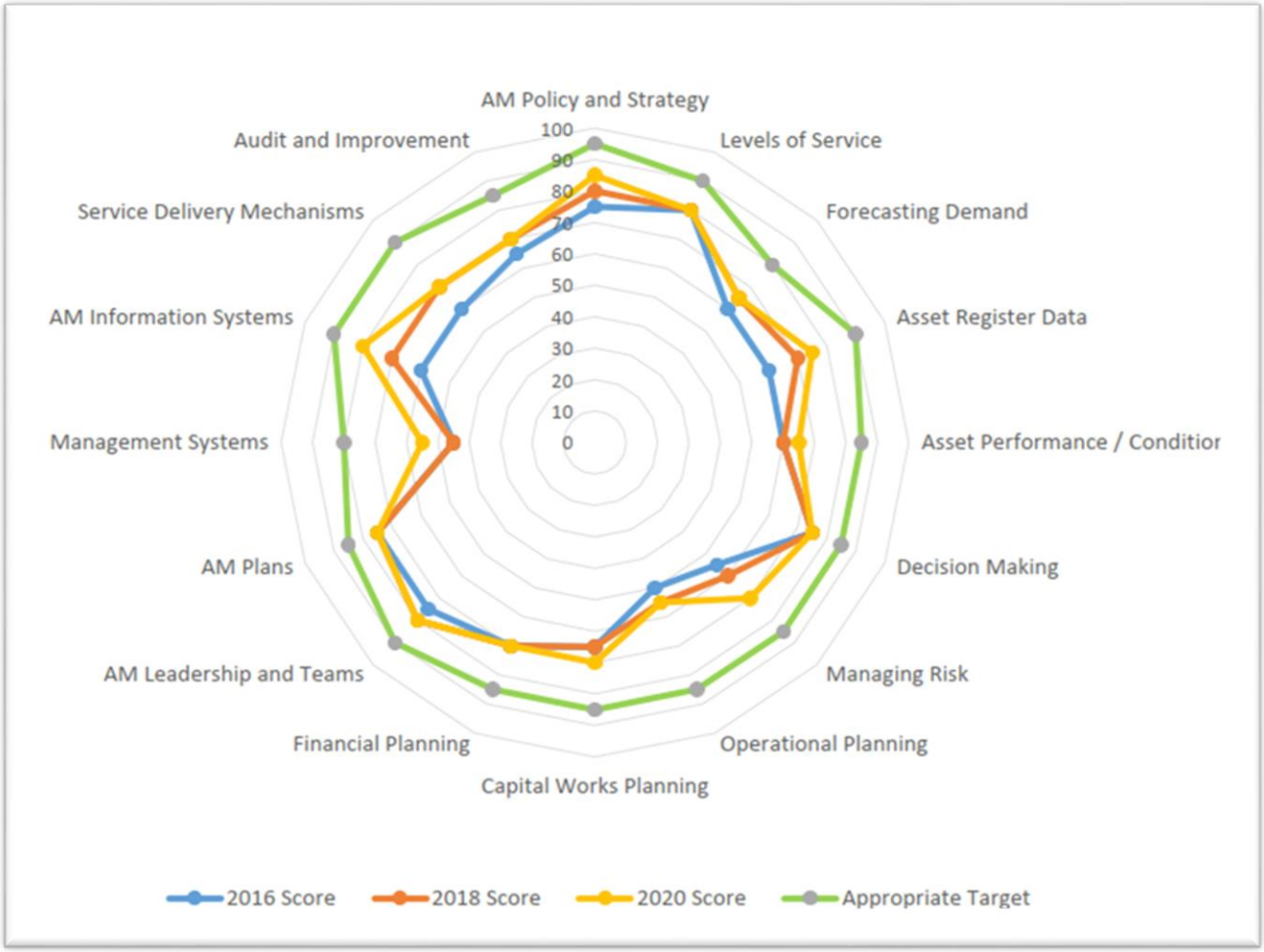


Figure 9-2: 2020 Asset Management Maturity Assessment for Facilities

Since the last AMMA which was carried-out in 2018 there has been good progress across many functions, with notable improvements relating to asset information and analysis, alignment of strategic priorities with AM planning and understanding of long term renewal investment requirements. However significant identified gaps between Actual and Target scores remain in a number of areas including service delivery, asset performance/condition, operational planning and management systems.

The average score across Facilities activities increased from 68% to 72% in the last two years, aiming for a target of 87%. The basis for the scores is described in Table 9-2, which includes summary comments from the Report which are relevant to Social Housing asset management practices and performance.

