Christchurch City Libraries Ngā Kete Wānanga o Ōtautahi.

Asset Management Plan



Table of contents

Christ	church City Libraries Ngā Kete Wānanga o Ōtautahi	0
Asset	Management Plan	0
1 Intr	oduction to our Asset Portfolio	4
1.1	Background	4
1.2	Asset Lifecycle Approach	5
1.3	Goals and objectives of Asset Management	5
2 Life	cycle Management Plans	6
2.1	Asset Overview (what assets we have)	6
2.2	Location and Value	6
2.3	Network Age and Lifecycle Stage	
2.4	Critical Assets	
2.5	Asset Data Confidence	
Ass	set Category	
Ma	iterial / Size/type	
Ass	set Value	
Ass	set Age11	
Ass	set Condition	
Ass	set Criticality	
Ass	set Capacity	
2.6	Asset Data Improvements	
3 Ma	naging Risk	
2 1		12
3.1 2 1	1 Rick Management nlan (rick framework)	
3.1	Critical Risk Identification and Management	13
3.2	1 Climate Change Impacts	11
Die	runtors	14
Po	tential Impacts on our Assets and Services	14 14
3 2	2° Asset Ricks	14
J.2		
4 Con	tinuous Improvement	
4.1	Overview of the Improvement Programme	
4.2	Current Asset Management Maturity	
4.3	Review of Progress against Previous Plan	
Tas	sk ID 20	
Act	tion/Task	20
Tin	neline 20	
Pro	ogress and Action	20
4.4	Improvement Plan 2020	
Tas	sk ID 22	

Project / Task	
AM Maturity Gaps	
Priority (H, M, L)	
Responsibility	
Resources (teams, \$)	
Timeframe	
4.5 Monitoring and review	24
5 Appendices (Supporting information)	25
Appendix I - Asset Management Objectives	
Appendix I - Asset Management Objectives Appendix II - Asset Portfolio Value Breakdown	
Appendix I - Asset Management Objectives Appendix II - Asset Portfolio Value Breakdown Appendix III - Libraries Site Summary	
Appendix I - Asset Management Objectives Appendix II - Asset Portfolio Value Breakdown Appendix III - Libraries Site Summary Appendix IV - Typical Component Life Cycles Cycle 30	
Appendix I - Asset Management Objectives Appendix II - Asset Portfolio Value Breakdown Appendix III - Libraries Site Summary Appendix IV - Typical Component Life Cycles Cycle 30 Component	26 28 29 30 30
Appendix I - Asset Management Objectives Appendix II - Asset Portfolio Value Breakdown Appendix III - Libraries Site Summary Appendix IV - Typical Component Life Cycles Cycle 30 Component Appendix V - 2020 Facilities Asset Management Maturity Assessment	26 28 29 30 30 31

Document Control

Version Control

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

Version	Date	Author	Description

Document Acceptance and Release Notice

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

Name	Role	Status	Signed	Date

Long Term Plan documentation

Christchurch City Council's Long Term Plan (LTP) consists of a group of integrated documents intended to be read in conjunction with each other.

Activity Plans include community outcomes, levels of service KPIs, future impacts and demands (such as growth) and finances. Asset Management Plans specifically cover asset lifecycles and asset risks.

This enables Council to meet the detailed requirements of the Local Government Act 2002, which applies to all councils in New Zealand.

Other approaches to asset management (for example the International Infrastructure Management Manual or ISO 55000) should consider both plans together, rather than Asset Management Plans in isolation.

1 Introduction to our Asset Portfolio

1.1 Background

Christchurch has long enjoyed a strong library tradition. From its origin in 1859 as the Mechanics Institute, subsequent management by the then Canterbury College to its eventual adoption by the City Council in 1948, it has been a significant presence in the city and surrounding area. A travelling library service to country districts began in 1920, the first branch library opened in Redwood 1968 (by Waimairi District Council), this was followed by Spreydon in 1972 (by Christchurch City Council) and in 1975 Christchurch became the first library to use a computerised lending system.

Today's library network is nationally and internationally renowned for its excellence in buildings, services and digital development with several of the current facilities receiving architectural awards and recognition.

Since its opening in 2018, Tūranga has won a number of prestigious awards and has become a shining example of the postearthquake central city rebuild.

The last 20 years has seen rapid change to the provision of libraries in Christchurch, in response to demand and for services, technology and asset renewal since the earthquakes of 2010/11. This has refreshed the age profile of the portfolio in general to a much newer range in terms of built assets, which has operational and financial implications. These are as described in this Asset Management Plan (AMP), the Libraries Activity Plan and in the Long Term Plan.

The Christchurch City Libraries Ngā Kete Wānanga o Ōtautahi strategy document "Libraries 2025 Facilities Plan (Updated 2014)" should be read in conjunction with this Asset Management Plan (AMP) as it sets the long-term strategic direction for the activity, from a facilities perspective.

The library portfolio also provides a hosting service for the Service Centre activity including contact counters which are a key part of the Citizens and Customer Services Unit. Service Centre counters are located in eight facilities (locations) which are as follows:

- Papanui Library
- Fendalton Library
- Shirley Library
- Linwood Library
- South Library
- Te Hāpua Centre
- Hornby Library
- Lyttelton Library

There are service centre counters in four other locations across the city and Banks Peninsula making a total of 12 locations.



