CITY OF SYDNEY

Community Asset Management Plan 2022

May 2022

Green Global Connected

Contents

Asset Management Planning

Background

Sustainable Sydney 2030–2050 Continuing the Vision is the City's overarching community strategic plan. Robust asset management is an objective of Sustainable Sydney 2030–2050 Continuing the Vision, contained within Direction 1: Responsible governance and stewardship.

The City of Sydney is responsible for approximately $13 billion in physical assets (Approximately $6 billion in land and $7 billion in built assets) to support its delivery of services to the community. The City has developed a framework for embedding asset management objectives and principles. These principles are aimed solely at managing the City's community assets to give the best possible long-term services to the City's residents, ratepayers and visitors.

The infrastructure that the City provides serves over 1.3 million people per day. The City commits significant funds to asset management and currently annually spends in excess of $80M in operational and maintenance, plus $120M in renewal and upgrade of the critical infrastructure assets.

The City also has a program to deliver new facilities, assets and buildings in the next 4 years to support our growing resident and visitor population

The recent completion of the Green Square urban renewal project included many significant community infrastructure projects. The key projects include the Green Square Town Centre, Gunyama Park Aquatic and Recreation Centre, Green Square Library and Plaza, Green Square Trunk Drainage and many new parks.

The completion of the Central Business District and South East Light Rail in December 2019 resulted in the transfer and construction of new associated public domain assets that will need to be maintained into the future.

With a growing infrastructure asset portfolio, the City will need to carefully manage service levels within funding restraints that will need to cater for an expected population increase to efficiently manage all our assets.

This Asset Management Plan demonstrates how the City is meeting its current and future demands on our assets.

What is Asset Management?

A Council asset is defined as "a resource controlled by a council as a result of past events and from which future economic benefits are expected to flow to the council" [1].

The term "asset management" as defined in the City's Asset Management Strategy is:

"The combination of management, financial, economic, and engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost-effective manner."

Asset management is a "whole of life" approach that includes planning, acquisition, operation, maintenance and disposal of assets.

Asset Management Framework

The City is enhancing our asset management governance in line with the recommendations from a recent ISO55000/55001[2] maturity review. It is intended that the current framework outlined in this plan will be optimised to provide greater clarity and efficiencies.

The Asset Management Gateway Panel oversees the City's asset management framework. The objectives of the Panel are to:

- Ensure that all asset management activities are consistent with the objectives of the Community Strategic Plan and incorporate lifecycle asset management principles
- Ensure compliance with the requirements of the Integrated Planning and Reporting Legislation and Guidelines and other infrastructure asset reporting
- Oversee the development of the City's Asset Management key strategy themes and projects
- Set direction and outcomes for the Asset System Working Group and the Corporate Asset Management System (CAMS)
- Ensure all asset management policies, strategies and plans (new and reviewed) are submitted Executive
- Ensure the integrity of the asset management process within Council and arbitrate and resolve any dispute or issue arising. The Panel is the decision making and oversight authority of all condition-based renewal capital works projects

The Asset System Working Group is responsible for the delivery of system improvements, training, mapping, integration to other systems, system maintenance and deliver process improvements.

To support this framework, the City has prepared and adopted several Asset Management documents, including:

- Asset Management Policy
- Asset Management Strategy
- Risk Management Plans for the critical assets
- Detailed Asset Management Plans for discrete asset classes

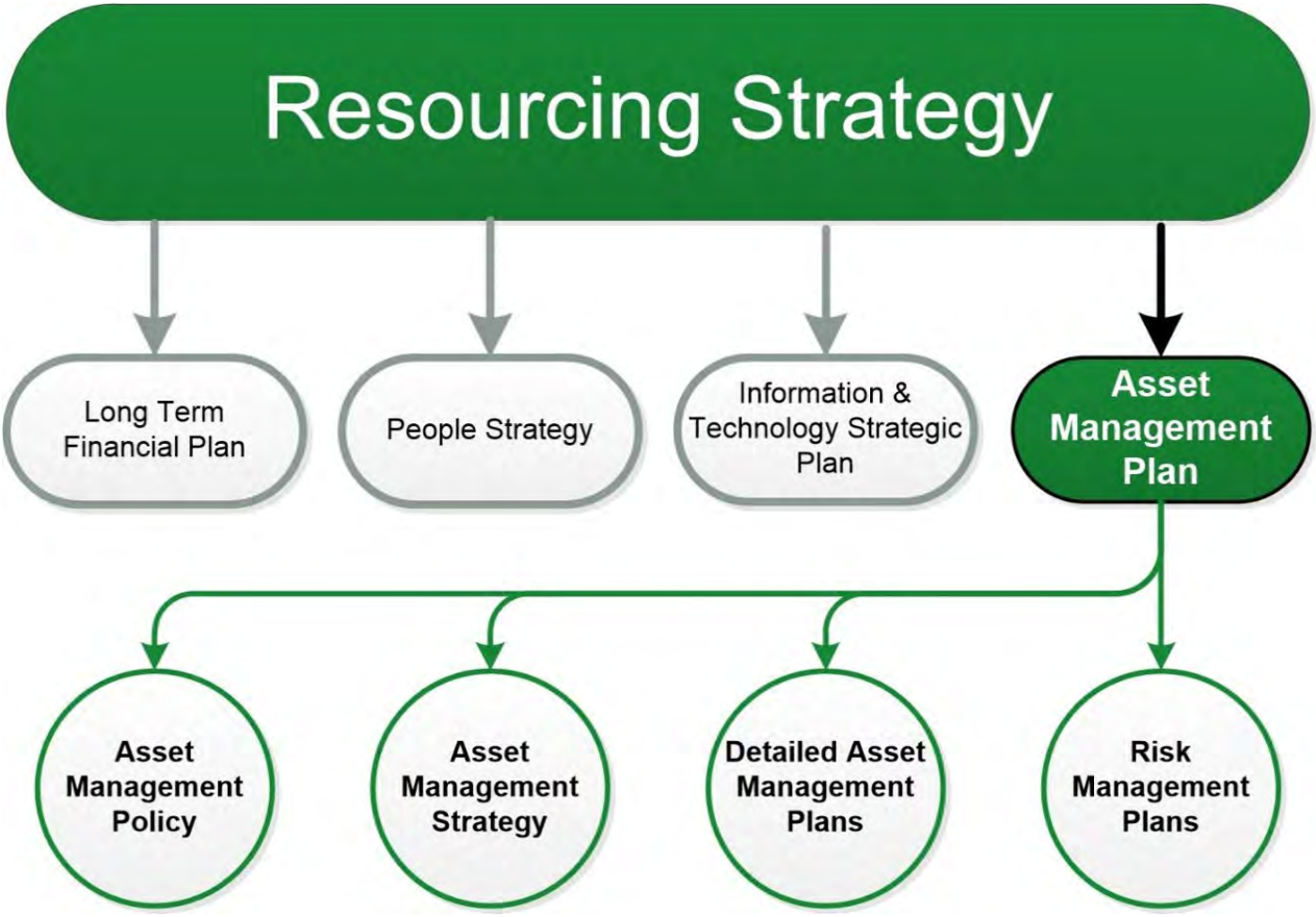
These documents are reviewed and updated periodically.

The condition analysis, financial valuation and projections and maintenance and operation costs in the current plans are prepared using the best available data and will be improved as updated information becomes available. The ongoing expansion and improvement of the City's Corporate Asset Management System will aid the development of data to support decision making.

Consistent with the requirements of the Office of Local Government performance measures, the information and modelling contained within this plan (and more broadly within the City's Integrated Planning and Reporting documents) demonstrate that the City is managing its infrastructure assets effectively and efficiently. Over the ten year window of this Plan, identified asset renewal and maintenance requirements are planned to be met, and the City's ten year capital works program is set to address identified infrastructure renewal whilst providing new and upgraded infrastructure and facilities to meet growing community demand in the future.

[1] "Planning a Sustainable Future" Planning and Reporting Manual for local government in NSW: Department of Local Government NSW

[2] ISO 55000/55001 is the international asset management and asset management system standards, the main objective of which is to help organisations manage the lifecycle of assets more effectively. The standard supports optimization of assets and reduces the overall cost of ownership while helping to meet the necessary performance and risk/safety requirements.


Resourcing Strategy
Long Term Financial Plan
People Strategy
Information & Technology Strategic Plan
Asset Management Plan
Asset Management Policy
Asset Management Strategy
Detailed Asset Management Plans
Risk Management Plans

Asset Management Policy

Policy

The City's Asset Management Policy enables the delivery of our asset management actions that are consistent with our strategic goals set out in the Community Strategic Plan and other strategic documents. The complete policy is an appendix of this document.

The policy objectives are:

- Provide infrastructure and services to sustain the City of Sydney communities
- Implement a life-cycle approach to the management of infrastructure and public assets
- Ensure that service delivery needs are the primary driver for infrastructure asset management practices
- Provide a sustainable funding model that provides assets aligned with the City's long term plans and community needs
- Develop and implement best value environmentally sustainable asset management practices
- Create a resilient city by modelling and planning to make it adaptable to acute shocks and chronic stresses
- Create a resilient city by modelling and planning to make it adaptable to acute shocks and chronic stresses
- Provide reliable asset and infrastructure data through supported digital platforms
- Implement an integrated decision support system
- Ensure compliance with legislative requirements
- Allocate asset management responsibilities

The full Asset Management Policy is attached to document as Appendix A.

Image: interior of Green Square Library

Asset Management Strategy

Background

This asset management strategy provides a summary of how the resources available in the City's Resourcing Strategy will deliver the key objectives in Sustainable Sydney 2050 Continuing the Vision and the Delivery Program.

The Asset Management Strategy is a dynamic document that helps to guide the asset management activities and decision making of the organisation into the future. The initiatives are reviewed on a regular basis to ensure their relevance in a changing environment, and to also incorporate community feedback.

Current Situation

Strategy

The City has made significant advances and continues to seek and implement initiatives to increase council's productivity in the asset management context. Some recent outcomes include the:

- Review and adoption of an overarching asset management policy
- Review and enhancement of the asset management framework and governance structure
- Creation and continuous review of all detailed infrastructure asset management plans
- Introduction of a mobile device capability for managing infrastructure inspection, maintenance and job completion. There are 350 active mobile device users across the civil infrastructure maintenance, parks and open spaces and tree management business units and contractors
- Introduction of job activity and costing capability through mobile applications
- Integration with 3rd party service contractors to ensure accurate and timely data is available for us to make informed decisions
- Streamlining of infrastructure asset valuation processes through interfacing of systems
- Coordination of infrastructure data collection projects aimed at improving the quality of the underlying base asset data for roads, stormwater drainage, trees, parks and open spaces, and buildings and their components.
- Redesign of the detailed asset management plan template and migration of all asset management plans to this template.
- Creation of advanced asset condition and prioritisation methods to develop renewal works programs.

Asset Inventories

This is the current infrastructure asset inventory and replacement value for council's assets, excluding land.

Asset Category	Asset Type	Quantity	Value ($M)
Roads	Road Surface	330 km	237.4
	Road Base	330 km	537.8
	Cycleway	18 km	Included in roads
	Footway	582 km	575.1
	Kerb and Gutter	639 km	328.4
	Traffic Facilities	2,204	24.3
		Total	**1,703**
Structures	Bridges	42	106.4
	Cliffs	64	-
	Stairs/Steps/Ramps (Road Reserve Only)	107	1
	Retaining walls	641	1.1
	Sea Walls	2.7 km	Included in Parks
	Jetties/Pontoons	4	Included in Parks
	Fences	289	Included in Parks
		Total	**108.5**
Stormwater	Drainage pipes	180 km	283
	Drainage pits	12,390	111.8
	Open Channels	100 m	0.1
	Culverts	7.4 km	31.8
	Gross Pollutant Traps (GPTs)	42	1.7
	Rain Gardens	249	2.8
		Total	**431.2**

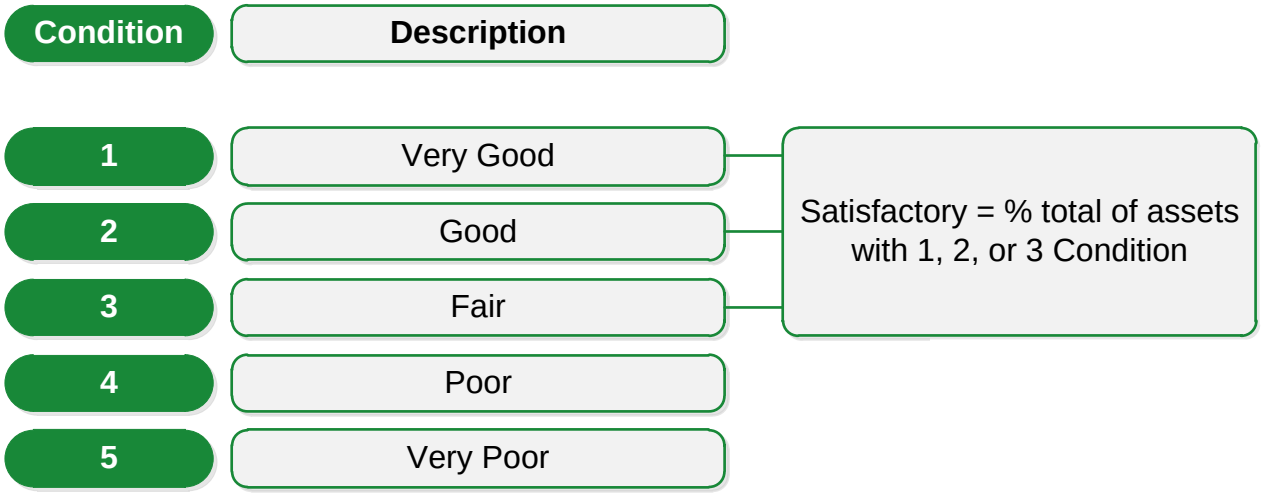
Asset Category	Asset Type	Quantity	Value ($M)
Parks	Iconic	22	303.7
	Neighbourhood	40	155.3
	Pocket	285	114.1
	Streetscapes	1048	28.5
	Sportsfields	15	31.3
	Traffic Treatments	563	7.8
	Playgrounds	152	Included in Parks
	Building Surrounds	10	10.1
		Total	**661.6**
Trees	Parks Trees	13,794	34.5
	Street Trees	35,128	86.3
	Property Trees	661	Included in Property value
		Total	**120.8**
Street Furniture	Smartpoles	2,794	103.3
	Poles and Lighting	4,430 poles 8,451 lights	36.4
	Bins	1,430	16.6
	Cycling Parking	1,563	
	Information Stands	292	
	Kiosks	1	
	Seats	4,278	
	Shelters	610	
	Tactile	2190	
	Wayfinding / Legible Sydney	4,007	8.8
	Permanent Survey Marks	3,020	3.4
	Parking Meters	1,449	8.5
	Security	N/A	3.3
		Total	**180.3**

Asset Category	Asset Type	Quantity	Value ($M)
Buildings	Specialised / Non-Specialised and Investment	254	2,028
Signs	Parking and Regulatory signs Sign Poles	64,000 (approx.) 36,750 (approx.)	16.4
Fleet	Vehicles and major plant	440	50.8
Plant and Equipment	Other Plant and Equipment	N/A	115
Library	Books, publications, electronic resources and other library collections	N/A	8.8
Art	Public art and sculptures	237	58.9
	Town Hall Collection	1,750 (approx.)	9.6
		Total	**68.5**
Office Fit out	Furniture, desks, technology	N/A	57.5

Asset Condition

Condition Definition

In line with International Infrastructure Management Manual, the Institute of Public Works Engineering Australia (IPWEA) condition rating standards, this is the condition ranking the City has adopted. The scale and how the rankings apply varies between each asset category.