Table 9-1: 2020 Asset Management Maturity Assessment Scoring

Section	Current	Target	Comments pertinent to Libraries
AM Policy & Strategy	85	95	Corporate AM Policy and Strategic AM Plan in place. Strategic context thorough and documented. Strategic priorities are well embedded with good alignment through to AMP and Activity Plans.
Levels of Service	80	90	The levels of service sections of the AMPs have good linkages to strategic outcomes, customer expectations. LOS and performance measures reviewed by 'pit crews' in 2020. Community needs analysis and survey information has been detailed in the AMP – engagement through user surveys is stronger for some activities (e.g. Libraries) than others.

Section	Current	Target	Comments pertinent to Libraries
Forecasting Demand	65	80	Good analysis of demand drivers in AMP, supported by corporate demographic information. The current and historical utilisation and capacity of most facilities is measured however the demand forecasts have not been converted into quantitative forecasts to a level useful for planning for individual facilities. Demand management techniques identified in AMP but not clear which are being funded or progressed.
Asset Register Data	75	90	Data structure reviewed as part of the Facilities Better Business Management (FBBM) Programme. The data in SAP has been cleansed and is of a better quality but some datasets still have big gaps. A data collection process is underway to capture remaining facility assets and their attributes.
Asset Performance/Condition	65	85	A significant amount of asset data validation and condition assessments have been undertaken, unfortunately the data was not available to support the 2020 AM Plans. Asset performance data is limited to maintenance reporting and response times. Asset performance assessments (e.g. fitness-for-purpose) have not been part of this year's asset inspections.
Decision Making	75	85	Formal decision-making processes are applied to major projects and programmes – business cases are used to justify the financial and non-financial benefits of projects. Options are evaluated using a Council framework. CAPEX projects are captured and prioritised against decision criteria (aligned to Council priorities) in CPMS. See also CAPEX planning re: renewal decisions.
Managing Risk	70	85	The Council risk framework has been applied, with regular risk reporting through Promapp. The Risk section of the AMP and appendices covers the main risks for each of the five facility types, and the mitigation measures. Criticality is considered in decision making, and the key risk for each facility are known and managed. However, a criticality rating has not been formally assigned to individual assets.
Operational Planning	55	85	Scheduled maintenance programmes are developed collaboratively with Citycare and Facilities, or through the ŌCHT. There have been efforts in recent years to more planned (less reactive) maintenance and SAP was being used to manage scheduled maintenance but this has reverted to spreadsheet lists. Reactive maintenance and costs are captured in SAP, but only at a building level. Budget constraints are likely to see cuts to planned maintenance programmes, focussing on maintaining safety and compliance activities.
Capital Works Planning	70	85	See comments for 'Decision Making' plus: Capital projects and programmes managed in accordance with CPDF and projects tracked in CPMS. A 10-year (AMP/LTP) and 30-year (IS) CAPEX programme is in place. Renewal forecasts are still based on 'top down' assessments until asset condition data is available for analysis. Network planning is required to provide a stronger base for development of growth and LOS project CAPEX.
Financial Planning	70	85	10-year forecasts are provided for OPEX and CAPEX. OPEX forecasts are largely based on historical expenditure and staff knowledge. Consequential OPEX (OPEX associated with new assets) is estimated, but there is limited information on asset expenditure to date, as the practice of linking Work Orders to assets is only just beginning within the new asset data structure. The operating impact of budget changes on levels of service (asset performance) is not well linked.

Section	Current	Target	Comments pertinent to Libraries
AM Leadership & Teams	80	90	The organisational structure for asset management has embedded. There is a good working relationship between asset managers and activity managers and the AMP process has been useful in developing a joint understanding of AM issues.
AM Plans	75	85	5 Facilities AMPs (including the Social Housing AMP) have been updated and were largely complete at the time of the assessment (Aug 2020). There is some good content, and there has been much better engagement with business owners during AMP development enabling. However not all sections are complete, the information from recent condition assessments was not available to inform the AMP and there is limited performance information in the AMPs.
Management Systems	55	80	The need for a quality management approach to asset management is understood and continues to be developed. Processes are well established and documented for many corporate processes such as capital delivery and risk. AMU is supporting a more formal process to assist activities prioritising 'critical AM Processes' and reviewing/improving the highest priority ones, but this is initially focusing on 3 Waters and Transport.
AM Information Systems	80	90	Good information systems – SAP, GIS, Fulcrum (field data). The FBBM project has focused on better use of SAP data and information to support the business. Power BI is being used to develop dashboards to better meet user needs, still work-in-progress.
Service Delivery Mechanisms	70	90	Contracts are in place for the delivery of maintenance and operations functions. Competitive tender processes are used. Increasingly the business is driving change in asset data collection, Work Orders and contract payments through the FBBM project –to get more accurate costing and better contract performance monitoring. A greater focus on ensuring what is in the contract and what is additional work, and more accurate maintenance schedules.
Audit & Improvement	70	85	An AM improvement programme has been developed for Facilities. Reporting on major projects that are part of the corporate programme is via AMGB. Each AMP identifies items for improvements for the Facilities area but there is no formal monitoring/reporting process.