Figure 1-1: Tūranga Library

1.2 Asset Lifecycle Approach

Council has established a lifecycle management framework, aligned to the *International Infrastructure Management Manual* as illustrated in Figure 1-2.





Figure 1-2: Asset Lifecycle Categories

The libraries portfolio has seen a particular cluster of activity in this space with new builds at Halswell, Sumner, Bishopdale and in the Central City. In addition, the Facilities and Asset Planning teams are focused on optimising planning, repair and renewals in order to best allocate operational and capital expenditure on assets.

Matatiki: Hornby Centre, a new Hornby Library, customer services, and recreation and sport centre is under construction for the growing south-west community and is expected to be opened in early 2024. This new building will be under the stewardship of Recreation, Sports and Events Unit, while sharing space with Libraries, and Citizens and Customer Services operating as an internal 'tenant'. On the opening of the new Matatiki Library the Old Hornby Library at 8 Goulding Ave, is to be gifted by Council to the Hornby Community Care Trust (which owns part of the building).

The council is currently in the design process to repair / rebuild South Library. The South Library and Service Centre building was badly damaged in the 2010/2011 earthquakes. Temporary strengthening has made it fit to occupy, however a permanent solution is needed for this community. This will complete the earthquake repairs and rebuilds for the libraries portfolio.

1.3 Goals and objectives of Asset Management

Asset management is a business process which guides the lifecycle management of assets. Lifecycle management includes the planning, acquisition, operation, maintenance, renewal and disposal of assets.

Effective asset management enables the delivery of levels of service in the most cost-effective manner to present and future communities.

The Council's Asset Management Policy (approved by Council's Executive Leadership Team on 26 March 2018) provides the organisation's long-term vision, values and direction for asset management. The policy aligns with the organisation's strategic framework. The policy relates to Council's overarching intentions for asset management and the asset management system and not specifically assets or asset decisions.

The five principles underpinning the policy are:

- Asset management outcomes align with the strategic direction of Council.
- Asset management is an organisational wide practice.
- Decisions about assets are based on well-managed, quality information.
- Asset management maturity is appropriate to the assets, services and risks we manage.
- Asset management plans are living documents.

The Asset Management policy sets out the assets Council manages in accordance with its asset management principles, and therefore within the asset management system scope.

The Asset Management Policy demonstrates commitment to maintaining an Asset Management System that promotes responsible management of assets to deliver value to customers and support business objectives, in accordance with best practice and alignment across the organisation. This provides a framework for establishing detailed plans and targets that support these objectives and are measured and monitored to ensure continual performance improvement for Asset Management.

The Asset Management objectives (see Appendix I) enable the management of assets in a manner consistent with the principles of the policy, and the organisation's objectives.

2 Lifecycle Management Plans

2.1 Asset Overview (what assets we have)

The following assets are covered in this AMP.

In	Scope	Out of Scope				
•	Libraries Information Unit owned buildings, systems	• V	olunteer Libraries and Diamond Harbour Library			
	and grounds/ carparking areas.	(0	covered in the Community Facilities Asset			
•	Libraries Furniture and Equipment.	N	1anagement Plan).			
		• Li	ittle River Library, Akaroa Service Centre, Lease storage			
		fa	acilities (including Library Archives Storage), Mobile			
		Li	brary and outreach vehicles (covered in the Corporate			
		A	ccommodation Asset Management Plan).			
		• D	igital (covered in the Digital Asset Management Plan).			
		• Li	brary Collections.			

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

A number of key issues exist to manage the Christchurch City Libraries Ngā Kete Wānanga o Ōtautahi portfolio while providing the levels of service outlined in the Libraries Activity Plan.

These include:

- Planning and funding the ongoing renewals of the portfolio to meet agreed service levels, particularly the larger and Hub Libraries.
- Ensuring the effective implementation of programmed maintenance, renewal and refurbishment works.
- Documentation of works against facilities at a detailed component level.
- Asset prioritisation and decision making at end of life.

2.2 Location and Value

In the Te Pūrongo-ā-tau Annual Report 2022, Fixed Assets under direct Council Control carried a book value of \$14.2 billion.

Description	Gross Replacement Cost	Current Building Value	Depreciated Replacement Cost	Annual Depreciation
TOTAL Library portfolio assets	\$296,063,000	\$176,041,000	\$168,864,000	\$3,263,687

Table 2-2: Asset Portfolio Value (as at 1 May 2023) (please refer to Appendix II for the complete list).

Please Note:

- The Gross Replacement Cost is based on the Insurance Total Sum Insured (reinstatement, inflationary and demolition).
- Current Building Value is based on fair market value (where the valuer looks at recent sales in the area to determine the value, when no active market exists, depreciated replacement cost is used).
- Depreciated Replacement Cost is based on Book Value.

Libraries also operate 2 other sites, Diamond Harbour and Little River, but these buildings are managed under the Community Facilities and Corporate Accommodation AMPs respectively.

Over the past 10 years Council has constructed three multipurpose hub facilities at Te Hapua: Halswell Centre, Matuku Takotako: Sumner Centre and Ōrauwhata Bishopdale Library & Community Centre. Libraries are the stewards of these buildings, while sharing space with Community Facilities, Recreation Sports and Events, and Citizens and Customer Services operating as an internal 'tenant'.