Current Asset Condition Assessments

Asset Category	Asset Component	Average Condition	Latest Year of Assessment	Next proposed Assessment	% of Assets rated as Satisfactory
Roads	Road Pavements	2.5	2016	Underway	87
	Footpaths	2.5	2019	2021	96
	Kerb and gutter	2.6	2019	2021	91
	Traffic Facilities	2.0	2018	Underway	95
	Steps and Ramps	2.7	2020	2025	87
Structures	Bridges	2.2	2020	2025	98
	Cliff & Retaining Walls	2.2	2020	2025	97
	Sea walls	2.5	2020	2025	100
	Jetties/Pontoons	2.5	2020	2025	100
	Fences	N/A	2015	2023	N/A
Stormwater	Drainage – Pits – Collected area	2.0	2021	Underway	99
	Drainage – Pipes – Collected area	2.2	2021	Underway	96
	Gross Pollutant Traps	2.0	2020	2024	90
	Raingardens	1.6	2019	2023	82
Parks	Iconic	2.8	2021	2022	99
	Neighbourhood	2.6	2021	2022	96
	Pocket Parks	2.7	2021	2022	98
	Streetscapes	2.9	2021	2022	99
	Traffic Treatment	3.1	2021	2022	99
Trees	Parks Trees	1.9	2021	2022	99
	Street trees	1.5	2021	2022	99
	Property Trees	1.6	2021	2022	99
Buildings		2.1	2021	2022	97

Asset Category	Asset Component	Average Condition	Latest Year of Assessment	Next proposed Assessment	% of Assets rated as Satisfactory
Street Furniture	Smartpoles, Light poles	2.1	2009	Underway	99
	Mounted lights	3.0	2009	Underway	99
	Street Furniture:				
	Bins & Ashtrays	2.7	2016	Underway	90
	Cycle Parking	2.5	2016	Underway	92
	Information Stand	2.6	2016	Underway	93
	Kiosks (CoS owned)	1.9	2016	Underway	99
	Seats	2.6	2016	Underway	86
	Shelters	2.1	2016	Underway	99
	Permanent Survey Marks	2.0	2020	Underway	99
Plant and Equipment	Fleet	2.3	2021	2022	99

Note 1 – Continuous review of all council's asset and related desktop condition assessments are ongoing.

Note 2 – The areas where data is either being collected or not applicable are shown as Not Applicable (N/A)

Generally, condition assessments are conducted as holistic on an asset class. The identification of defects and ad hoc condition assessment on individual assets are being performed on a continual basis.

Non-destructive testing and a condition assessment is underway for all electrical poles.

We are in a transition to a new service provider for street furniture. A new inventory and condition audit will take place and the outcomes will be displayed in next year's Community Asset Management Plan

Asset Management Capability and Maturity - Assessment

In 2019, the City conducted a maturity analysis compared to the Australian Standards:

- AS ISO55000 – Asset Management – Overview, principles and terminology and
- AS ISO55001 – Asset Management – Management Systems – Requirements

The review identified several areas where further improvement in asset management practices in the City. A project plan to achieve the desired level of maturity is being implemented.

Key projects that have been recently completed are:

- Develop terms of reference for a strategic asset group (Asset Management Gateway Panel)
- Develop an asset decision process including budget build for renewals

Key projects that are recommended and underway include:

- Review, develop and reassign roles and responsibilities related to infrastructure assets
- Develop asset health dashboard for executive level management decisions.
- Develop operational dashboards for service delivery standards.

The Asset Management Gateway Panel provides greater oversight in capital works project decision making. Together with a revision of the asset management policy, future asset management plans will have projects within each of the critical asset areas outlining the path to maturity.

We are continuing to focus our efforts in the key areas of:

1. Asset Management Governance
2. Asset Management Skills and Processes
3. Asset information and systems
4. Levels of service
5. Financial sustainability
6. Environmental sustainability asset management practices
7. Resilience in our infrastructure assets

An outline of the strategy focus areas are contained in the following table with the detailed information, including specific elements of the key objectives.

Emphasis on environmental, social and cultural measures and metrics will be identified and incorporated into this report and in the future.

In the short term we are focussing on the areas of resilience, climate change and inclusion of social and culturally important assets within detailed asset management plans.

Accompanying strategies, standards and plans

This Community Asset Management Plan has been informed and works together with the following City strategies, standards and plans:

- Community Strategic Plan
- Design codes and technical specifications
- Climate Change Adaptation Plan
- Digital Strategy
- Information and Technology Strategic Plan
- Data Governance Framework
- Environmental Strategy
- Resilient Sydney
- Smart City Framework
- Greening Sydney
- City for All

Asset Strategy Focus Areas

Focus Area	Key Outcomes	Priority Projects
Asset Management Governance Consistent and appropriate data and corporate governance processes are in place for all asset activities and classes	– Improved data governance – Structured infrastructure risk management plans – Current and relevant policy and strategy – Compliance with Integrated Planning and Reporting requirements – Digital service delivery designed around the user	– Cyclic review of the Asset Management Gateway Panel. – Review and update business, data governance and management processes – Adopt risk management plans for the Critical asset classes, including climate change adaptation, at a network level – Policy reviewed on four year cycle – Endorse Asset Management Plans – Identify areas of improvement for better return on investment Review and reassign roles and responsibilities related to infrastructure assets
Asset Management Skills and Processes The City's staff will have sufficient data and system knowledge, rigorous processes, clear communication and a culture committed to asset and service improvement	– Proactive asset management culture – Standard asset creation and handover processes – Developed asset management skills – Effective communication and On-line tools	– Develop on-line references and tools for asset managers – Develop standard templates and processes for asset demolition and creation – Communications strategy for asset management practices – Provide or facilitate training for asset managers
Asset Information and Systems The City will support service delivery through the provision of up to date asset information and integrated systems providing digital and mobile platforms	– Integrated platforms – Fully resourced system support – Mobile first solutions – Quality data and information – Adopted long term strategy for system – Best practice data modelling and reporting	– Development of executive asset health dashboard – Review and update of the stormwater drainage inventory and condition data incorporating CCTV analysis of pit and pipe capacity and structure – Building and condition audit for relevant buildings – Continue rollout of ConfirmConnect and WorkZone mobile platform – Develop and enable advanced modelling within the corporate system

Focus Area	Key Outcomes	Priority Projects
Levels of Service The City will measure the performance of all asset classes against agreed levels of service including intervention levels, inspection frequency and condition thresholds	– Agreed service levels for all asset classes – Costs associated with service delivery captured and understood – Validated asset lifecycle models – Service levels of new and acquired infrastructure identified at inception – Environmental considerations included in all service level outcomes	– Development of service levels specific to individual asset classes including intervention levels, priority determination and inspection frequency – Develop cost collection model and implement through mobile technology – Develop processes to directly link the corporate asset management system to water, energy and waste consumption – Consult with the community to identify any over or under servicing of assets
Environmentally Sustainable Asset Management Practices Embed best practice environmental management practices into all aspects of infrastructure service delivery	– Climate change considerations as part of normal business – Cleaner stormwater solutions – Embedded sustainable design guidelines – Environmental impact considered in plant and equipment acquisition – Asset reporting includes environmental outcomes	– Embed environmental guidelines in all renewal and upgrade activity – Develop processes to directly link all corporate asset management systems to water, energy and waste consumption – Develop processes to minimise the environmental impact of new or replacement plant and equipment
Financial Sustainability The cost of infrastructure service delivery will be fully understood and incorporated into lifecycle modelling linked to the long term financial plan	– Full understanding of costs to deliver services to support budget preparation – Benchmarked asset operation and maintenance activities and costs – Validated lifecycle models	– Develop and implement strategy, processes and procedures to capture costs associated with infrastructure maintenance activities – Migrate asset financial and valuation data to the Corporate Asset Management System

Focus Area	Key Outcomes	Priority Projects
	– Integrated asset operational and financial data – Purpose specific tools for asset reporting	
Resilience in our infrastructure assets Planning for the City's infrastructure assets to be resilient against future shocks and stresses	– Clear definition of resilience – Asset management plans address resilience issues – Resilience considered at the time of renewal	– Define resilience and its context for each asset group – Rate current infrastructure against adopted definition of resilience. – Develop plans to accommodate resilience into future renewal and operational planning if required.

Link to Community Strategic Plan Directions

Infrastructure assets play both a direct and an indirect role in the delivery of a number of the key Community Strategic Plan directions. Listed below are the directions where critical assets are affected.

The context of assets within the Community Strategic Plan generally expresses the community's intent. Which may include infrastructure beyond what the City owns and controls. Although this infrastructure may create the need for the City to deliver support infrastructure and assets, these are denoted with *.

Some directions have a Planning focus that don't directly include the scope of delivering infrastructure assets instead shape the assets that will be renewed/upgraded. These are denoted with **.

Direction	
1.2	The City of Sydney has the capacity, capability, information, data and systems to serve the community into the future
1.3	The City of Sydney is financially sustainable over the long-term
2.1	The city reaches net zero emissions by 2035 with embodied carbon significantly reduced
2.2	Greening has increased to create a cool, calm, and resilient city
2.3	Water is managed to support a resilient, sustainable, and liveable city
3.1	Aboriginal peoples' history and cultures of this place are evident in the public realm
3.2	Welcoming, inclusive and connected streets and public spaces are created and maintained
3.3	Creativity and culture is embedded in the fabric of the city
3.4	Physical and visual connections to the harbour are strengthened
3.5	Equitable access to open green spaces, playgrounds, pools, recreational and sporting facilities supports social connection and wellbeing
4.1 **	The city's liveability will be enhanced through well planned and designed development
4.3 **	Communities will be supported by the provision of infrastructure and assets that are aligned with growth
4.4 **	Good design leads to buildings and public spaces that are high performing, well designed, inviting and inclusive
5.1	Street space is reallocated for people, places and planting
5.2 *	Most people use the high-capacity, rapid and frequent public transport network that connects the city and the metropolitan area
5.3	More people walk more, because walking is the most attractive and convenient choice for short trips in the local area

Direction	
5.4	More people ride more, because it is an attractive, convenient and safe option for everyday transport
5.5	Freight, servicing and parking will be managed to support the efficient functioning of the city while improving the amenity of city spaces
6.2	Everyone feels welcome and included in the city
6.6	There is equitable access to education and learning opportunities
7.2	Everyone has equitable and affordable access to community and cultural facilities, supporting social connection and wellbeing
7.3	Infrastructure, services and communities are prepared for and can withstand the impacts of acute shocks and chronic stresses and emergency situations
7.4	The city economy is diversified to strengthen its resilience
7.5	People feel safe in the city
8.5	There is an increased supply of accessible creative space
9.5**	Unique local neighbourhoods and the global city centre support thriving economic activity
10.2 *	The supply of well maintained, safe, secure and sustainable social housing is increased to support diverse communities

These directions will be considered when we renew existing or create new community assets. The Community Asset Management Plan outlines, where possible, the additional projected Operating, Maintenance, Renewal costs for assets that are significantly upgraded or delivered within the next 10 years in line with the Community Strategic Plan directions. These costs have also been included in Long Term Financial Plan.

Asset Management Plans

The City of Sydney is implementing asset management in a structured and consistent manner guided by the International Infrastructure Management Manual (IIMM) and the Institution of Public Works Engineers Australia (IPWEA), utilising the basis of the NAMS.PLUS3 template. The assessment against the ISO55000 standards will enhance the implementation.

The Corporate Asset Management System provides a repository where the City can aggregate and assess improved data and the facility to produce better maintenance and operational histories.

To meet the Integrated Planning and Reporting guidelines the City is implementing Asset Management Plans in the following way:

Community Asset Management Plan

The Community Asset Management Plan (this document) provides an overview of the asset management principles and fundamentals we are implementing across asset classes. It contains the current policy and the dynamic strategy themes and projects. It also outlines the long term (minimum 10 year) plans for groups of assets that are critical to the City's operation.

The critical assets included in the plan are:

- Road Network Assets
- Stormwater Drainage Asset
- Parks and Trees
- Property Asset

The plan has the standard Asset Management Plan elements the City is applying to infrastructure assets while at the same time not focusing on technical issues more suited to detailed planning.

Detailed Asset Management Plans

These are plans for discrete asset categories that include detailed inventory information, condition assessments, service levels, funding requirements and future demand. The Detailed Asset Management Plans are not included in the Resourcing Strategy due to their technical complexity, volume and evolving content based on improved data collection and governance.

The Detailed Asset Management Plans are being reviewed and updated to a new consistent plan template over the next 12 months. In addition, the review will include the following key actions:

- Asset Register Data – ensuring the City has acquired the right asset inventory data to make tactical and strategic decisions.
- Service level review for all assets to determine optimum inspection, response, renewal and upgrades. This includes environmental, social and cultural service outcomes.
- Further refinement of the identification of critical assets especially in the context of resilience, climate change and Indigenous Cultural & Intellectual Protocols.
- Further refinement of risk-based priorities for renewal planning.
- Enhanced life cycle modelling to provide more efficient and effective renewal funding scenarios

- Refinement of unit rates that are City of Sydney specific for construction and maintenance
- Planning to make our critical assets in each asset group resilient to the relevant shocks and stresses the asset may experience.
- Use technology and smart city initiatives to make better tactical and strategic decisions.