9.5 Improvement Plan 2020

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 2020 maturity assessment and as part of this asset management plan review. These items were added to the outstanding items from the 2018 Improvement programme. The current improvement programme horizon has some 6 months to run. This AMP will put in place the programme for 2021 through to 2024.

Table 9-3 details those tasks that will 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 9-3: Asset Management Improvement Tasks

Task ID	Project / Task	AM Maturity Gaps	Priority (H, M, L)	Responsibility	Resources (teams, $)
20-A	Portfolio ranking out of date- update based on 2020 information	Decision making Capital investment strategies Operational Planning and reporting Maintenance planning	**High**	Asset Planning	Asset Planning/ Housing/ Finance
20-B	Current demand forecasting models are not fit for purpose	Decision making Capital investment strategies	**High**	Asset Planning AMU	Asset Planning/ Asset Management Unit
20-C	**Risk Management** • Continuity in risk registration- develop register • There is no review of how the housing portfolio can be "Alpine Fault 8 Event ready". Review readiness	Risk Management Decision Making	**Medium**	Asset Planning Risk and Resilience Asset Owners	Asset planning
20-D	**Quality Management** A structured quality programme is needed	Data Quality gaps	**High**	Asset Planning and Asset Management Unit	Facilities/ Asset Management Unit
20-E	**Capital Programme** • Clarity of future work that dovetails into maintenance plans • Use relevant condition data and more advanced lifecycle analysis in order to generate capital works programming. • Identify and agree asset priorities • Warm and Dry programme completed • Maintenance cycles need to continuously be monitored, verified and modified • There are not complex specific projects identified for the R&R programme for FY22/23 to FY23/24	Decision making Capital investment strategies	**High**	Asset Planning Facilities Management Asset Owners	Programme Management Office/ Asset Owners/ Facilities ŌCHT

Task ID	Project / Task	AM Maturity Gaps	Priority (H, M, L)	Responsibility	Resources (teams, $)
	• There are not complex specific projects identified for the R&R programme for FY24/25 to FY30/31 • Buffer to changing economic conditions, in particular post COVID • Assist/ enable growth of social housing provision in Christchurch back to pre-earthquake levels				
20-F	**Changing Climate** • Frequent inspections and maintenance to protect against weather • Understand implications from sea level rise and increased flood risks • Sustainability	Maintenance planning Risk management	**Medium**	Risk and Resilience team Asset Planning Asset Owners	Using data from above and internal shared service resource from the Asset Teams
20-G	**Asset condition data** • Undertake individual asset site visits to ascertain condition. Secure asset data in SAP and advance reporting and analysis on data.	Asset register data Asset condition assessment Information systems	**High**	Asset Information Management Team	Existing allocated budget of $ to gather data.
20-H	**IT Improvements** • Incrementally upgrade the technology in Asset Data (including potential of BIM) • Key locational feature list dates back to pre-earthquake data • GIS linkages	Information systems	**High**	Asset Owners Asset Planning Asset Management Unit Information Technology	Projects in 20/21 to lead this
20-I	**AM Improvement Tasks** • Analyse resourcing, responsibilities, timelines & reporting around Improvement tasks	Improvement task reporting	**Medium**	Asset Planning Asset Management Unit	Asset Planning Asset Management Unit

9.6 Resourcing the improvement programme

As can be seen from Table 9-3 above, the common resource required to progress all initiatives is time – especially the time of the key team members. This linked with a limited budget for additional resources to free-up team members has proven to be a constraint in the past and so it will require further thought as to how this challenge is overcome. Consideration of existing workloads, stakeholders outside of Council, 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. The process to prioritise improvement items will be coordinated by the AMU.

9.7 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 and the PDP tool.