Figure 2-1: Map of Library Assets – Christchurch



Figure 2-2: Map of Library Assets – Banks Peninsula

2.3 Network Age and Lifecycle Stage



Figure 2-3: Age Profile and Replacement Costs.

The profile of the assets included in this AMP is shown in Appendix III.

- The Redwood Library (1968) is the oldest library (and building) in the current portfolio. Future development and demand in the northwest suburbs may require a larger library than the current size of the local library. Any replacement library is expected to be located in Belfast (or another northwest location) and the expected replacement cost will be more than the replacement cost of the current library.
- The Spreydon Library (1972) is second oldest library in the portfolio.
- Hornby Library (1978) is to be replaced by the Matatiki: Hornby Centre (excluded in the graph above) in early 2024.
- The original buildings of Lyttelton and Parklands Libraries were built in the mid / late 1970's and converted into libraries in 1999 and 2005 respectively. Both libraries have been strengthened following the 2010/2011 earthquakes. However the original age of the building structure may require replacement sooner than the typical life span of a library building.
- South Library is expected to be repaired or rebuilt in the next few years, due to the remaining earthquake damage. The cost is not included in the graph above, the value shown above is only the current insurance replacement cost.
- Five libraries have been constructed since the 2010/11 earthquakes, including Aranui, Te Hāpua (Halswell), Tūranga, Matuku Takotako (Sumner) and Ōrauwhata (Bishopdale). To avoid significant replacement cost in the estimated replacement 2070 to 2080s years, consideration should be made to spread the replacement cycle over a longer period.
- Akaroa and Linwood libraries are leased by third parties and the replacement value is not shown in the graph above. In 2050 there will be a number of libraries passing the 50 year mark as they were built in the mid- 1990s to 2000s. As an asset becomes aged, maintenance costs tend to increase until the useful life of the asset expires. This will be an increasing focus for resources further out in the 30 year horizon.

2.4 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 Library assets are as follows:

- Numbers of people adversely affected upon asset failure.
- Significant business activity interruption upon asset failure.
- Consequential cost of failure.
- Critical lifeline / disaster recovery asset.

Using the above framework, four of the most critical elements effecting assets for library activities have been identified as follows:

- **Structural Integrity** The safe design and assessment of components and structures under load has become increasingly important since the 2010/11 earthquakes. South Library is the remaining project to achieve a permanent solution post the quakes.
- **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.
- *Plant, Equipment and Systems* '- Failure of these items may lead to unplanned downtime and business interruption.
- Asbestos- Asbestos containing materials (ACM) were common building materials used pre-2000 when some of the library asset portfolio was constructed. A register has been developed and an Asbestos Management Plan framework applies to the mitigation and removal of risk related to asbestos issues across the library activity complexes.

Two library assets can provide a disaster recovery function as assets under the <u>Civil Defence Emergency Management Act</u> <u>2002</u>¹ and therefore potentially have higher Building Code importance levels – and consequently, are deemed critical. These assets are as follows:

- Te Hapua: Halswell Community Centre- Civil Defence Level 4 Disaster Recovery Asset).
- Orauwhata Bishopdale Community Centre- Civil Defence Level 3 Disaster Recovery Asset.

Papanui Library is provides the backup location for the Council's call centre.

2.5 Asset Data Confidence

Table 2.6 summarises the asset information available for the library assets both in terms of completeness (% of assets for which that data type is stored) and reliability (using the A-E grading below). Asset data is held in SAP.

Asset Category	Material / Size/type	Asset Value	Asset Age	Asset Condition	Asset Criticality	Asset Capacity
Libraries	70%/B	90% / B	100% / B	50%/ C	100% / A	100% /B

Table 2-6: Asset Data Confidence

¹ http://www.legislation.govt.nz/act/public/2002/0033/51.0/DLM149789.html

	Description Grade
A Very High	Highly Reliable < 2% uncertainty Data based on sound records, procedure, investigations and analysis which is properly documented and recognised as the best method of assessment
B High	Reliable ± 2-10% uncertainty Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings' for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation.
C Medium	Reasonably Reliable ± 10 – 25 % uncertainty Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings' for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or significant extrapolation.
D Low	Uncertain ± 25 - 50% uncertainty Data based on uncertain records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available.
E Very Low	Very Uncertain > 50% uncertainty Data based on unconfirmed verbal reports and/or cursory inspection and analysis

Table 2-7: Data Confidence Grading System (From IIMM 2020, Section 4, Table 4.2.7.2)

2.6 Asset Data Improvements

Asset and Condition data that is collected will be used by the Strategic Property Analysts alongside key asset stakeholders in order to plan the timing of refurbishments and replacements. A condition assessment should be completed at least every 3 years as 'best practice', however health and safety audits should be completed at least annually. Depending on the condition, the renewal cycles can then be moved forward or pushed back. The condition assessments will help improve the lifecycles of the different maintenance components making them more accurate. Typical components life cycles are listed in Appendix IV.

In late 2019/early 2020 Citycare began to undertake a site visit to each Library asset in order to capture condition and maintenance data which will be stored in SAP. While most libraries were visited, there were a few libraries that were missed (e.g. Parklands Library). A further review of the data collected identified that not all building elements were captured, and the data was of limited use for future maintenance works programming. This was highlighted in the Asset Management Maturity Assessment Report undertaken by Infrastructure Decisions Ltd (independent third party) dated November 2020.