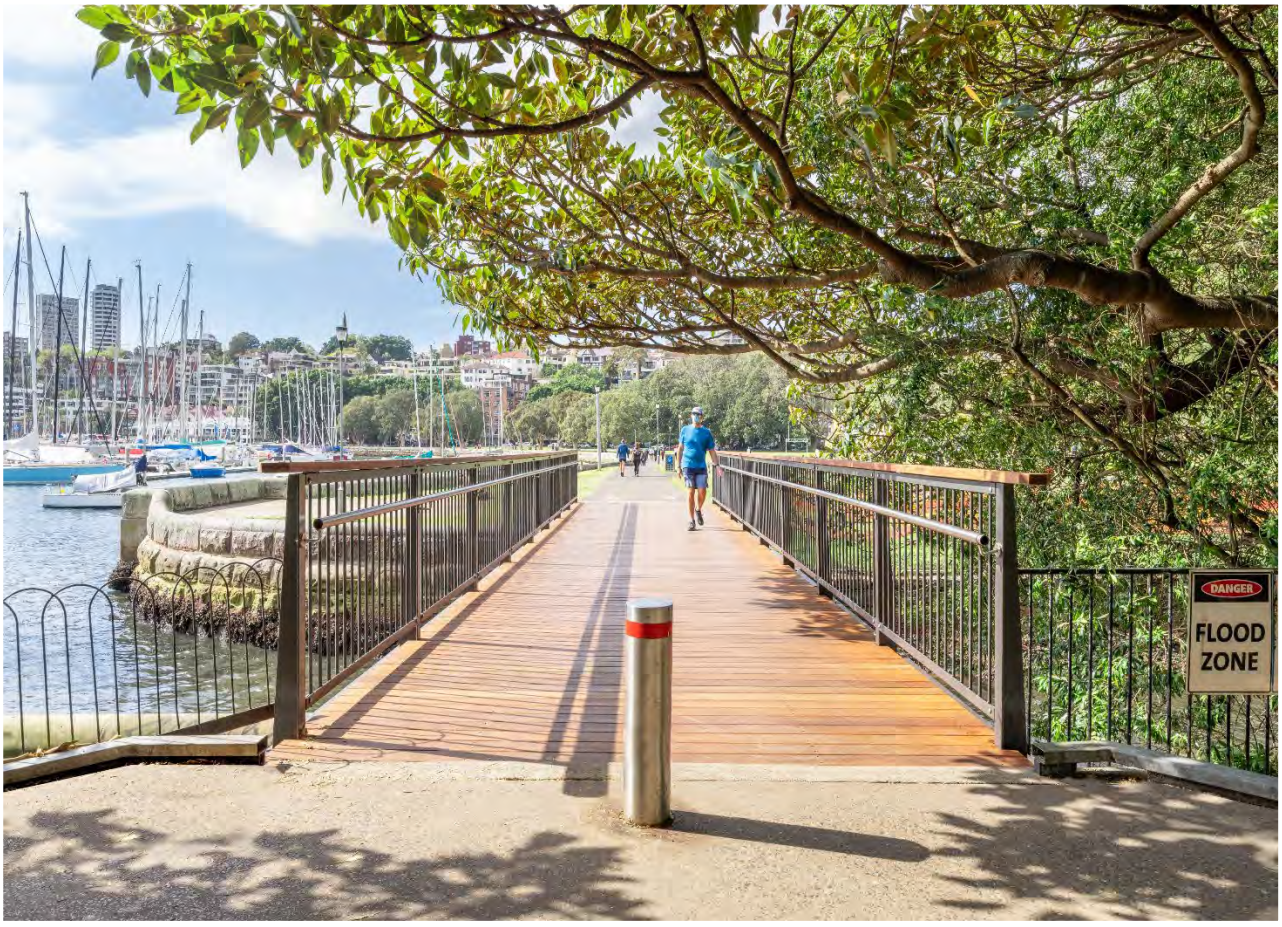


Image: Rushcutters Bay Park Bridge, City of Sydney

Community Asset Management Plan

This section briefly describes the elements included in each of the critical asset categories of this Community Asset Management Plan.

Levels of Service

The City has defined service levels in two ways:

1. Community Levels of Service relate to how the community receives the service in terms of safety, quality, quantity, reliability, capacity, environmental impact, responsiveness, cost/efficiency and legislative compliance; and
2. Operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria and are shown in the detailed Asset Management Plans.

Desired levels of service are obtained from various sources including Customer Satisfaction surveys, residents' feedback to Councillors' and staff, service requests and correspondence, and consultation with stakeholders. The City has identified the review and update of service levels for specific asset classes as a key element of the ongoing asset management strategy.

The City will refine and adjust the levels of service to ensure continued community satisfaction as reflected through these sources. Any changes will be included in revisions of the plans. The change of levels of service on our roads has been assessed and now is in a resourcing analysis stage. The parks assets review produced recommended changes how our parks should be maintained. These changes have been rolled out.

This plan now reflects elements of the Report on Infrastructure Assets (i.e. Special Schedule 7) from the City's financial statements. This replaces previous estimates of minimum condition levels to provide uniformity across reporting platforms.

Demand Management

Generally, the major factors affecting asset management provision and maintenance are population and demographic changes, environmental factors, economic conditions and community expectations. Population and visitor growth in particular will see an increased demand for available open space, pedestrian space, community facilities and also a need for new and emerging assets to meet user expectations.

The Community Strategic Plan is a vision for the City to meet the future demands required for the city to be a green and global city. The Plan impacts the amount and repurposes assets to meet the needs.

The handover of a number of assets from other government authorities is also anticipated in the short term which will impact on service provision.

Demand for new services will be met through a combination of managing existing assets, upgrading of existing assets and providing new assets as required. As the City has a finite stock of existing assets, a focused qualitative approach has been undertaken when upgrading existing assets. This ensures we provide purpose built assets in the right areas.

New and emerging smart city sensors incorporated with Internet of Things (IoT) technologies will provide opportunities to deliver assets that will have higher utilisation, reduced downtime and lower lifecycle costs.

Asset Condition Assessment

The City has adopted a consistent approach to the assessment of the condition of infrastructure assets.

The task of rating all assets to the level of detail required to effectively manage them is significant and the City is continually updating and incorporating improved condition data.

Condition assessments are important because they:

1. Identify assets or areas where maintenance or renewal is needed;
2. Give information, through regular assessment, on the trend in deterioration of assets;
3. Enable estimates of costs to restore to a reasonable level; and
4. Help the City to plan future maintenance.

The adopted model is consistent with the International Infrastructure Management Manual, the Institute of Public Works Engineering Australia (IPWEA) NAMS.PLUS3 Asset Management Guidelines and the NSW Local Government Integrated Planning and Reporting Framework.

The general method to assess asset condition uses a five-point scale and is applied across all infrastructure assets.

The condition indexes are shown in the asset condition section for each of the critical asset chapters.

Each infrastructure asset category has specific levels and descriptions (contained in the Detailed Asset Management Plans) associated with the condition indexes, the assessments shown in the asset specific sections reflect these specifics.

The City has commissioned a number of critical asset data collection projects to keep our condition data up to date and extending coverage for newly acquired assets. These include:

- Road Network assets – road pavement and traffic facility conditions are being collected this year.
- Stormwater drainage network (being pit, pipe and channel information) including size, capacity, dimensions, condition, update is approximately 70% complete and will continue for the next 2 years. This includes CCTV analysis for all City owned Gross Pollutant Traps (GPTs) pipes, pits and raingardens. A Model for Urban Stormwater Improvement Conceptualisation (MUSIC) is currently underway that will assist in planning and scheduling maintenance work in the short term and the siting and installation of future GPTs in the long-term. A review of water quality and marine ecology data in the City's waterways is also planned to assist in prioritising both the maintenance work and new GPT installations. This is an ongoing project with a high labour component and was been impacted by COVID 19.
- Ongoing and cyclic parks inventory collection that include details of park and park elements, condition and valuation. Condition assessments of whole park assets have been completed. The validation of footway verges in conjunction with the roads footway and kerb audit continues. We are continuing to develop improved methods for condition data for parks including utilising weighted averages and relative useful lives of components.
- Collection of detailed building data is ongoing. The collection of condition data for property structures and fabric is continuing. An independent review of the 60 high value or high use buildings or primarily relating to risk and priority works is complete. This is the basis for the renewal component of the capital works program for properties.
- Comprehensive non-destructive testing and condition assessment of all council’s smart poles is underway. It will take approximately three years to complete.

Asset Valuations

A summary of the current replacement cost, written down value and Average Annual Asset Consumption amount for the Asset Category.

Risk Plan

The City of Sydney has developed a Risk Management Policy, Risk Assessment Methodology and Enterprise Risk Management System based on the identification of credible risks, measure of likelihood that it will occur and measures of consequence of the occurrence. The action required to manage those risks are assessed using a Risk Rating Matrix and the Risk Categorisation.

Critical risks, being those assessed as 'Very High' – requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan - are summarised.

A project to review and update the high-level risks associated with the critical asset classes has been undertaken. The project has identified what element of the infrastructure, at a network level, is at risk and what can happen, possible causes, existing controls in place and risk treatment options and plans.

The table following shows a snapshot of the types of risk identified together with their causes and controls and rating.

The associated Risk Management Plan for Critical Assets has been reviewed and adopted. A review of the plan is due in the coming year. The Asset Maturity project identified the City should enhance how risk is considered during the renewal priority process. Future revisions of the Risk Management Plan and the detailed asset management plans will include information on the risk treatment options, plans and timetable for completion.

Resilience

The City has recently undertaken a resilience risk assessment for the Local Government Area and is currently developing a resilience plan for the organisation. We are ascertaining the required actions to make our infrastructure assets resilient to future shocks and stress. The shocks and stresses identified that could impact the City's infrastructure include:

- Primary infrastructure failure
- Epidemic/pandemic
- Extreme heat and heatwaves
- Extreme weather - storms and flooding
- Water insecurity
- Cyber attack
- Terrorist attack
- Civil unrest
- Mass medical emergency
- Population growth and densification
- Food, fuel or water crisis, incl. global supply chains
- Landslip/subsidence/liquefaction
- Aging population/increasing vulnerable populations

Some projects to increase our resilience already underway include:

- Increasing the Tree Canopy and Green Cover
- Trialling new materials with less embodied carbon
- Reducing building energy and water consumption
- Water recycling and harvesting

High level risks for critical assets - snapshot revised 2022

Asset Risk and What Can Happen	Possible cause	Existing controls	Risk Rating
Road Transport Network not meeting community needs	Public transport failure Footpath capacity inadequate - insufficient corridor space Safe cycleway network not completed Competing priorities with road use Inadequate freight delivery drop-off opportunities Parking impacts on public transport corridors Climatic and environmental factors e.g. increasing number of hot days	– Transport planning – Alignment with TfNSW transport and safety policies and plans – Emergency traffic response – Public domain plans – Cycling strategy – Parking Policy – Design code and technical specifications	Very High
Stormwater System Capacity – flooding of property	Historically under capacity systems due to previous design standards Rainfall intensity variations from climate change Sea level rise from climate change Population growth and densification	– Floodplain Management Policy – Floodplain Risk Management Plans – Design code and technical specifications	Medium
Parks and Open Space not meeting community needs	Population growth Increasing expectations Sports field demand Siting of utility infrastructure Demand management, competing land uses Climatic and environmental factors	– Urban renewal planning – Land dedications from new developments – Planning controls – Consultation – Design code and technical specifications	High
City Buildings and Property not meeting safety or community requirements	Fire safety, water treatment, entrapment (lifts), hazmat & vandalism Structural integrity Flooding Climatic and environmental factors e.g. increasing number of hot days Population growth	– Inspections – Contract management – Condition reports prepared – Community feedback – Planned maintenance programs	High

Maintenance, Renewal and Upgrade Costs

To assess the lifecycle costs of managing assets, it is necessary to understand the plans for and expenditure incurred to maintain those assets. A summary of the expenditure trends is shown for each category of asset and the definitions of lifecycle costs appear below.

Operational Costs

Recurrent expenditure which is continuously required to operate and manage assets e.g. management staff and associated on-costs.

Maintenance Costs

These costs are defined as repairs to assets to ensure they reach their full or expected life and include reactive, planned and preventative maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management or supervisory directions.

Planned or preventative maintenance is repair work that is identified through various means including inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Renewal or Replacement Costs

Renewal or Replacement 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 service potential or condition. Work over and above restoring an asset to original service potential comprises upgrade/expansion or new works expenditure.

Expansion (New) Assets and Upgrade Costs

New or expansion works are those works that create a new asset that did not previously exist. Upgrade works improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs and community requirements or requests. Assets may also be acquired at no cost to the City from land development.

New assets will commit the City to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required. The City will increase annual maintenance budgets to ensure sufficient maintenance funds over the life cycle of all newly created assets.

There is a risk that the significant transfer of assets will impact on the provision of future works.

Estimate of Cost to bring asset to satisfactory condition

Elements from the City's financial statements relating to Special Schedule - Report on Infrastructure Assets of the Code of Accounting Practice and financial reporting are included in this document.

The Special Schedule - Report on Infrastructure Assets includes estimates of the cost to bring our critical assets to a satisfactory standard or an agreed level of service. This replaces previous estimates of minimum condition levels to provide uniformity across reporting platforms.

The Special Schedule - Report on Infrastructure Assets contains two primary estimates for assessing the City's financial obligation relating to renewal of infrastructure assets. These are:

Estimated cost to bring to a satisfactory standard

The amount of money that is required to be spent on an asset that is currently not at the condition determined to be satisfactory by Council and the community. Unless otherwise agreed with the community the level for satisfactory is set at Condition 3 – 'Fair'

Cost to bring to the accepted level of service set by Council

Estimate of the cost to renew or rehabilitate existing assets that have reached the condition based intervention level adopted by Council. For the City, in general terms this means any asset that has reached a Condition 4 – Poor or Condition 5 – Very Poor.

Required Maintenance

Estimate of the costs identified to perform routine activities that should be undertaken to sustain the asset in a functional state, ensuring assets reach their predicted useful life, excluding renewal. This includes operational and maintenance costs.

Actual Maintenance

Actual expenditure incurred to perform those routine activities.

Financial Summary, Projections and Projections

The summary contains the financial requirements resulting from all the information presented in the previous sections of the Asset Management Plan. These projections will be refined as updated information becomes available. There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by the asset category. They are:

• Long-term life cycle costs based on historical trends and for the full useful life of the asset.

• Medium term lifecycle costs over the 10 year financial planning period contained in the Long Term Financial Plan.

Estimates of each are shown for the critical asset classes.

Life Cycle Costs

Whole of Life costs are the costs that contribute to the overall cost of providing the asset from design, acquisition, construction, maintenance and demolition or disposal phases.

Asset Consumption Costs

Asset Consumption Costs are the average annual costs that are required to sustain the service levels over the life of the asset after the asset has been commissioned.

These include the ongoing operational and maintenance costs and average annual asset consumption (sometimes referred to as depreciation expense).

This provides an estimate of the theoretical spend required to keep the asset in a satisfactory functioning state over the full useful life period.

Asset Consumption Costs are calculated using the general methodology:

$$\textbf{Average Annual Asset Consumption} = \frac{\text{Replacement Value of the Asset}}{\text{Expected Life of the Asset (how long will it last)}}$$

Into

$$\frac{\text{Required Operational Costs} + \text{Required Maintenance Costs} + \text{Average Annual Asset Consumption}}{\textbf{Asset Consumption Costs}}$$

The Table below provides an example of how the Asset Consumption Cost is calculated

Asset Type	Replacement Value	Useful Life	Average Annual Asset Consumption	Required Operating Cost	Required Maintenance Cost	Asset Consumption Cost
Stormwater Pit	$10,000	100yrs	$100/yr	$500/yr	$100/yr	**$700/yr**
Park	$5,000,000	25yrs	$200,000	$5,000	$15,000	**$220,000/yr**

Estimated Operational, Maintenance, Renewal and Replacement Costs

The amount that the City is currently spending or budgeting to renew or replace an asset, including the planned ongoing operational and maintenance expenses and planned capital renewal or replacement expenditure. The calculation is as follows:

Budgeted Operational Costs +

Budgeted Maintenance Costs +

Budgeted Renewal or Replacement Program

Estimated Operational, Maintenance, Renewal and Replacement Costs

Sustainability Index

The ratio of the Estimated Operational, Maintenance, Renewal and Replacement Costs over the Asset Consumption Costs to give an indicator of sustainability in the asset's service provision. Planned or replacement expenditure will vary depending on the timing of the renewal project and is often incorporated into projects upgrading the asset.

$$\textbf{Sustainability Index} = \frac{\text{Estimated Operational, Maintenance, Renewal and Replacement Costs}}{\text{Asset Consumption Costs}}$$

A Sustainability Index in excess of 0.9 (90%) over a ten year period is generally considered sustainable using industry benchmarks.