Appendix 1: Maintenance Schedules under lease with ŌCHT

TASK	DEFINITION
Earthquake Repairs	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Bathroom Conversion	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Kitchen Remodel	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Unit Remodel	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Communal Area Lighting	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Full Redecoration Interior	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Full Redecoration Exterior	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Roof Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Roof Repair Major	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fencing Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Gutter Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Insulation Replacement/Install	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Window Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Window Repairs Major	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Window Cleaning – Exterior	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Stove space enlargement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fridge space enlargement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Heater Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Shed Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Smoke Detectors (Hard-wired)	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fire Alarm Systems Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fire Alarm System Repair	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fire Signage	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
BWOF	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Asbestos Testing	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Asbestos Removal	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Asbestos Encapsulation Management	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Meth Remediation	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Fire Damage – Major	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Major Upgrades/Refits	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Sewer Replacement	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Electrical Rewire	Scope of work to be determined by Christchurch City Council in advance of work being instructed under relevant contract.
Lift maintenance - Hornby Courts (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and Service Provider
Irrigation Systems (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and Service Provider
Chimney Clean (Akaroa) (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and Service Provider
Building Wash downs (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and Service Provider

Table A-1: Minor Maintenance: Council

TASK	DEFINITION
Vacant Unit Evaluation (VUE)	Comprehensive scope of work delivered to turn-around vacant property for re-letting to new tenant.
Tenant Damage Costs	Each and every repair item deemed tenant damage should be clearly itemised on the Vacant Unit Evaluation and priced for cost recovery action by the Trust.
Clean Only	Minimal scope of work delivered to turn-around vacant property for re-letting to new tenant.
Painting – Minor	Window seals, patch repairs, mould repairs, doors. Excludes major interior and exterior painting work.
Roof Repair Minor	Remedy of minor leaks, holes, dislodged tiles. Excludes major/full roof replacement.
Fencing Repair	Minor repairs as result of mechanical damage and rot. Excludes major replacement of boundary fencing.
Gutter Repair	Urgent repair deemed necessary to reinstate function as per URG definition. Excludes major replacement of gutters and/or downpipes.
Window Repair	Minor repairs as result of mechanical damage and rot. Excludes major replacement of entire window(s) or component parts.
Glazing Replacement	Broken and cracked glass that is a weather tightness and/or a Health and Safety issue/ Excludes whole-of-house replacements, or replacement of glazing for cosmetic purposes.
Stove Repair	Repair/replacement of elements, controls, lights, thermostat and electrical connections. Excludes substantial repairs over the cost of replacement (uneconomic to repair). Excludes stove replacement.
Stove Clean	Cleaning costs outside of VUE and General cleans as part of returning a property to the letting pool.
Heater Repair	Lounge and Bathroom If CCC installed. Excludes Tenant owned appliances. Excludes replacement and new installs.
Heater Service	Lounge and Bathroom. At time of vacant only if required and If CCC installed. Excludes Tenant owned appliances.
Carpet Repair	Includes tears, lifting, mould and replacement of individual tiles where applicable. Excludes full replacement or major repairs over 20% of the surface area.
Carpet Shampoo/Stain Treatment	Cleaning costs outside of VUE and General cleans as part of returning a property to the letting pool.
Vinyl Repair	Includes tears, lifting, mould and replacement of individual tiles where applicable. Excludes full replacement or major repairs over 20% of the surface area.
Security Lights Replacement	Includes like-for-like replacement where uneconomic to repair. Excludes Tenant owned equipment and new installations.
Security Lights Repair	Includes Bulb replacement and minor electrical repairs. Excludes Tenant owned equipment, replacements and new installations.
Smoke Detectors (10yr Fire Angel)	Includes replacement of faulty (including non-10yr) detectors with Fire Angel system. Excludes whole-of-house upgrades and replacement of non-faulty systems.
Unit Evacuation signs	Includes appropriate signage to identify exits in the event of an emergency. Excludes electrical components and safety systems already covered under BWOF requirements.
Fire Damage – Minor	Includes minor cleaning to return property to a habitable condition.
Sewer and Drainage Repair	Includes costs to unblock drains, gullies, traps and CCTV investigation of consistent issues. Excudes major excavation and replacement of drainage.