The cycle of condition assessments has just restarted in late 2022, this has been focused on "Whole of Life" costings and not just the current condition for future maintenance and renewal works.

To date (March 2023) only three Libraries have been re-visited so far. However there is now a more complete set of building elements and Citycare are now collecting the condition assessment data in accordance with the council's metadata standards. This should make it easier to upload the data into SAP and allow for more advanced analysis for future maintenance works programming.

The following improvements to data quality are included in the AM Improvement Plan in Section 4:

- Ongoing condition assessment of assets predominantly building conditions.
- 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.

3 Managing Risk

3.1 Managing Risks

Council's approach to managing risk is detailed in its Risk Management Policy.

Business unit leads have the responsibility for identifying, recording and monitoring business risks using Councils in-house risk detailing tool 'Promapp'. These are risks 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.

3.1.1 Risk Management plan (risk framework)

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

Key design principles that are important for the resilience of Library assets are:

- **Seismic engineering design** legislation post-earthquakes has increased minimum standards for a building's structural strength. Both new builds and additional strengthening works on Library assets have attributed to an asset base that is increasingly more resilient to potential future seismic events.
- Sustainable design in order to reduce negative environmental impacts.
- Council looks to incorporate Libraries knowledge and experience, professional design advice alongside *end user inpu*t into asset design and this is considered in planning for new buildings and evaluating existing assets. It adds to asset portfolio resilience by way of providing assets that are useable and functional and reflect what the community wants.
- Advancement of asset management and the use of asset lifecycle assessments being a business approach that aims to maximise the efficiency and cost-effectiveness of the libraries assets throughout their lifespan. Advancing asset management maturity is a pertinent risk mitigation strategy as it forms a basis for responsible decisions, optimises economic building decisions based on long term scenarios and allows for the management of assets in a proactive rather than reactive way.

Insurance

The use of insurance enables the transferring of risk as the financial risks associated with asset loss or damage are transferred from Council to the insurer. Insurance companies assume the financial risk in exchange for premiums which have increased post-earthquakes as risks have been reassessed.

Insurance cover is based on assessed replacement cost appraisals undertaken on an annual basis by registered valuers.

Each library asset is assessed as to its replacement value - being the 'as new' replacement cost of the asset regardless of current age and condition. The use of this process mitigates the chance of undervaluation, or insufficient insurance cover.

Monitor and provide feedback on asset and insurance revaluations and ensure that the values are robust. A medium to high risk exists if asset revaluations are not accurate and an event occurs.

Business Continuity and Emergency Response Planning

The following draft Business Continuity Plans (BCP) are in place:

- Corporate Services Group BCP
- Facilities Property and Planning BCP
- Asset Management Team BCP
- Libraries Information Unit BCP
- Facilities Management BCP

Other specific initiatives:

Continue to design for resilience when constructing new assets and refurbishing existing.

- Using GIS mapping technology look to advance knowledge as to locational considerations and which specific Library assets are considered more vulnerable to the likes of climate change and therefore require additional resources in order to mitigate concerns.
- Contingency plans will need to be prepared to ensure, through operational systems and temporary response plans, that appropriate response can be made to mitigate the effects of a triggered risk.
- Monitoring condition and performance of assets to predict future performance and potential asset failures through systematic periodic inspections and condition assessments.

3.2 Critical Risk Identification and Management

3.2.1 Climate Change Impacts

	Disruptors	Potential Impacts on our Assets and Services
	Climate Change	Sea levels Sea level rises could affect coastal assets. For Libraries this includes New Brighton and Matuku Takotako/ Sumner as potential risks in the 50 year time horizon.
		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 BP (Tonkin & Taylor) 50 and 100 year scenarios.
		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.
Chronic Stressors		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 resilient building 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. Guidance has been published in August 2020 by the Ministry for the Environment in the "National Climate Change Risk Assessment for New Zealand", which identifies risks to build environments from ongoing sea level rise and extreme weather events in the 10 most significant risks.
		Weather patterns Average warmer temperatures could lead to increased demand for air-conditioned libraries over a longer period and similarly cooler temperatures could lead to increased demand for warmer libraries as the population aim to seek access to assets 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 library buildings. A prime example in the libraries portfolio is South Library , which is adjacent to the Heathcote River.
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. New libraries and repair projects design to enable rapid reopening. South Library is the remaining project to achieve strengthening post the quakes.
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. Two library buildings are in red evacuation zones- New Brighton and Matuku Takotako: Sumner. Aranui, Parklands and Akaroa are in the orange or yellow evacuation zones.
Flooding	High Flood Hazard Management Area (HFMA) 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 the only library affected by this zone is South Library (grounds towards river, not building itself)
	Flood Management Area (FMA) means an area identified on the CCC planning maps which is at risk of flooding in a major flood event, where specific minimum floor level rules and earthworks rules apply. Matuku Takotako /Sumner, New Brighton, Shirley, Redwood, Fendalton and Orauwhata/ Bishopdale Libraries lie within the FMA 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.

3.2.2 Asset Risks

The Libraries and Information unit also identifies and records risks at a more detailed level, as shown in Table ... on the following page.