The Building and Infrastructure Asset Renewal Ratio benchmark is set by the Office of Local Government to be in excess of 1.0 (100%).

Any difference between Asset Consumption Costs and Estimated Renewal or Replacement Costs provide a guide as to whether funding for the asset renewal matches the theoretical estimate of the consumption or decay of the asset.

Updated data and modelling will be included in future revisions of the Community and the detailed Asset Management Plans are continually being revised to include updated data and modelling

Information contained in the models address any gap identified in the Special Schedule-Report on Infrastructure Assets estimates of the cost to bring our critical assets to a satisfactory standard.

Critical Assets

Scope

Integrated Planning and Reporting defines assets which are essential for councils operations as critical assets. These are those for which financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation.

Assets groups which the city define as critical and included in the Community Asset Management Plan are:

- Road Network – including carriageways, footpaths, kerb and gutter, cycleways, bridges (pedestrian and vehicular);
- Stormwater Drainage – including pits, pipes, culverts, open channels, stormwater quality improvement devices;
- Parks and Trees – including parks improvements, turf, garden beds, parks and street trees, water recycling and reuse systems, water features, habitat corridors and trees within Council properties;
- Property – including corporate, community, investment/strategic, public domain buildings and the Sydney Town Hall.

It is acknowledged that some asset categories not included in the Community Asset Management Plan may be considered critical by interested parties.

The critical asset groups identified account for approximately 90 per cent of all asset value (excluding land).

Summary information for the critical asset classes are contained in this report. The data is based on the information contained in Community Asset Management Plan Section. The City has utilised the Asset Management Framework, the NAMS.PLUS3 methodology and the best available data to prepare this summary information.

The City publishes a ten year capital works program summary as part of its Long Term Financial Plan incorporating asset renewal programs as linked to the detailed asset management plans. The prioritisation of works within that program will be reviewed is updated as the analysis of condition data is completed.

The detailed asset management plans will continue to be refined, particularly as updated information becomes available through the completion of data collection projects.

Road Network Assets

Background

The City provides a road network in partnership with the Roads and Maritime Services and neighbouring councils to enable safe and efficient pedestrian and vehicular movements.

A significant proportion of the City's road network assets have been in existence for many years. These assets have originated from a combination of council construction and development activity by private or other public authorities within the area.

The road network assets assessed in this Plan include:

- Road Pavements (including cycleways)
- Footpaths
- Kerb and Gutters
- Bridges for both pedestrians and road users

In this plan cycleways are included in the road pavement or carriageway. Future revisions will separate cycleways from roads as the data becomes available and the broader cycleway network is completed.

For the purposes of the Community Asset Management Plan, bridge information, valuation and modelling have been included as it forms a critical part of the road and footpath network. However, individual Detailed Asset Management Plans for structures, which includes bridges, cliffs and retaining walls are being prepared because of the different maintenance and renewal requirements for bridges by comparison to roads and footpaths.

A survey of inventory and condition of the road surface associated traffic facilities is underway. An inventory of footpath and kerb and gutter network was last completed in 2019.

A bridges and major structures inventory and condition survey was completed in 2021. An audit and condition survey of parks structures e.g. retaining walls, and pedestrian underpasses was completed in 2021.

The City receives grant funding from both the Federal and State Governments to assist in the management, maintenance and operation of the City's road infrastructure, which is a fundamental part of the NSW transport network.

It is anticipated that ownership of a number of roads will be transferred to the City from State Government entities within the next ten years. Negotiations relating to the terms of any such transfers are ongoing, but it is expected that whilst already constructed and operational, ongoing maintenance requirements of these assets will add to the City's commitments.

The Green Square Urban Renewal is expected to create additional infrastructure in the order of 150,000 square metres of road and footway and 16km of kerb and gutter. Further handover from other urban redevelopment sites and other government authorities are expected in the next 12-24 months. This will add demands on the provision of infrastructure services

City considers cycling as an important means of transport and has provided the following infrastructure:

- Physically separated permanent cycle paths – approximately 19.5 km.
- Pop-up cycle paths (constructed in 2020 as a Covid-19 response measure) – approximately 7.2 km.
- On-road cycle lanes (delineated by pavement markings) – approximately 37.28km

2.7km of cycleways are currently being delivered and will continue to provide an active safe mode of transport.

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Road Assets - Inventory

Asset Category	Quantity	Replacement Value ($M)
Road Surface	330 km	
Road Base	2,899,159 sqm	775.2
Separated Cycleway	19.5 km	
Footpaths	1,805,053 sqm	575.1
Kerb and Gutter	639,021 m	328.4
Traffic Facilities –, Thresholds, Medians, Traffic Islands, Speed Humps, Roundabouts	2,204 items	24.3
	TOTAL	**1,703**

Road Assets - Inventory - Structures

Asset Category	Quantity	Replacement Value ($M)
Steel/Concrete/Composite Bridges	40	104.0
Timber Bridges	4	2.4
Cliffs	140	
Steps/Stairs/Ramps (on Road Reserve)	106	1
Retaining Walls	642	1.1
Sea Walls	2.7km	Included in Parks Value
Jetties/Pontoons	4	Included in Parks Value
Fences	289	Included in Parks Value
	TOTAL	**108.5**

Jetties/Pontoons and Fences replacement values are accounted for within Parks and Open Space valuations.

Asset Inventory – Street Furniture

Asset Category	Quantity	Replacement Value ($M)
Smartpoles	2,661	103.3
Lighting	8,440 Lights, 4,200 Poles	36.4
Bins	818	16.6
Cycling Parking	1,539	
Information Stands	296	
Kiosks	1	
Seats	890	
Shelters	617	
Tactile	2190	
Permanent Survey Marks	3,306	3.3
Wayfinding/Legible Sydney Signs	3,950	8.8
	TOTAL	**168.4**

Note: Parking meters are not included in this asset plan as they are treated as equipment rather than civil infrastructure

Image: Rainbow crossing, corner Bourke St and Campbell St Darlinghurst

Road Assets - Levels of Service

Current

Community Levels of services used by business units to gauge community satisfaction.

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
Quality	Road surface, footpaths, kerb and guttering provides smooth surface/ride appropriate to location, function and road type and speed limits	Customer/ community satisfaction	75% satisfaction level in community survey (Roads and Footpaths)	Achieved – greater than 75% satisfied in last Community Survey (Roads and Footpaths)
Safety	Assets are free from hazards and significant deficiencies	Issues/defects identified	Number of road pavement issues/ defects reduced from previous year	Road defects: • 1451 in 2016/17 • 916 in 2017/18 • 1145 in 2018/19 • 1176 in 2019/20 • 1100 in 2020/21 Footpath defects: • 4501 in 2016/17 • 3698 in 2017/18 • 3309 in 2018/19 • 2769 in 2019/20 • 2701 in 2020/21 Kerb and Gutter defects: • 679 in 2016/17 • 380 in 2017/18 • 442 in 2018/19 • 231 in 2019/20 • 270 in 2020/21

During the Covid-19 pandemic and major lockdown periods, there was a significant reduction in the number of pedestrians and pedestrian movement across the City's public domain areas. As a result, there was a decline of reported condition defects for the footway and kerb categories.

Technical Levels of service and intervention level refers to the condition rating and the time when the assets should be ideally be renewed.

Asset Category	Key Performance Category	Intervention Level	Action
Road	Condition	4	Renewal
Footway	Condition	4	Renewal/Upgrade
Kerb and Gutter	Condition	4	Renewal
Bridges	Condition	4	Renewal

Future

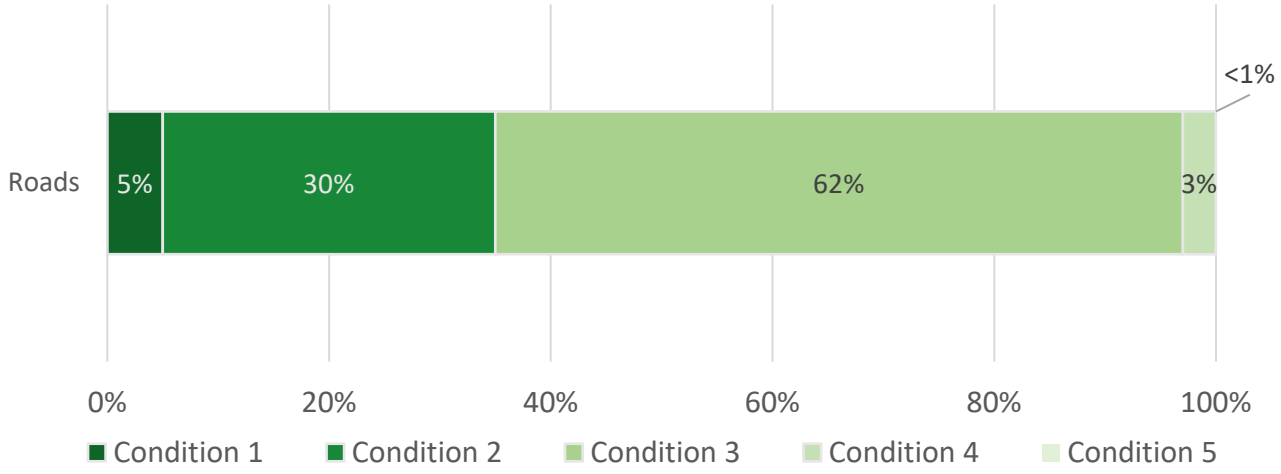
A comprehensive review of all service levels, including inspection frequency, intervention levels and response times, for all civil and stormwater assets is continuing. The review will drive changes to maintenance and renewal activities to provide a level of service that is reflective of community expectations and resource availability.

Images: Eglinton Road, Glebe Footway Renewal Works 2021

Road Assets - Lifecycle Management

Current Condition - Roads

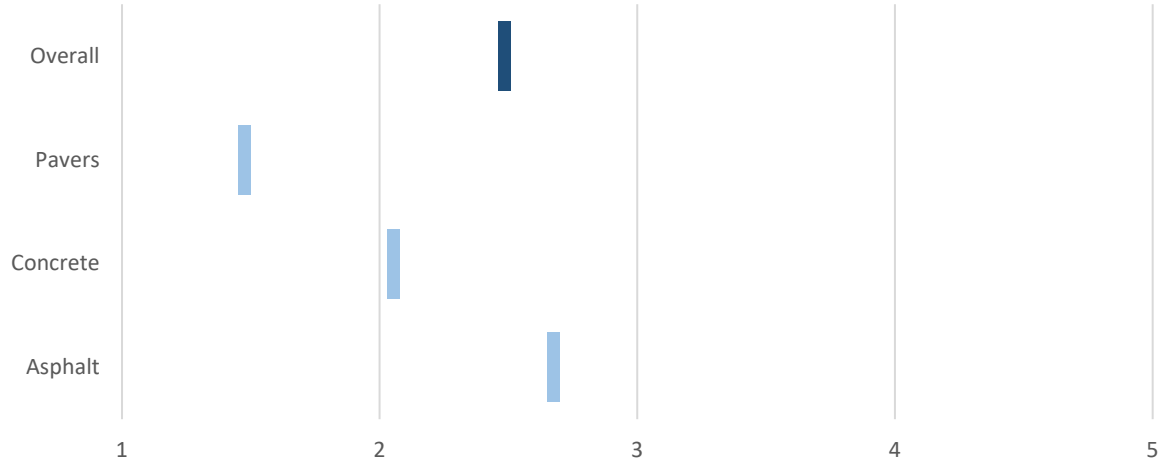
The chart below shows the distribution of road surface assets. Photographs of road surfaces provide a guide to what Condition 1 – Very Good and 5 – Very Poor look like.



Condition 1 – Very Good

Condition 5 – Very Poor

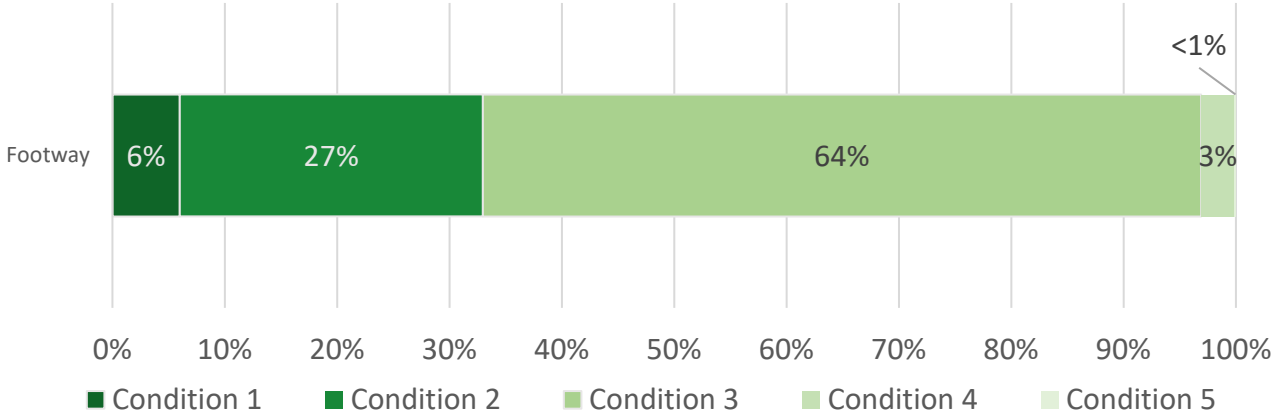
This chart shows the average condition of each of the road surface materials.



Road Inventory and condition updates were completed for the road carriageway network in 2017/18. Desktop condition ratings have been conducted yearly after 2017/18. The overall condition of the road surface is a 2.46 and less than 4% of the road network falls within categories 4 or 5. Any road surface asset rated a condition 4 or 5 has been or is under investigation and, subject to final assessment, will be included in the works program in the next 3 years.

Current Condition - Footway

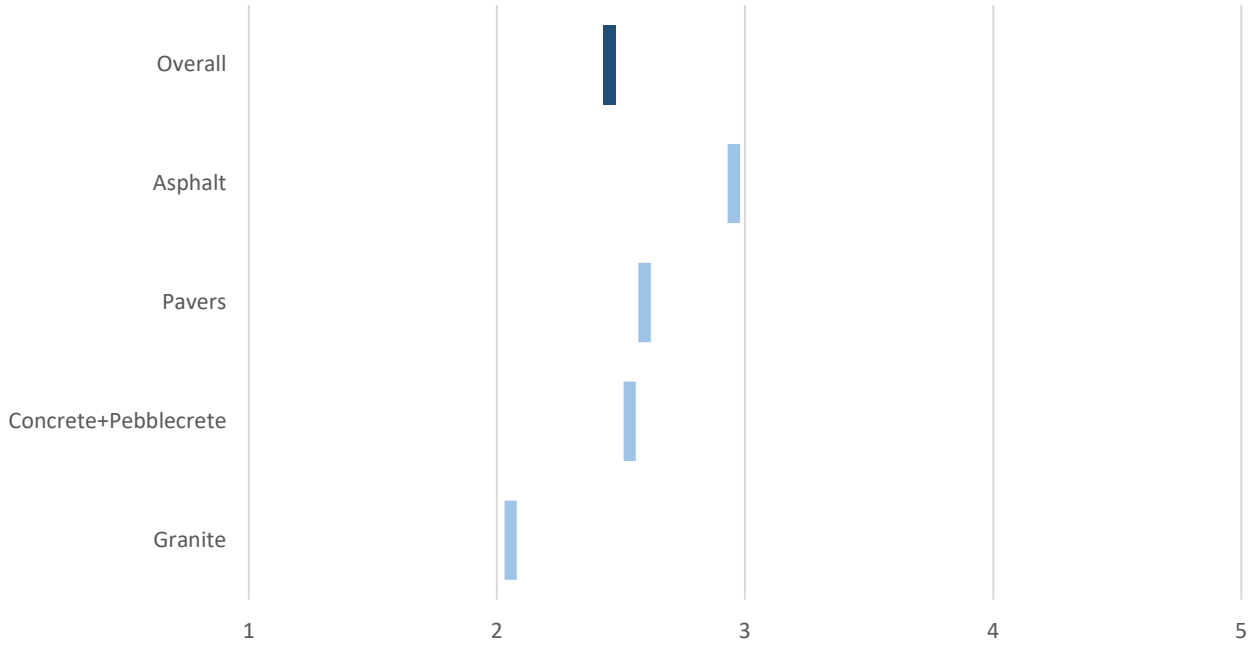
The chart below shows the distribution of footway assets. Photographs of footway surfaces provide a guide to what Condition 1 – Very Good and 5 – Very Poor look like.