Electrical Wire Repairs	Includes damaged socket, fuses, thermostat repair and/or replacement. Excludes major wiring replacements (re-wire).
Water Supply Repair - Minor Plumbing	Includes blocked sinks, toilets, repairs to showers and hose attachments, minor plumbing repairs for leaking pipework internally and externally. Excludes major replacements of plumbing internally or externally.
Rubbish Removals	Includes rubbish costs outside of VUE and General cleans as part of returning a property to the letting pool. Includes ensuring all units have correct bins available, either individual or communal.
Curtain and Blind Repair	Includes rips/tears, tracks, pull strings and associated wear and tear items. Excludes new installs of blinds and curtains.
Curtain Replacement/New Install	Includes curtain replacement and new installation as part of VUE operations. Excludes the replacement and new installation of blinds. Excludes portfolio wide upgrades of existing curtains.
Lock Replacement	Replacement of locks like-for-like as required. Excludes locks accounted for under VUE operations. Excludes portfolio wide upgrades of existing locks.
Lock Repairs	Repair of locks as required. Excludes locks accounted for under VUE operations. Excludes lock replacements.
Letterbox Repairs/Replacement/Numbers	Includes repair/replacement (like-for-like) of both box and numbers. Excludes new installations and site-wide renewal/upgrades.
TV Aerials Repairs	Includes repair to existing Aerial cabling. Excludes Tenant owned equipment, high-level access for repair, replacement and new installs.
Power Reconnections	Includes connection to power where isolation has occurred during VUE operations. Excludes requirement to reconnect after potential CCC planned works programmes.
Window security stays	Includes the repair and replacement of existing window stays. Excludes upgrade work or new installs as may be required under future provisions for safety equipment.
HWC Seismic Restraints	Includes the repair, replacement and new install of HWC seismic restraints not already covered under VUE operations.
Grounds - Non SMP	Includes allowance for areas outside of existing SMP where intervention may be required. Excludes Tenant responsibility for gardens directly outside unit or any private fenced areas. Excludes SMP related work.
Hand Rail	Includes repair and replacement of existing hand-rails (Bathroom and Toilet) like-for-like where CCC owned and installed. Excludes new installs.
Extractor Fans	Includes repair of Bathroom/Kitchen extractor fans owned and installed by CCC. Excludes Tenant owned equipment/appliances.
Boarding up of units	Includes appropriate boarding of units whilst waiting for permanent repair due to glass breakages. Includes boarding of windows as a result of fire damage.
Draft stopping and weather sealing	Includes the provision and installation of draught-stop strips where required. Excludes window repairs (covered elsewhere).
Removal of washing machines and fridges	At time of vacant, remove CCC owned washing machines and fridges from individual units.
Clotheslines repair and replacement	Includes repair/replacement (like-for-like) of both framework and washing-line. Excludes new installations.
Pest Control incl Wasps and Bees	Tenant responsibility. Allows for instances of pest infestation outside the control of the Tenant.
Internal Lights	Tenant responsibility. Allows for instances of defunct lighting units, high-level ceilings and sealed-units that Tenants can't access.
Lawn Mowing (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and OCHT.
Lawn Fertiliser (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and OCHT.
Grounds Maintenance (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and OCHT.
Spouting Cleans (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and OCHT.
Car Park Sump Maintenance (SMP)	Encompasses all active sites leased to the Trust. Property list to be developed and maintained between CCC and OCHT.
HVAC Maintenance (SMP)	Includes Heat Pump at Manse Place. Excludes all Tenant owned appliances.
Gate/Key Pad (SMP)	Includes Harman Courts/Cedar Park
Management Fee - Overhead	Includes Minor Maintenance service provider overhead. Excludes Project Management fees as these are assumed to be built into SOR for delivering approved scopes of work.
Insulation Repairs	Includes minor patch repairs to existing insulation during approved minor maintenance works. Excludes major replacement of like-for-like, new installations or replacement of insulation for different types.
Meth Testing	Includes testing on the basis of suspicion in addition to standardised testing of vacated units under VUE. Includes both Indicator and Comprehensive testing where required.
Blind Replacement/ New Install	Includes replacing blinds like-for-like, and installing new blinds where there is no other alternative due to privacy issues. Normal operation would be for thermal curtains to replace existing blinds during VUE.
Flooding Response (Major Leaks)	Includes major leaks from Toilet, Sink, Bath and Shower. Excludes responses to external flooding events. This will be dealt with under BCP.
Garage Repairs	Managed by Variation via OCHT Contractor. Assessment of portfolio requirements needs to be considered.
Carpet Replacement	Includes full carpet replacement outside of minor maintenance approved scopes of work. Excludes pre-planned programmes of work across the wider portfolio.
Stove Replacement	Includes replacing Stove like-for-like. Excludes major alteration work if required to install.
Vinyl Replacement	Includes full Vinyl replacement outside of minor maintenance approved scopes of work. Excludes pre-planned programmes of work across the wider portfolio. Excludes Asbestos removal.
HWC Replacement	Includes replacement of faulty Hot Water Cylinder where this impacts requirements under the RTA. Excludes pre-planned programmes of work across the wider portfolio.

Table A-2- Minor maintenance ŌCHT