ID	Risk Description	Inherent rating	Treatments in place (today)	Residual impact	Residual likelihood	Residual rating	Proposed additional treatments
ТВС	The condition of some facilities is progressively deteriorating. There is a risk that continued reduction in maintenance budgets sees a further reduction in asset condition to the point of a reduction in achievable LOS.	High	Continued undertaking to obtain data in order to better understand asset condition and allow an increase in scope and accurate validation of maintenance funding requirements.	Medium	Medium	Medium	 Libraries to give strategic direction. 2022/24 data collection to assist. Develop business tools to extract and manipulate asset data.
ТВС	Health and Safety There is a risk that: people (staff, public, contractors, tenants) get injured (physical, psychosocial) in our workplace or facilities.	High	Various treatments from training to registers and procedures	Moderate	Possible	Low	 FM and AM teams to continue to monitor and implement relevant management plans and controls alongside library operational teams. Including regular health and safety audits.
TBC	Facilities and Land Hazards - There is a risk that the health and safety of users, tenants, staff, contractors and others will be affected by hazards found in facilities or in contaminated land. These hazards include chemicals, electrical systems, hazardous substances, noxious organisms, fire, earthquake damage, or contaminants. Caused by hazards in the workplace or contaminants in facilities and grounds, including but not limited to: asbestos, heavy metals, electromagnetic radiation, electricity, VOCs, legionella, PAHs, pesticides, methamphetamine, chemicals, mould, landfill gases, earthquake prone buildings.	Very High	Asbestos management- Development, ongoing review and implementation of an asbestos management framework. Application of management plans to identified HAIL sites to ensure mitigation of risk. Legionella controls- Testing, Dosing, Cleaning and Temp treatment processes in place for high risk areas. Training in place Awareness activities undertaken.	Major	Likely	Medium	 FM and AM teams to continue to monitor and implement relevant management plans and controls alongside library operational teams. Including regular health and safety audits.

This may result in adverse effects to people's long-term health, non-compliance with legislative requirements, facility remediation costs or facility closures with the associated reduction in revenue, adverse media and stakeholder scrutiny, reduction in value, costs including business interruption, initial and on- going testing, and procedural ambiguity.	Improve HazardousSubstances Management-Inventory of substances held.Certification in placeWorks in place (signs,extinguishers etc)Training in placeAwareness activitiesundertaken.
	Develop improved electrical safety management framework including- Electrical safety policy, Tag out procedures, Proactive electrical safety tasks in contracts including switchboard thermal scanning. Testing and tagging of appliances and Education.
	Develop improved gas safety management framework including- register of all gas installations (supply, internal reticulation and appliances). This can be linked to hazardous substances registers, regular inspections of all installations, AND servicing of appliances (if appropriate).

Table x-x: High and very high inherent risk items

4 Continuous Improvement

4.1 Overview of the Improvement Programme

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

4.2 Current Asset Management Maturity

An independent assessment of current asset management practice was undertaken in October 2020. This was completed at a high level encompassing all Facilities (Libraries, Community Facilities, Recreation & Sport, Art Gallery, and Social Housing.)

Asset Management Maturity Assessments (AMMA) are carried out once every 3 years and will be undertaken again in September 2023.

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

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

A summary of the assessment results for this activity is attached as Appendix V.

The maturity assessment shows that:

- The gap between current and target follows similar patterns in the 2020 update as it did in 2018.
- Council has closed the gap between current and "appropriate asset management practice" for this activity in the areas of management systems, asset register data, managing risk and capital works planning.
- The most significant gaps are still in areas of asset performance / condition data, operational planning and service delivery mechanisms.

Section 4.5 provides a programme of activities required to close the remaining maturity gaps and address the weaknesses identified during the development of this AMP.



Figure 4-1: Asset Management Maturity Assessment for Facilities Activities

(Includes Community Facilities, Libraries, Corporate Accommodation, Recreation, Sport and Events, Social Housing Art Gallery and Museums).

4.3 Review of Progress against Previous Plan

The last improvement plan was developed as part of the 2020 AMP update. The indicative term of the improvement programme was three years. Table 4.2 provides an update on the status of the improvement programme items as at November 2020.

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

Table 4-2:	Progress against 2018	3 Improvement Plan
------------	-----------------------	--------------------

Task ID	Action/Task	Timeline	Progress and Action
A	Asset Condition Assessment- Identify tasks and methods and gain consensus in all council	1/6/19	Complete, FBBM project delivered system structure and business rules
В	Data collection and storage including utilisation data- Following A, How is the data collected and stored?	1/6/19	Complete, FBBM project delivered system structure and business rules
С	Quality Management- A structured quality programme is needed	Ongoing	In progress, 60% complete, data collection process agreed and underway with City Care. Next step is to consolidate, analyse and utilise the data
D	Capital Programme- Clarity of future work that dovetails into maintenance plans	Ongoing	95% complete, Capital programme is populated in LTP Prioritisation process (CPMS)
Е	Business Rules- All staff should follow the same set of rules on AM	1/10/19	Complete, FBBM project delivered system structure and business rules
F	Sustainability- Improvement and awareness of metrics	Ongoing	In progress, 50% complete, carry forward.
G	Priorities- Identify and agree asset priorities	Ongoing	95% complete, Capital programme is populated in LTP Prioritisation process (CPMS)
н	Changing Economic conditions- increase quality and quantity of maintenance programme	Ongoing	75% complete alongside data collection and FBBM implementation
I	Changing Climate- Frequent inspections and maintenance to protect against weather	Ongoing	75% complete- routine maintenance checks but long term impacts of climate change under assessment.