Condition 1

Condition 5

This chart shows the average condition of each of the footway materials

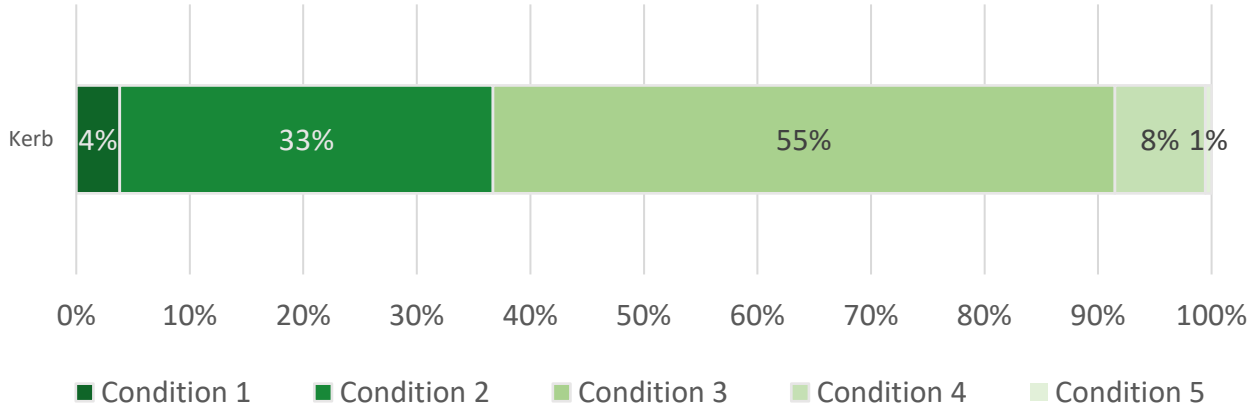


A footpath and kerb and gutter assets verification and condition collection was completed in 2019. Desktop condition ratings have been conducted after 2019. This demonstrates the overall condition of the footway network is footway is a 2.43 and less than five per cent of the road network falls within condition categories 4 or 5. Any footway asset rated a condition 4 or 5 has been or is under investigation and, subject to final assessment, will be included in the works program in the next one to three years.

Desktop condition ratings have been conducted after 2019.

Current Conditions – Kerb and Gutter

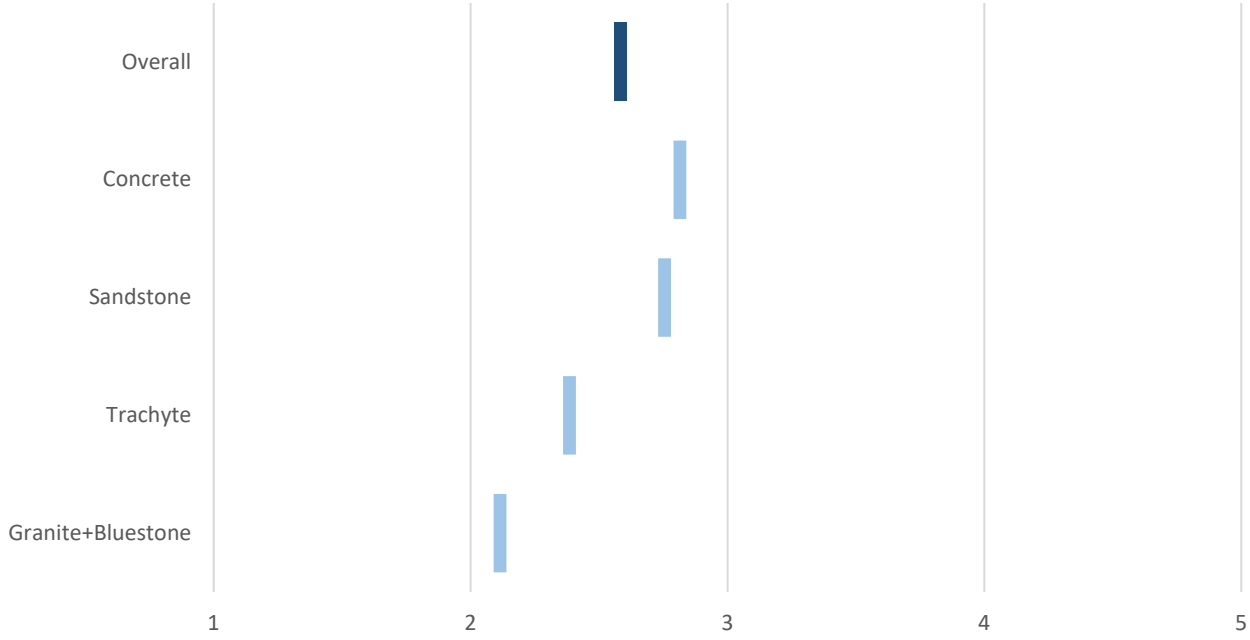
The chart below shows the distribution of condition assessments for kerb and gutter assets. Photographs of kerb and gutter provide a guide to what Condition 1 – Very Good and 5 – Very Poor look like.



Condition 1

Condition 5

This chart shows the average condition of each of the footway materials by area



Similar material types have been consolidated into groups. A kerb and gutter asset verification and condition collection exercise was completed in 2019. Desktop condition ratings have been conducted after 2019. The graphs demonstrates the overall condition of the kerb and gutter network has an overall condition of 2.56 and less than approximately 9% of the network falls within categories 4 or 5. Any kerb and gutter asset rated a condition 4 or 5 has been or is under investigation and subject to final assessment, will be included in the works program in the next one to three years.

The reuse and slower degradation of natural kerb stones lengthens the useful life. Therefore conditions are generally consistent on a yearly basis.

Asset Valuations

Listed below are written down value (depreciated value) and calculated Average Annual Asset Consumption used in the lifecycle and sustainability calculations.

Asset Type	Current Replacement Cost	Written Down Value	Average Annual Asset Consumption
Road Surface	237,446	154,877	6,990
Road Base	537,895	476,545	614
Footway	575,169	372,922	8,078
Kerb and Gutter	328,422	203,676	2,810
Bridges	106,442	57,423	106
Total	**1,787,661**	**1,265,443**	**19,556**

Figures are $k

Lifecycle Costs

The table below shows the trend in the last 5 years in infrastructure expenditure for the road network. Operational and maintenance expenditure is obtained from the Business Unit operational budgets and the renewal, upgrade and new expenditure from the capital work program reports. The 5-year average is the basis for the long term lifecycle costs.

Year	Operating/Maintenance	Renewal	Upgrade	Expansion
2016/17	9,829	13,620	14,307	20,689
2017/18	10,149	12,132	10,413	9,247
2018/19	10,160	12,760	10,394	10,182
2019/20	10,063	19,919	19,544	26,880
2020/21	10,096	21,039	34,146	18,338
5 Year Average	**10,059**	**15,894**	**17,761**	**17,067**

Figures are $k

Increased expenditure in upgrade and expansion in the last two to four years is due to the ongoing roll out of the City's cycleway network and the development of Zetland Avenue. The lower renewal amount for 2015-2019 reflects the increased focus on the George Street light rail project.

Maintenance, Renewal and Upgrade costs

This table shows the Report on Infrastructure Assets as at 30 June 2021 in accordance with the Code of Accounting Practice and financial reporting. It shows the estimates to bring the road assets to a satisfactory standard as described in 'Estimate of Cost to bring asset to satisfactory condition' section of this report.

Asset Class	Asset Category	Estimated Cost to bring assets to satisfactory standard**	Estimated Cost to bring to the agreed service set by Council ##	2020/21 Required Maintenance	2020/21 Actual Maintenance
Roads	Sealed Roads – surface course	508	1,189	3,088	3,366
	Sealed Roads – base structure	4,519	5,649	174	165
	Bridges	0	0	145	138
	Footpaths	2,036	4,725	5,010	5,256
	Kerb and Gutter	3,145	6,336	1,234	1,171

Figures are $k/yr

** As per Office of Local Government Requirements, reflects the estimated cost to restore all Council assets to condition '3' or better. These cost assessments remain highly subjective as in previous years

- reflects the estimated cost to restore all assets assessed to be at a condition beneath Council's minimum service levels. These standards (i.e. target conditions) reflect the strategy of maximising the consumption of the assets' service potential before renewal works are undertaken.

The City's general definition of agreed level of service is that any asset that has reached a Condition 4 – Poor or Condition 5 – Very Poor should be renewed as a matter of priority.

Image: Council staff renewing a footway

Road Assets - Financial Summary, Projections and Sustainability

Long Term – Lifecycle costs based on current expenditure

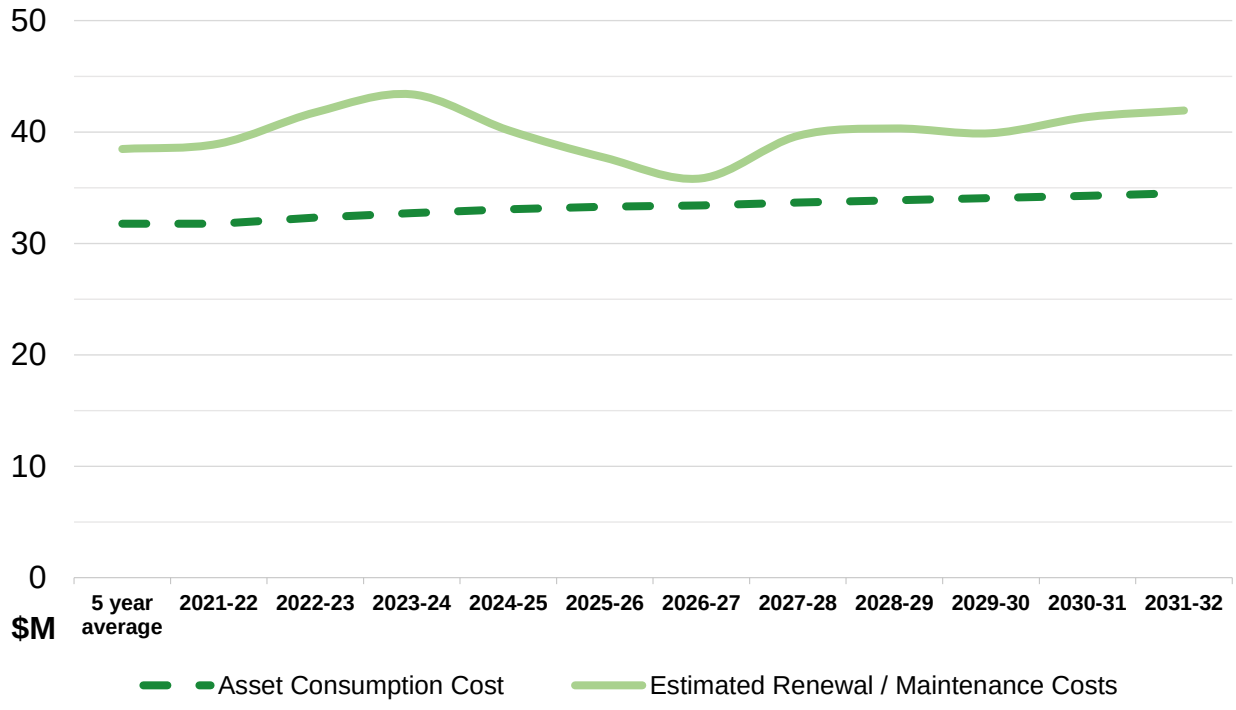
The table below shows the current sustainability index as projected using the average of the last 5 years estimated costs. This is the basis of the long term cost that the City will need to fund for the life of the assets.

Asset Consumption Cost	Operational, Maintenance, Renewal and Replacement Costs	Difference
31,769	**31,999**	**-230**
What we should be spending	What we are spending	

Figures are $k/yr

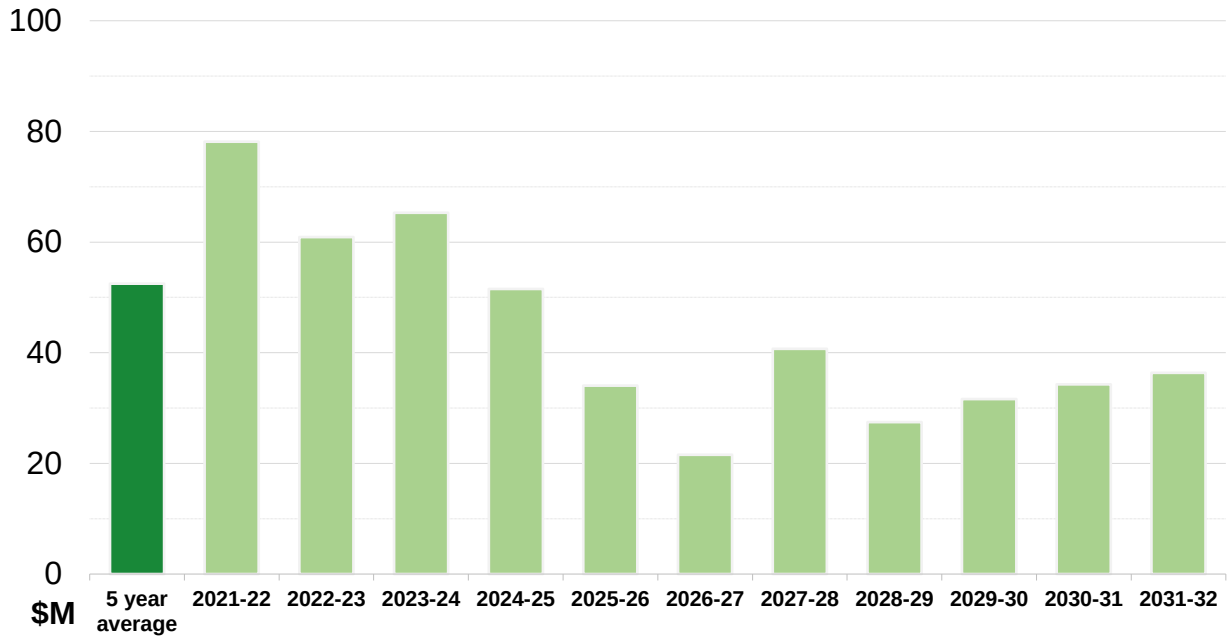
Medium Term – 10 year financial planning period

This chart shows the relationship between the Asset Consumption Costs and the funded Long Term Financial Plan for estimated Operational, Maintenance and Renewal and Replacement costs.



The delivery of new assets is the primary reason for the change in the asset consumption cost line.

The chart below shows the proposed Upgrade and Expansion Expenditure as shown in the current Long Term Financial Plan



The increase spending for the next 2 years term is due to City South Pedestrianisation and upgrade works within COVID 19 stimulus projects approved in June 2020

This table shows the estimate of the Average Asset Consumption Costs, the Estimated Operational, Maintenance, Renewal and Replacement Cost, and the Sustainability Index 10 Year projection.

Asset Consumption Costs	Estimated Operational, Maintenance, Renewal and Replacement Costs	Difference	Sustainability Index
10 year projection calculated	10 year projection budgeted		10 Year period
33,363	**40,084**	**6,721**	**1.20**
What we should be spending	What we are going to spend		Ratio of what we going to spend to what we should be spending

Figures are $k/yr

Road Assets - Environmental Summary, Projections and Sustainability

The City's road network assets generate operational carbon emissions via the provision of street lighting and pedestrian lighting. As of 2021/2022 all operational electricity is 100% renewable, either through onsite Solar PV or through the direct purchase of renewable electricity from a wind and two solar farms. There is no gas use associated with the operation of the road network. Emissions associated with fleet and contractor fuel use for road asset management activities are included in the City's total carbon reporting, however we are not able to reliably attribute these emissions to road maintenance activities.

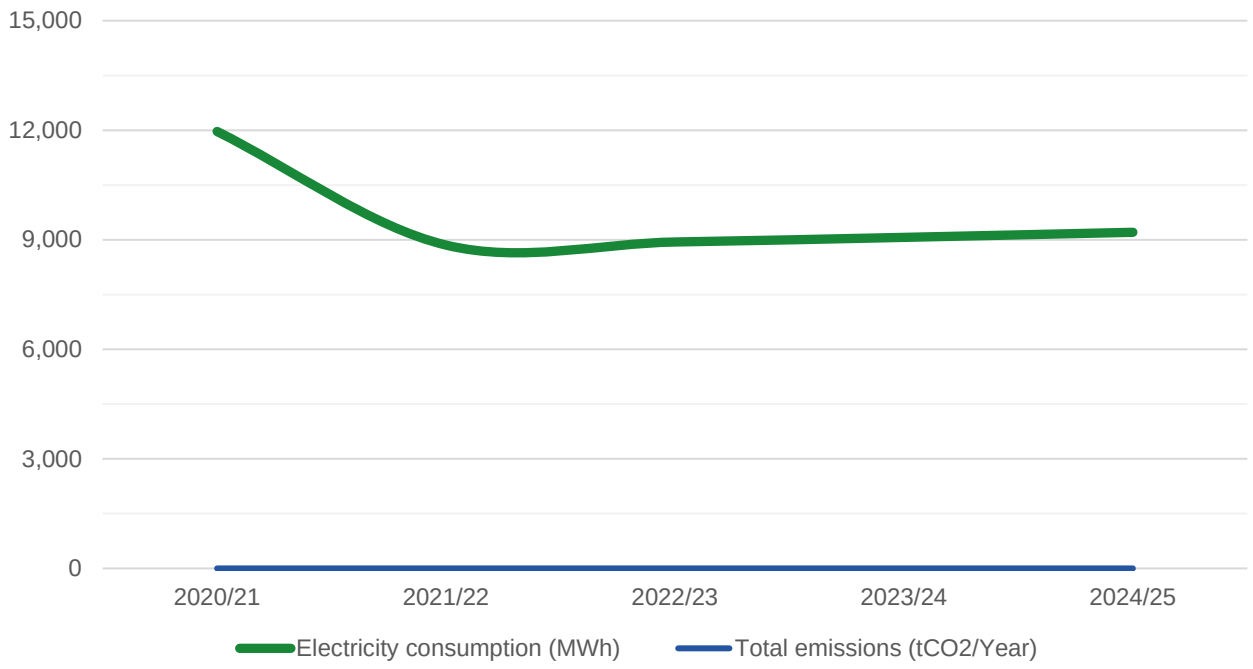
Therefore, there are zero operational emissions associated with this asset class. This is expected to be maintained over the period covered by our Environment Strategy 2021-2025.

The Asset Emissions Forecast captures the impact of planned projects on our future emissions. It also tracks the effect of energy efficiency projects which will continue to be delivered as a core tactic for our ambition to be a net-zero organisation.

The forecast predicts that electricity consumption associated with street lighting will decrease in the next three years due to an LED streetlight replacement program being delivered in partnership with Ausgrid. The planned installation of additional pedestrian lights from 2022/23 onwards will marginally increase electricity use. This increase will not impact our overall operational emissions as the City's electricity supply is 100% renewable.

Table 1 and Figure 1 show the change in electricity use for the reporting years of the Environment Strategy.

	2020/21	2021/22	2022/23	2023/24	2024/25
Electricity consumption (MWh)	11,966	8,855	8,939	9,066	9,205



Concluding Remarks

The estimates contained in the Charts and Table indicates that the City has budgeted to renew road assets at a sustainable rate over the next ten years and is addressing the maintenance and renewal requirements and the Special Schedule - Report on Infrastructure Assets cost to satisfactory requirements consistent with the Office of Local Government performance measures.

The increase in renewal work for the 2021/22 period is due to the George Street Pedestrianisation project and delivery of separate cycleways. These works represent a large dollar value within the renewal and upgrade works budgets. This large amount has increased the average budget over the ten year period and has temporarily increased the planned average spend over the next ten years.

Image: Geddes Ave Cycleway, Zetland. City of Sydney 2021

Stormwater Drainage Network Assets

Background

The City of Sydney operates an extensive stormwater drainage network that is connected to Sydney Water and other statutory authority infrastructure. The network has been in place in some areas for more than 100 years.

When a large part of the City Centre was originally developed, the stormwater drainage network was built by Sydney Water and the City of Sydney. Typically, in suburban areas, Sydney Water would operate the large canals or trunk lines into which local stormwater would flow. However, within the City area, both large and small stormwater infrastructure is spread between the organisations.

Some 80% of the stormwater network is owned by the City with about 15% owned by Sydney Water and the remainder by other authorities.

This is a unique situation that leads to issues surrounding ownership and responsibility for assets.

A program is in place to update the stormwater drainage inventory and condition data including full CCTV analysis of the capacity and condition of the City owned pipes and pits. This program is heading towards completion.

A preliminary analysis of completed areas included in this document. To date condition assessment of approximately 70% of the network has been completed.

The analysis of the completed areas suggest that average structural condition of the network is likely to be between 2.1 and 2.5.

Valuation information was updated in 2017 to reflect the more accurate information available through the data collection. The City's drainage asset base will be updated in future revisions of the plan as condition information and other information, particularly relating to ownership of pipes and pits, becomes available.

Further analysis of the CCTV data and follow up field investigation is required, particularly in the condition assessment, of the completed area pipe assets and the ownership profile.

The City has prepared a five year renewal program developed in accordance with relevant standards including all pipes in the collected area in condition 4 or 5 in the priority renewal works schedule. The plan will be reviewed following full analysis of the stormwater drainage inventory and condition data. Usually renewal works are undertaken where assets have suffered damage, often by tree root infiltration, collapsed stormwater pipes or at identified flooding locations to provide increased hydraulic capacity.

Provisions for the renewal program and considerable capacity upgrade projects have been incorporated into the Long Term Financial Plan.

Floodplain risk management studies will largely determine the renewal and replacement priorities based on risk. The 10 year drainage renewal program will be subject to amendment based on ongoing risk assessments.

Stormwater assets have an extremely long useful life and provide challenges to examine their condition on a regular basis. The City is committed to upgrading the condition and capacity of the stormwater network as demonstrated by the flood plain risk management studies completed and current stormwater planned works.

The creation, acquisition and upgrade plans will be driven by the new floodplain risk management studies and implementation plan.

A draft implementation plan has been prepared for all floodplain management items listed in the City's eight floodplain risk management studies and plans. This plan has formed the basis of our 5 year, 10 year and long term development plans for expenditure and the programming of construction of flood mitigation works including planning options such as the re-evaluation of Council's Interim Floodplain Management Policy.

Significant new and upgraded stormwater assets will be delivered in the next ten years. Trunk drainage works in Green Square costing $140M was recently completed.

Currently we are developing a stormwater quality study (MUSIC) which predicts the performance of stormwater quality management systems. The output allows the City to create plans for stormwater hydrology and pollution impacts. The City will increase annual maintenance budgets to ensure sufficient maintenance funds over the life cycle of all existing underperforming assets and make provision for new pollution devices where applicable.

Image: Sydney Park Wetlands, Sydney Park, St Peters

Stormwater Assets - Inventory

This table shows the range, extent and asset replacement cost for the drainage assets detailed in the Community Asset Plan, together with some associated infrastructure for reference purposes.

Asset Category	Quantity	Replacement Value ($M)
Stormwater Pipes	180km	283
Stormwater Pits	12,390	111.8
Open Channels	100m	0.1
Box culverts	7.4 km	31.8
Stormwater Quality Improvement Devices		
Gross Pollutant Traps	42	1.7
Raingardens	249	2.8
Total		**431.2**

Stormwater Assets - Levels of Service

The table below shows some important community levels of service used by Business Units to gauge community satisfaction. A comprehensive review of all service levels, including inspection frequency, intervention levels and response times, for all civil and stormwater assets is continuing. The review will drive changes to maintenance and renewal activities to provide a level of service that is reflective of community expectations and resource availability.

Current

Community Levels of services used by business units to gauge community satisfaction.

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
Quality	To service the needs of the community and Council to an appropriate standard (i.e. minimise local flooding and ponding)	Yearly total of customer service requests and letters	Maintain parity or reduce number of customer requests from previous year	Requests per year: 1055 - 2016/17 654 – 2017/18 826 – 2018/19 707 – 2019/20 623 – 2020/21
Function	Stormwater system to be of suitable condition and capacity to	Response time to requests for clearances of	Respond to requests for clearance of blockage causing	Achieved 2020/21 (335 enquiries

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
	convey required flow	blockages causing flooding	flooding within 48hrs	
Safety	Absence of significant health safety hazards	Response time to Work Health and Safety issues or reports and public safety complaints received through customer service requests	Dangerous hazards or public safety matters are responded to and made safe within 48hrs	Achieved 2020/21 (201 enquiries)
Environmental	Improve stormwater quality that is discharged into receiving waters	Number of trapped gully pits cleanings	950 units cleaned per annum	1,590 - 2016/17 1,052 - 2017/18 1,044 – 2018/19 800 – 2019/20 912 – 2020/21

Stormwater assets are designed for average weather conditions. Stormwater assets are not designed for prolonged weather events such as extended high rainfall (flooding) and prolonged drought (trapped pits needing top up and not cleaned). The statistics over time may reflect where such conditions have been experienced.

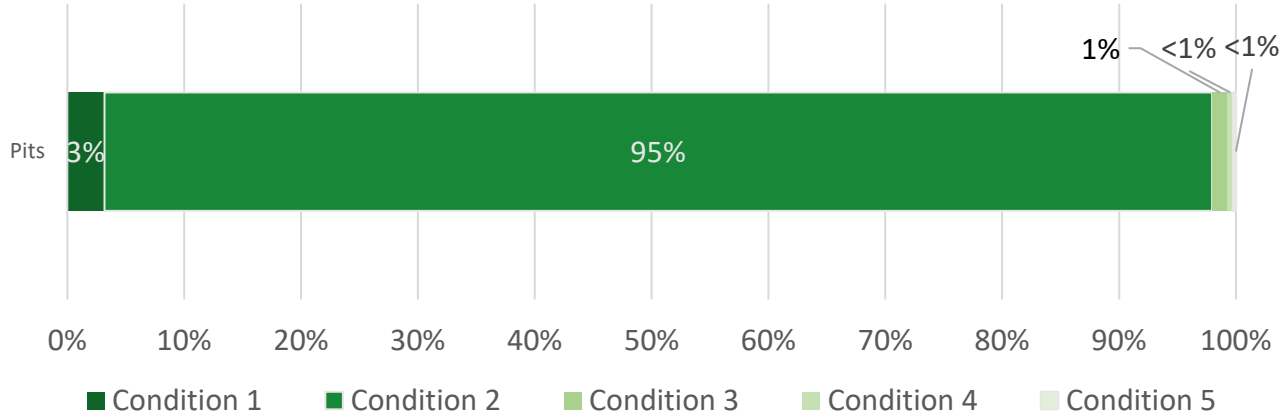
Image: Sydney Park water reuse scheme, Sydney Park, St Peters

Stormwater Assets - Lifecycle Management

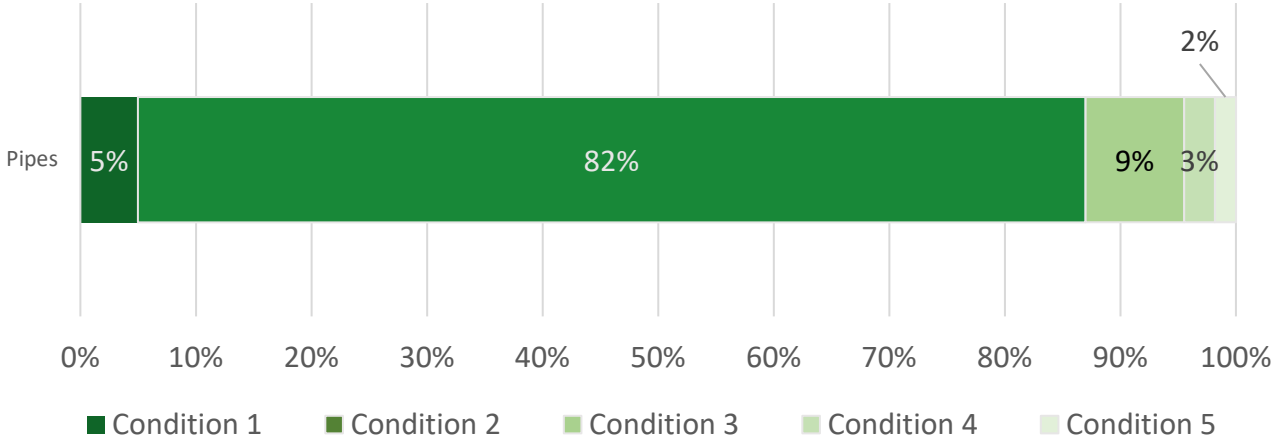
Asset Condition

The condition charts below show the overall condition of pits and pipes in the completed collection area. The completed collection area represents about 70% of the network but needs to be fully analysed prior toa final average condition can be issued.. The initial observation is that the pit conditions are generally very good with some issues with the pipe network. Variability in the condition assessment from year to year will occur as the assessment sample size increases. The City has included all pipes in the sample area in condition 4 or 5 in the priority renewal works schedule.