4.4 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 maturity assessment and as part of this asset management plan review. These items were added to the outstanding items from the 2020 Improvement programme.

We are currently engaged with the improvement programme horizon with the next maturity assessment scheduled for September 2023. This will put in place the programme for 2023 through to 2026.

Table x 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.

Figure ... illustrates the timeline for the overall improvement programme.

Figure 4-2: AM Improvement Programme Timeline

Table 4-3: Asset Management Improvement Tasks

Task ID	Project / Task	AM Maturity Gaps	Priority (H, M, L)	Responsibility	Resources (teams, \$)	Timeframe
20-A	Quality ManagementA structured quality programme is needed.	Data Quality gaps	High	Asset Planning and SAM	Facilities/ SAM	Term of AMP
	 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. Buffer to changing economic conditions including COVID-19. 	Decision making Capital investment strategies.	High	Asset Planning FM Asset Owners	PMO/ Asset Owners/ Facilities	Term of AMP
20-В	 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	High	Risk and Resilience team Asset Planning Asset Owners	Using data from above and internal shared service resource from the AM Teams	Term of AMP
20-C	 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.	Term of AMP
20-D	 IT Improvements Incrementally upgrade the technology in libraries (including BIM data). 	Information systems	High	Asset Owners Asset Planning SAM	Projects in 24/25 to lead this	Term of AMP

Task ID	Project / Task	AM Maturity Gaps	Priority (H, M, L)	Responsibility	Resources (teams, \$)	Timeframe
	GIS linkages.			Information Technology		
20-Е	 AM Improvement Tasks Analyse resourcing, responsibilities, timelines & reporting around Improvement tasks. 	Improvement task reporting	Medium	AM SAM	AM & SAM	Term of AMP
20-F	 Energy Efficiency Energy audit targeted to ensure efficient operation of Turanga and other selected sites. 	Operational Planning and Reporting	Medium	AM Energy Analyst	Facilities/ LIU	Term of AMP

4.5 Monitoring and review

The Asset Management Improvement Programme (AMIP) will be reported to the Strategic Asset Management Team (SAM). All improvement items and the improvement programme will be monitored by the SAM team and reported to the Executive Leadership Team as required.

5 Appendices (Supporting information)

Appendix I - Asset Management Objectives

Principle	Objective				
1. Asset management	1.1 Linkages between Council's strategic direction and asset management outcomes are clear and understood				
the strategic	1.2 All asset based services are linked to the attainment of Community outcomes				
direction of Council	1.3 A whole of life approach is taken for all asset management initiatives				
	1.4 Asset management planning outputs provide the options and financial forecasts for the first draft of the Long-Term Plan (LTP)				
	1.5 Investment in Infrastructure is optimised across all asset types				
	1.6 Opportunities to increase resilience are considered in all asset management planning				
2. Asset management	2.1 The Strategic Asset Management Team (SAM) provides leadership of asset management practice at Council				
wide practice	2.2 Asset management is co-ordinated across the organisation				
	2.3 Core asset management processes are consistent across Council				
	2.4 Asset management practice is compliant and appropriate				
	2.5 Asset Management Teams across all lines of the business are motivated and driven by customer needs				
	2.6 There is an organisational culture of continuous improvement in asset management				
3. Decisions about	3.1 Asset data is available in corporate system for use in all decision making related to Council assets				
well managed,	3.2 The performance and condition of assets is monitored and reported				
quality information	3.3 Decision making by asset owners and managers is outcome based and based on reliable asset information				
	3.4 Supporting asset information is readily accessible				
	3.5 Asset data is up to date				
	3.6 Asset management decisions by asset owners and managers are based on evaluation of all viable options to deliver levels of service outcomes				

Principle	Objective
4. Asset management	4.1 Identified asset management maturity gaps close over time
appropriate to the	4.2 The asset management capability of staff resources matches the needs of the organisation
assets, services and risks we manage	4.3 The organisation recognises the importance of AM and adequately resources the AM system
	4.4 Appropriate levels of asset management maturity are defined and reviewed as business needs change
	4.5 The level of AM practice is matched to the criticality of the assets
	4.6 Christchurch City Council gains recognition for its evolving AM practice
5. Asset management	5.1 AMPs are easy to follow
living documents	5.2 AMPs are complete and at the agreed level of maturity
	5.3 AMPs reflect the current level of asset management practice for the asset type
	5.4 The asset management improvement programme in the plan, contains all actions necessary to close the existing maturity gaps
	5.5 AMPs contain the 30-year financial forecasts; suitable to develop the first draft of the Long Term Plan and the Infrastructure Strategy
	5.6 Life cycle strategies are articulated within the asset management plan