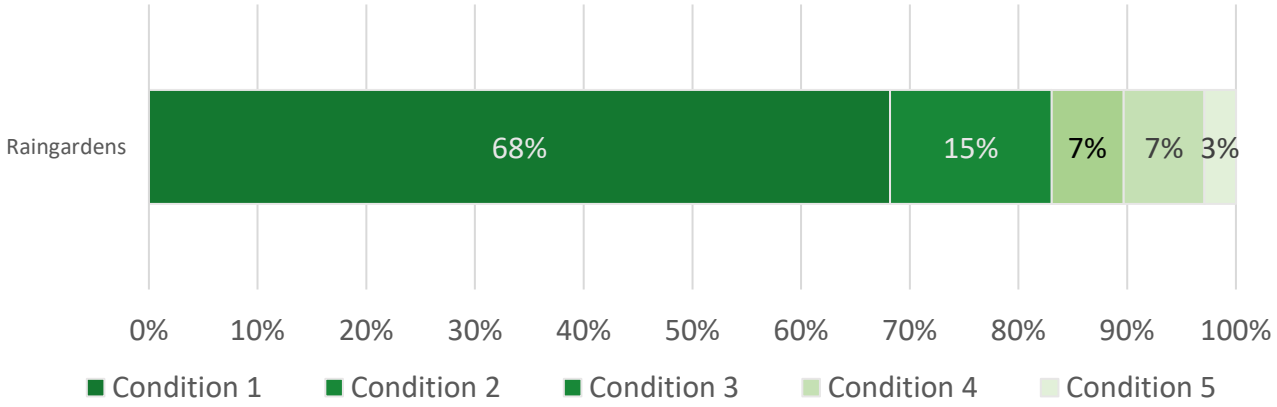
The chart below shows the distribution of condition of the stormwater pit assets.



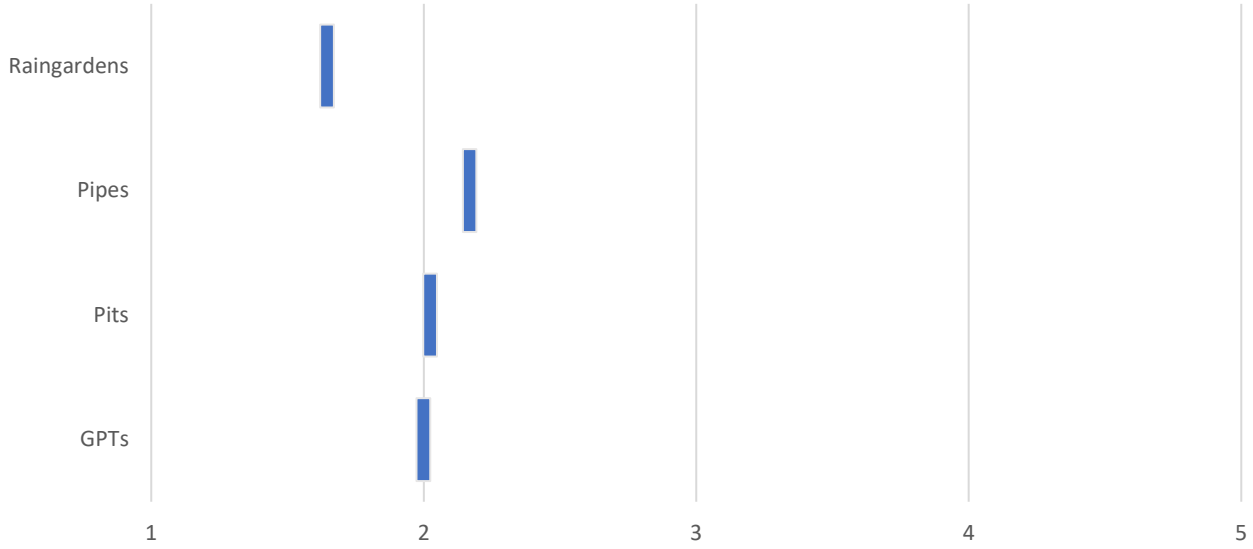
This chart shows the distribution of conditions of the stormwater pipes assets



This chart shows the distribution of conditions of the raingardens assets



This chart shows the average condition of each of the stormwater categories. There is no overall condition as the four drainage asset types listed are distinct asset types and can't be summarised across the stormwater drainage asset group



Asset Valuations

Listed below are written down value (depreciated value) and calculated Average Annual Asset Consumption used in the lifecycle and sustainability calculations.

Asset Type	Current Replacement Cost	Written Down Value	Average Annual Asset Consumption
Pipes / Channel / Culverts	314,860	220,850	2,935
Pits	111,849	76,867	1,064
GPTs / Raingardens	4,569	2,275	300
Total	**431,278**	**299,992**	**4,299**

All figures are $k

Lifecycle Cost

The table below shows the trend in the last five years in infrastructure expenditure for the stormwater drainage network. Operational and maintenance expenditure is obtained from the Business Unit operational budgets and the renewal, upgrade and new expenditure from the capital work program reports. The five year average is the basis for the long term lifecycle costs.

Year	Operating/ Maintenance	Renewal	Upgrade	Expansion
2016/17	2,574	3,371	9,307	13,492
2017/18	3,203	2,839	7,206	8,383
2018/19	3,400	1,206	1,202	938
2019/20	2,489	1,430	441	321
2020/21	1,938	3,302	1,146	331
5 Year Average	**2,721**	**2,430**	**3,860**	**4,693**

Figures are $k

The upgrade and expansion expenditure was higher from 2016 to 2018 due to the Green Square Trunk Drain and Water reuse and the Sydney Park Water reuse projects.

Maintenance, Renewal and Upgrade costs

This table shows the Report on Infrastructure Assets as at 30 June 2021 in accordance with the Code of Accounting Practice and financial reporting. It shows the estimates to bring the road assets to a satisfactory standard as described in the 'Estimate of Cost to bring asset to satisfactory condition' section of this report.

Asset Class	Asset Category	Estimated Cost to bring assets to satisfactory standard**	Estimated Cost to bring to the agreed service set by Council ##	2020/21 Required Maintenance	2020/21 Actual Maintenance
Stormwater Drainage	Stormwater Drainage	9,650	9,650	2,854	1,938

** As per Office of Local Government Requirements, reflects the estimated cost to restore all Council assets to condition '3' or better. These cost assessments remain highly subjective as in previous years

- reflects the estimated cost to restore all assets assessed to be at a condition beneath Council's minimum service levels. These standards (i.e. target conditions) reflect the strategy of maximising the consumption of the assets' service potential before renewal works are undertaken.

The City's general definition of agreed level of service is that any asset that has reached a Condition 4 – Poor or Condition 5 – Very Poor should be renewed as a matter of priority.

Stormwater Assets - Financial Summary, Projections and Sustainability

Long Term – Lifecycle costs based on current expenditure

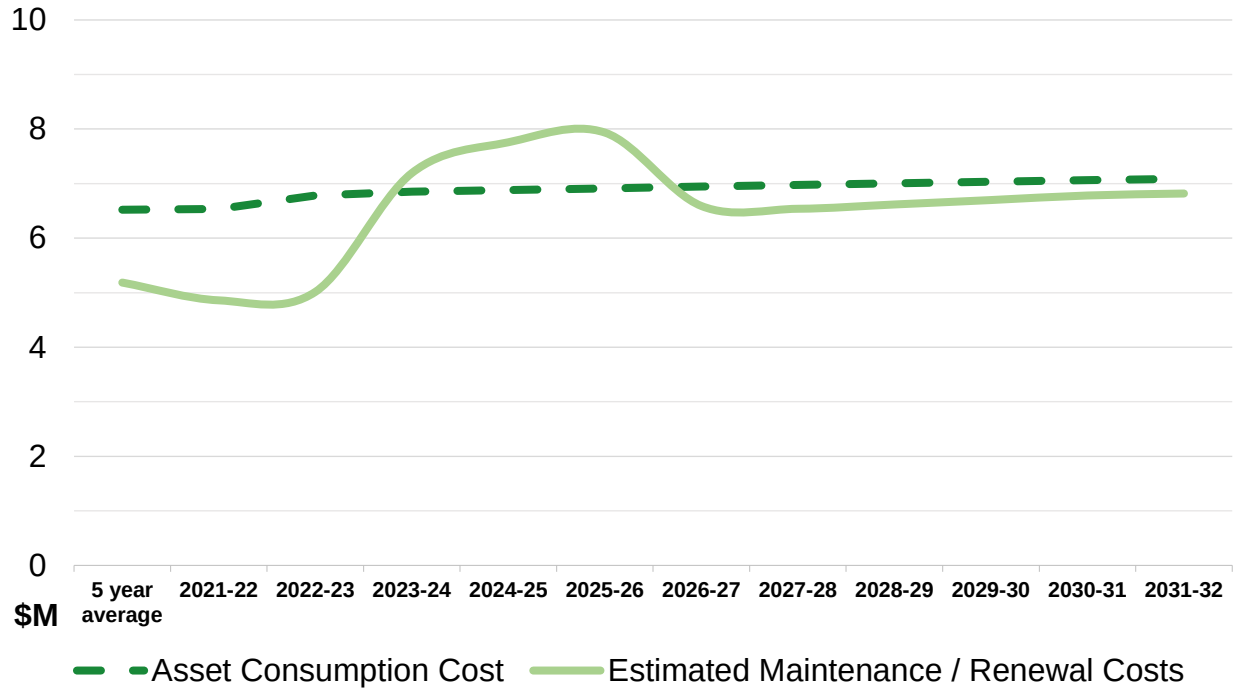
The table below shows the current sustainability index as projected using the average of the last 5 years estimated costs. This is the basis of the long term cost that the City will need to fund for the life of the assets.

Asset Consumption Cost	Operational, Maintenance, Renewal and Replacement Costs	Difference
6,534	**5,240**	**-1,294**
What we should be spending	What we are spending	

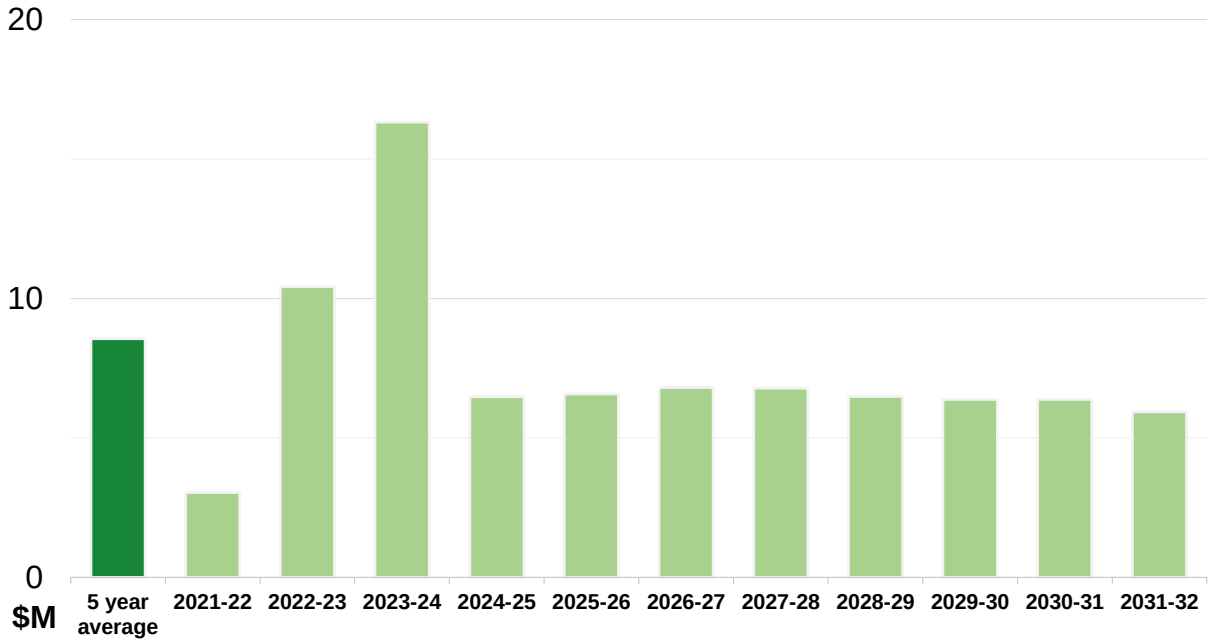
Figures are $k/yr

Medium Term – 10 year financial planning period

This chart shows the relationship between the Asset Consumption Costs and the funded Long Term Financial Plan for estimated Operational, Maintenance and Renewal and Replacement costs.



The chart below shows the proposed Upgrade and Expansion Expenditure as shown in the current Long Term Financial Plan.



This table shows the estimate of the Average Asset Consumption Costs, the Estimated Operational, Maintenance, Renewal and Replacement Cost, and the Sustainability Index 10 Year projection.

Asset Consumption Costs	Estimated Operational, Maintenance, Renewal and Replacement Costs	Difference	Sustainability Index
10 year projection calculated	10 year projection budgeted		10 Year period
6,915	**6,618**	**297**	**0.96**
What we should be spending	What we are going to spend		Ratio of what we going to spend to what we should be spending

Figures are $k/yr

Concluding Remarks

The charts indicate that the City has committed significant funding to the renewal and expansion of the Drainage infrastructure in the next 10 years with substantial amounts being allocated to upgrading the network in accordance with the floodplain risk plans and Model for Urban Stormwater Improvement Conceptualisation (MUSIC) modelling. The modelling will be updated in future revisions and the detailed asset management plan for stormwater drainage.

Another contributing factor is the discovery of poor and very poor pipes via CCTV inspections, this will result in new renewal works in the near term.

The asset consumption chart, which includes maintenance and renewal estimates reflects the large impact from relatively small amounts of funding for renewal. Drainage assets have a particularly long life with a relatively low average asset consumption cost and so a small change to renewal in any one year (say $1,000,000) has a marked effect on the chart appearance.

The City recognises renewal and expansion of stormwater drainage infrastructure is an important priority. Additional funds are being allocated to resolve flooding and water quality problems.

The estimates indicate that the City has budgeted to renew the drainage assets at a sustainable rate and is addressing the renewal requirements and the Special Schedule - Report on Infrastructure Assets requirements consistent with the Office of Local Government performance measures.

Image: Mary O'Brien Reserve, Zetland

Parks, Open Space and Tree Assets

Background

The City's parks, open spaces and trees are one of the community's most loved assets with hundreds of thousands of residents and visitors using our parks daily. The size of the park and open space network is approximately 200 hectares throughout the local government area, providing both active and passive places for the use and enjoyment of communities.

The City is also responsible for the care, control and management of many Crown Reserves, including Hyde Park, Victoria Park, Prince Alfred Park and Bicentennial Park.

The City's tree population consists of over 46,000 trees, located throughout the streets, parks and open spaces and City properties.

The Community Asset Management Plan includes parks and open spaces, together with trees (park and street) in the modelling. However, separate Detailed Asset Management Plans are being prepared for parks and open spaces and trees (park and street) because of their different maintenance and renewal requirements.

Parks and Open Spaces – Considerations

In excess of 3.4 Ha of park and open spaces have been added to the City in the previous 5 years through the development process. The recent additions include Harold Park, Walaba Park, Chippendale Green, Mary O'Brien Reserve, the Western Block, Gunyama Park and some small parks around Green Square. While these parks and open spaces are already constructed, the ongoing maintenance will add to the City's ongoing commitments.

Negotiations also continue for the handover to the City of a number of significant parks and open spaces from the State Government which are anticipated in the next few years. The ongoing maintenance requirements of these assets will add to the City's commitments.