Appendix II - Asset Portfolio Value Breakdown

Description	Gross Replacement Cost	Current Building Value	Depreciated Replacement Cost	Annual Depreciation
Ōrauwhata Bishopdale Library & Community Centre	\$8,592,000	\$5,386,000	\$5,520,000	\$96,020
Fendalton Library & Service Centre	\$16,423,000	\$10,541,000	\$7,350,000	\$181,508
Fendalton Library Caged Bike Storage	\$22,000	\$14,000	\$15,000	\$214
Tūranga (New Central Library)	\$145,972,000	\$81,675,000	\$92,440,000	\$1,628,040
New Brighton Library & Pier	\$18,847,000	\$11,722,000	\$8,457,000	\$199,521
Matuku Takotako: Sumner Centre	\$14,251,000	\$8,976,000	\$9,101,000	\$144,742
Hornby Library & Community Care	\$3,081,000	\$2,054,000	\$948,000	\$36,661
South Library & Beckenham Service Centre	\$16,531,000	\$9,763,000	\$7,871,000	\$178,934
Spreydon Library	\$2,875,000	\$1,928,000	\$788,000	\$32,667
Papanui Library	\$4,308,000	\$2,834,000	\$2,018,000	\$52,639
Redwood Library & Creche	\$2,799,000	\$1,878,000	\$838,000	\$32,176
Shirley Library	\$5,911,000	\$3,922,000	\$2,631,000	\$68,074
Parklands Library	\$3,799,000	\$2,573,000	\$1,873,000	\$43,918
Aranui Library	\$7,239,000	\$4,590,000	\$4,252,000	\$77,830
Te Hāpua Halswell Centre	\$27,323,000	\$16,748,000	\$16,883,000	\$292,847
Upper Riccarton Library	\$12,232,000	\$7,437,000	\$6,358,000	\$130,681
Lyttelton Library	\$5,858,000	\$4,000,000	\$1,521,000	\$67,214
Linwood Library & Service Centre (Leased Site)	#N/A	#N/A	#N/A	#N/A
Akaroa Library (Leased Ministry of Education)	#N/A	#N/A	#N/A	#N/A
TOTAL Library portfolio assets	\$296,063,000	\$176,041,000	\$168,864,000	\$3,263,687

Table x-x: Asset Portfolio Value by Site (as at 1 May 2023)

Please Note:

- The Gross Replacement Cost is based on the current Insurance Total Sum Insured (reinstatement, inflationary and demolition).
- Current Building Value is based on "fair market value" (where the valuer looks at recent sales in the area to determine the value, when no active market exists, depreciated replacement cost is used).
- Depreciated Replacement Cost is based on Book Value.

Appendix III - Libraries Site Summary

Facility	Year Built (Approx.)	Status	Owned	Service Centre	Bldg Area m2	Capacity	Pop Density /km2 est.	Dist to shops	Dist to Bus	Café
Akaroa	1989	Open	Leased	No	250	50	367	130	130	Yes
Aranui	2012	Open	Owned	No	700	75	1750	300	300	No
Ōrauwhata Bishopdale	2017	Open	Owned	No	799	160	2500	50	100	No
Tūranga	2018	Open	Owned	Yes	9850	1300	887	100	200	Yes
Fendalton	2000	Open	Owned	Yes	2000	300	1800	500	100	No
Te Hapua: Halswell	2015	Open	Owned	Yes	3500	900	750	150	50	Yes
Hornby	1978	Open	1/2 Share	No	270	50	1600	120	150	No
Linwood Eastgate	0	Open	Leased	Yes	1150	230	1500	100	100	No
Lyttelton	1999	Open	Owned	Yes	388	70	300	50	100	No
New Brighton	1999	Open	Owned	No	1000	200	880	100	175	Yes
Papanui	1995	Open	Owned	Yes	1200	200	2300	200	170	No
Parklands	2004	Open	Owned	No	500	100	1800	120	50	Yes
Redwood	1968	Open	Owned	No	200	50	1800	60	30	No
Shirley	1995	Open	Owned	Yes	1060	200	2300	150	50	No
South	2003	Open	Owned	Yes	2650	600	2000	450	60	Yes
Spreydon	1972	Open	Owned	No	250	50	2900	130	130	No
Matuku Takotako: Sumner	2017	Open	Owned	Yes	1800	360	430	15	15	No
Upper Riccarton	2006	Open Shared Use	Leased Land Building owned	No	1500	300	2800	700	130	Yes

Table x-x: Libraries Site Summary

Appendix IV - Typical Component Life Cycles

Cycle	Component
10	Wall finish
40	Wall lining
30	Windows Doors
20	Ceilings
10	Floor Carpet
20	Floor Vinyl
20	Bamboo floor
20	Roof Membrane
25	Roof shingles
25	Spouting
15	HVAC
8	HVAC components
20	Fixtures & Fittings
10	Ext Paint
25	Carpark surface
30	Electrical
20	Lift
30	Sanitary services
10	Appliances
20	Bathroom remodel
20	Kitchen remodel
20	Shelving

Table x-x: Typical Component Life Cycles

Appendix V - 2020 Facilities Asset Management Maturity Assessment

Section	ection Current/		Reason for scores 2020	Improvement actions planned or	
	Targ	et		underway	
AM Policy	85	95	Corporate AM Policy and Strategic AM Plan in place, provides	Continue to communicate, review,	
and Strategy			key principles, objectives, corporate AM improvement path,	monitor and update AM Policy,	
			framework for AM planning.	SAMP.	
			Strategic context analysis is thorough and documented in IS,	Streamlining of strategy, AM,	
			AMP, Activity Plan and Various Facilities Strategies and	planning documents.	
			Network Plans.	Update AIVI Policy and Objectives	
			through to AMP and Activity Plans		
Levels of	80	90	The levels of service sections of the AMPs have good linkages	Engage with community around	
Service	00	50	to strategic outcomes, customer expectations.	level of service options (beyond	
oct the			LOS and performance measures reviewed by 'pit crews' in	'document submissions'	
			2020.	processes).	
			Community needs analysis and survey information has been		
			detailed in the AMP - engagement through user surveys is		
			stronger for some activities (libraries, rec centres, gallery)		
			than others (community facilities, housing).		
			There has been no specific community engagement over		
			levels.		
			of service and willingness to pay, beyond Council 'plan		
			submissions' processes.		
Forecasting	65	80	Good analysis of demand drivers in AMP, supported by	AMP Demand Sections –	
Demand			corporate demographic information.	streamline and summarise from	
			facilities is measured however, except for Housing and	respective strategies and	
			Libraries the demand forecasts have not been converted into	quantitative data on historic	
			quantitative forecasts to a level useful for planning for	demand and forecasts	
			individual facilities.		
			Demand management techniques have been identified in the	Update facilities strategies (>5	
			AMP but not clear which are being funded or progressed.	years old or where context has	
			Demand analysis considered in various Strategies (Aquatics)	, changed and needs strategic	
			and Network Plans (Community Facilities).	review).	
Asset	75	90	Data structure reviewed as part of the Facilities Better	Ongoing reviews and auditing to	
Register Data			Business Management Programme (FBBM). The data in SAP	ensure data management	
			has been cleansed and is of a better quality, but some	processes are being followed.	
			datasets still have big gaps (e.g. installation date,	Develop and use data quality	
			replacement costs).	dashboards to drive prioritisation	
			facility assots and their attributes	including roplacement cost	
			Fulcrum has been deployed to support capturing of		
			information from the field into SAP.		
			Ongoing data updating processes need to be embedded.		
Asset	65	85	A significant amount of asset data validation and condition	Establish a process to capture	
Performance/			assessments have been undertaken, unfortunately the data	performance information during	
Condition			was not available to support the 2020 AM Plans.	condition assessments.	
			Asset performance data is limited to maintenance reporting	Dashboard reporting for	
			and response times. Asset performance assessments (e.g.	operational/contract KPIs.	
			fitness-for-purpose) have not been part of this year's asset		
- · ·			inspections		
Decision	/5	85	Formal decision-making processes are applied to major	Develop renewal model for	
waking			projects and programmes - pusiness cases are used to justify the financial and non-financial benefits of projects. Options	incorporating condition	
			are evaluated using a Council framework	nerformance risk and cost	
			CAPEX projects are captured and prioritised against decision	information.	
			criteria (aligned to Council priorities) in the CPMS.		
			See also CAPEX planning re: renewal decisions.		
Managing Risk	70	85	The Council risk framework has been applied, with regular	Capture resilience assessment	
			risk reporting through Promapp.	results and manage through the	
			The Risk section of the AMP and appendices covers the main	corporate risk register (Promapp).	
			risks for each of the five facility types, and the mitigation	Noted that Risk team are also	
			measures.	progressing other	

Section	Current/		Reason for scores 2020	Improvement actions planned or	
	Targ	et	Criticality is considered in desision making and the key risk	underway	
			for each facility are known and managed. However, a criticality rating has not been formally assigned to individual assets.	risk review 2019.	
Operational Planning	55	85	Scheduled maintenance programmes are developed. collaboratively with Citycare and Facilities. 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.	Re-establish management of scheduled maintenance through SAP and Fulcrum. Continue work to enable better categorisation/capture of financial information to support OPEX optimisation and planning	
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.	Improved scoping and project definition of projects and programmes for next 3 years. Establish a process for developing renewal programmes from condition assessments and validating with facilities managers.	
Financial Planning	70	85	 (This section was not complete in some of the 5 AMPs). 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. 	Review of asset financial information to allow better reporting by facility and asset type and improved OPEX analysis and budgeting for the next LTP. Revaluation of assets (once data improvements enable this, see Asset Register).	
AM Leadership and 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. AMU lead a consistent approach to AM across Council, with council wide AM communications on AM through SharePoint and forums such as the Delegate's Liaison Group. AM practice is becoming more part of Council language and culture. AMU has developed an AM competence framework, but this has not been applied to individual roles or job descriptions.	Review staff/team capabilities against AM competence framework to identify capability development needs (training, mentoring, etc). Continue AM working group/s to support shared learnings and knowledge.	
AM Plans	75	85	5 AMPs 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.	Complete all sections when condition data is available. Include performance information (use staff knowledge to fill data gaps). Streamlining of front-end content to reduce duplication with strategies, Activity Plans. Discuss with business owners and consider merging into a single Facilities AMP.	
Management Systems	65	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. Facilities have prioritised and reviewed their critical processes and are managing these in Promapp.	Addition of specific AM processes, such as condition/performance assessments and development of renewal forecasts, in Promapp.	

Section	Current/ Target		Reason for scores 2020	Improvement actions planned or underway
			Since the last review, AMU has reviewed/improved some critical AM processes including asset handover and disposals. 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 only focussing on 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. Some new buildings are being provided with BIM data, working through how this will fit into Council's IS/AM strategy to support better AM.	Continue implementation of B2B and business intelligence tools to support integrated, easy access to information. Asset Information Strategy. Strategy for implementing BIM
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.	Ensure AM requirements are built into new contract/s. Continued focus on improving oversight / control of contract operational activities.
Audit and 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.	Establish a process for monitoring AM improvements outside of the corporate AMU programme.

Table x-x: Facilities Asset Management Maturity Assessment

Appendix VI - Capital Investment Programme 2025-34

PMO to provide this