Projected growth in the Park network area (from 206 hectares in 2018/19 to 215 hectares in 2021) will impact on resourcing and ongoing maintenance and renewal activities.

Many of the key urban renewal areas, in particular the Green Square Urban Renewal Project will create large additional parks and open spaces, adding to additional renewal and maintenance costs. Gunyama Park and nearby Aquatic and Recreation Centre is an example. Major refurbishments of Hyde Park, Belmore Park and Perry Park are planned in the medium to long term and are included in the Long Term Financial Plan. Recent developments on a number of new and renewed assets in Green Square were completed in the past 12-24 months.

There is a continual increase in the number of street trees, streetscapes and traffic treatments being developed as part of the Greening Sydney program, cycleway, and various other road and footway renewal programs. Additional assets and technologies are being developed to manage storm water harvesting. Resourcing to support, manage, and maintain these assets will be required in future years.

The development of synthetic sports fields within the City will present a new asset type that will require new approaches to maintenance of those assets and associated facilities.

Playground equipment, softfall, shade sails and associated infrastructure require replacement and minor upgrade works to ensure that identified playgrounds remain safe and fit for use, minimising risk to the City and providing increased amenity for children and their carers. The program for replacement of playgrounds is determined following a report from an external playground assessor itemising the remaining useful life for each playground.

Major community events in parks and open spaces place considerable stress on the parks that can result in expensive repair programs. Assessment of these events and their impact on service levels is ongoing.

During the pandemic the increase use of parks impacted services levels in particular in the waste collection and inspection areas. With the recent increased rain frequency and quantities this has created challenges with mowing and turf maintenance.

Parks that have been identified with a condition rating of 4 or 5 are included in the preparation of the annual works program. Some are specifically included in the Long Term Financial Plan and some addressed through allocation of provisional renewal funding.

Trees – Considerations

The extensive urban renewal projects across the local government area, including Green Square, the Ashmore Precinct and Harold Park, include new streetscapes and street tree assets. Best practice design and construction is being applied, with the trees now in highly engineered environments. Resourcing to support, manage and maintain these assets will be required in future years.

Major upgrade tree related projects planned in the next 5 to 10 years include:

- Greening Sydney Strategy– with targets to increase canopy cover
- Urban Forest Strategy
- Street Tree Master Plan implementation (e.g. in road tree planting);
- Cycleway and public domain project installation/upgrades;
- Hyde Park, Central Avenue tree replacement program.

Unlike engineered assets, the tree asset network does not have an upgrade component, only maintenance, renewal or expansion, with the timeframe for tree replacements difficult to predict with certainty. The life span of trees varies according to the species, location and local environmental factors. As such there is no formal renewal plan, but a provisional amount for the replacement of 700 trees annually based on current practices and trends, together with new tree allocation in the Long Term Financial Plan.

The ongoing improvement to the tree asset condition and maintenance data should permit the development of more structured renewal plan. This would assist with the City's urban forest co-ordination, to enable enhanced asset turnover.

The City is enabling the improved management through implementation of tree management condition assessment and maintenance activities using a mobile application and using that data to create advanced models and reporting dashboards.

Image: City of Sydney staff plant shrubs in Sydney Park, Sydney Park, St Peters

Parks and Trees Assets – Asset Inventory

The table below shows the range, extent and asset replacement cost for the parks and open space and tree assets detailed in the Community Asset Plan, together with some associated infrastructure for reference purposes.

Asset Category	Description	Quantity	Area (Ha)	Replacement Value ($M)
Iconic	Parks that are of cultural and historical significance, or of a significant size or prominent location. These parks have a high visitation from the community and visitors e.g. Hyde Park.	22	110.9	276.7
Neighbourhood	Larger parks within villages and suburbs that have high visitation and have increased levels of amenity and infrastructure. These include facilities such as sports fields with playgrounds and toilets e.g. Alexandria Park.	40	28.8	130.9
Pocket Park	Local parks or street closures, generally small in size that provides informal recreational areas serving surrounding residents. Some limited facilities may be provided e.g. Millard Reserve.	288	32.9	107.5
Streetscapes & Traffic Treatments	Landscaped areas within the road reserve In particular on footpaths, nature strips, roundabouts and traffic blisters	1553	2.4	39.7
Sportsfields	Areas of landscaped turf purposed for club and professional sport games and training.	15	14.1	26.8
	Total	**1,918**	**210.8**	**581.6**
TREES				
Park	Contained within parks and open spaces	13,440		34.5
Street	Contained in the road reserve and footpaths	33,440		85.2
Property	Contained within Council properties like Childcare, Community Centres	649		Value contained in the Property Value
	Total	**47,529**		**119.7**

This asset management plan for parks, open space and trees does not include public art, electrical/lighting and particular structures located within parks and open space.

An initiative to collect open space related data continues to operate with a focus on the streetscapes and traffic treatments added to the portfolio, improving the City's data quality and understanding of the extent of open space.

Community Gardens are being progressively implemented and will be included in future revisions of this plan.

Park and Tree Assets - Levels of Service

The table below shows some important community levels of service used by Business Units to gauge community satisfaction. A comprehensive review of all service levels, including inspection frequency, intervention levels and response times, for all park assets is underway. The review will drive changes to maintenance and renewal activities to provide a level of service that is reflective of community expectations and resource availability.

Current - Parks

Target and current levels of service for parks and trees are provided below.

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
Quality	Provide quality parks and open spaces for the use of the community	Customer satisfaction surveys and customer requests	An overall satisfaction rating >8 in the surveys	Achieved
Function	To provide a diverse range of parks and open spaces within the City which ensure that user requirements are met	Customer satisfaction surveys	An overall satisfaction rating >8	Achieved
Safety	To provide a safe and hazard free environment	Reported accidents and incidents and claims	Dangerous hazards or public safety matters responded to & made safe within 24 hrs	Achieved
Responsiveness	Speed of responsiveness to public enquiry's and request	Timeframes outlined in completing customer service requests	>95% of customer requests completed within timeframes	Achieved
Environment	Ensure the City achieves the	Monitoring and reporting of	Achieve reducing operational	Completed

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
	target of reducing emissions by 2021	targets through the SMART platform	emissions by 44 per cent by 2021 from the 2006 baseline	
	Ensure the City achieves the resource recovery of waste from City managed parks, street and public places by end June 2021	Monitoring and reporting of targets through the SMART platform	50 per cent resource recovery of waste from City managed properties by end June 2021	Achieved

Current – Tree Management

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
Function	To improve the environmental, social and financial benefits that trees provide to the community Providing trees of suitable species and condition that achieves benefits	Urban Forest Strategy Street Tree Master Plan and Park Tree Management Plans guide species selection and planting criteria	Increase in canopy cover, health and overall longevity of tree population	Achieved
Safety	To provide a safe and hazard free environment	Reported accidents and incidents and claims	Dangerous hazards or public safety matters are responded to and made safe within 2 hrs	Achieved
Responsiveness	To provide proactive, responsive service that promotes tree health and longevity and minimises ongoing maintenance requirements	Timeframes outlined in completing customer service requests	>95% of customer requests completed on time. Respond to customer request within 48 hours, complete works required within 14 days	Achieved Achieved

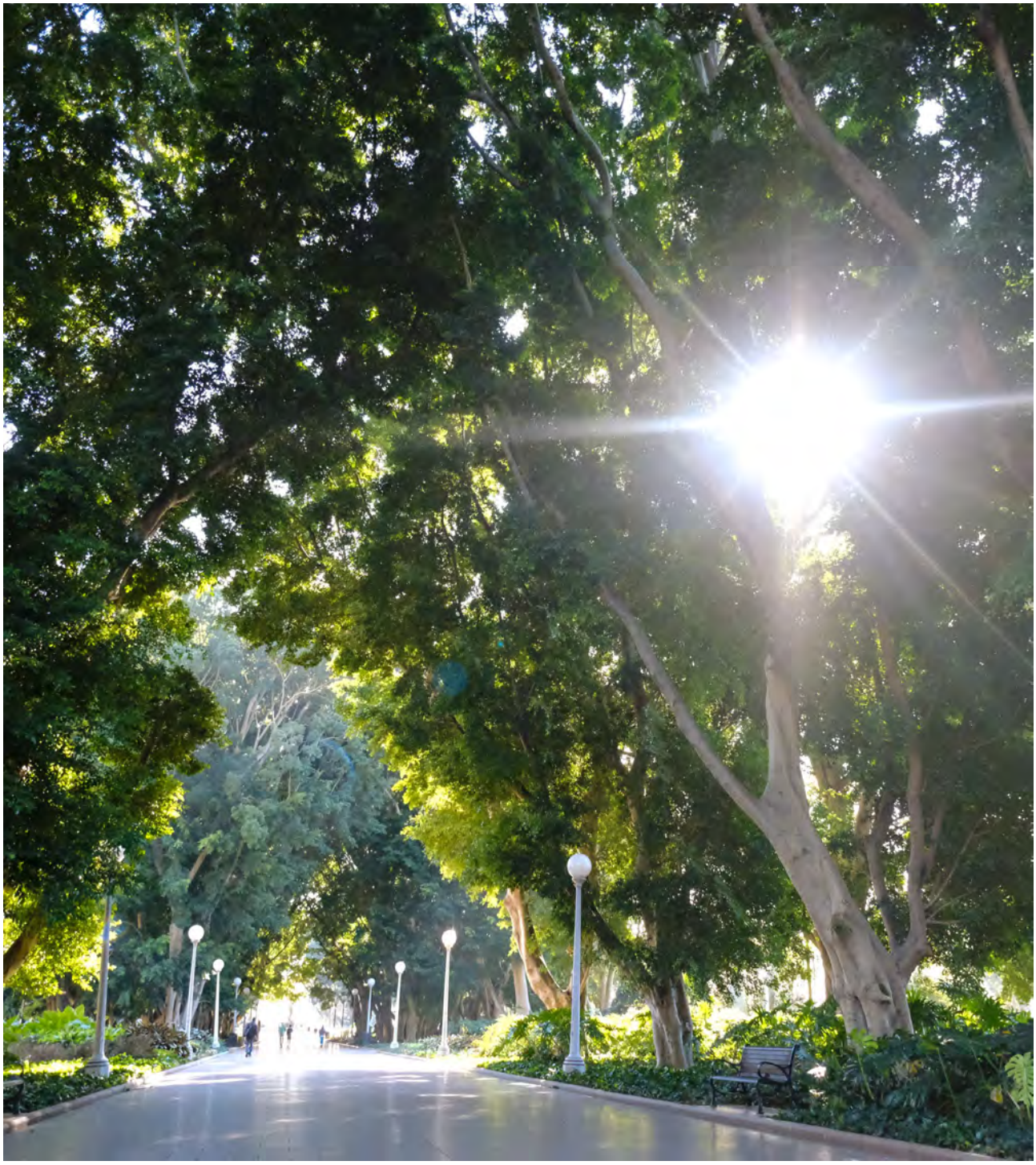
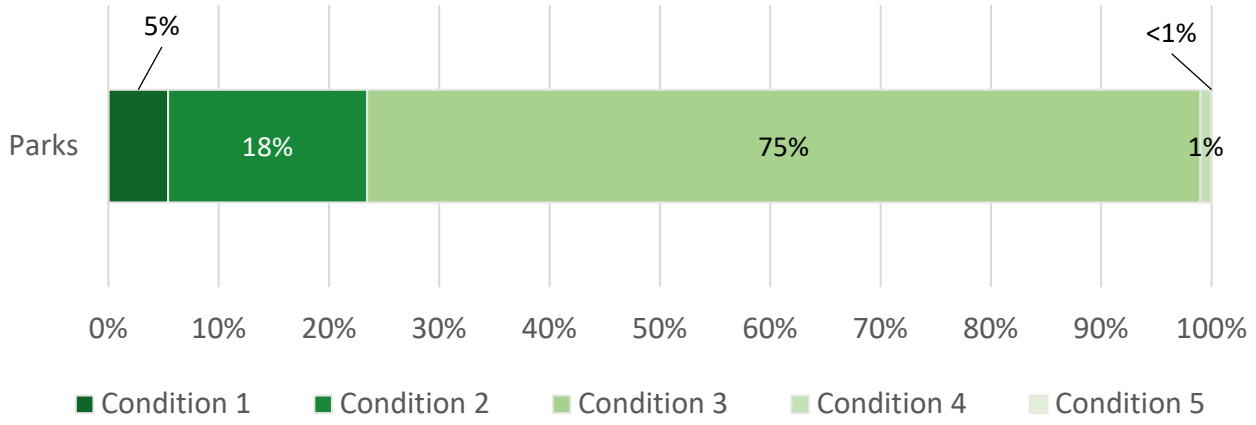


Image: Hyde Park, Sydney Chris Southwood/City of Sydney 2021

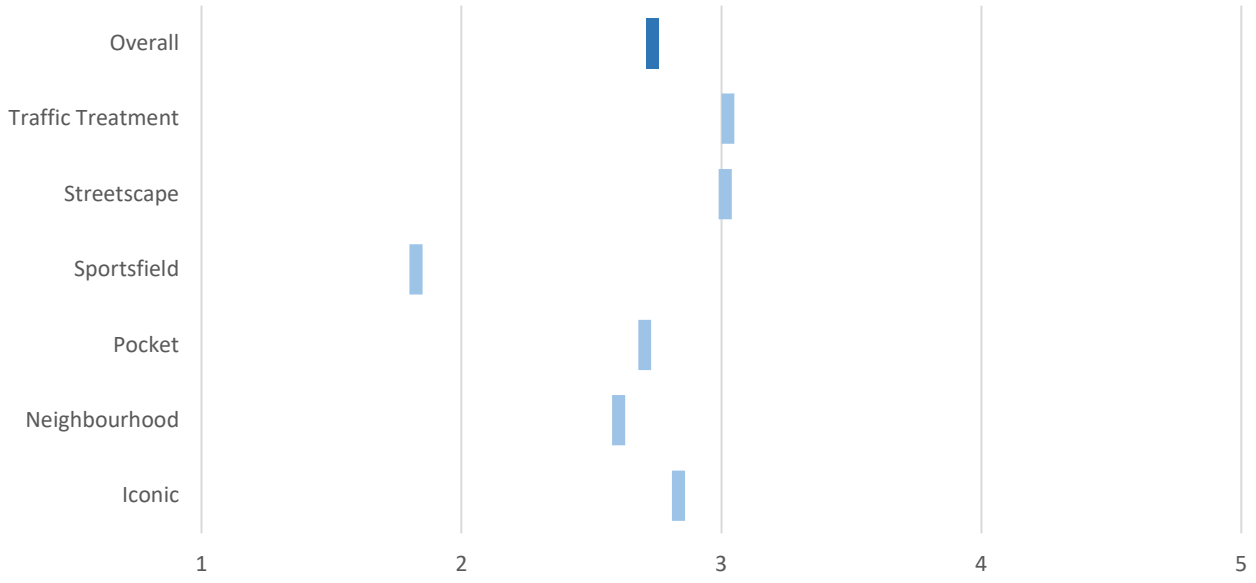
Park and Tree Assets - Lifecycle Management

Asset Condition - Parks

The chart below shows the overall condition of parks and open space assets. The charts are calculated on the aggregate replacement value of the parks within each condition index band. The difficulty in assessing parks for conditions due to the change in weather patterns can show variability in condition over the short term.

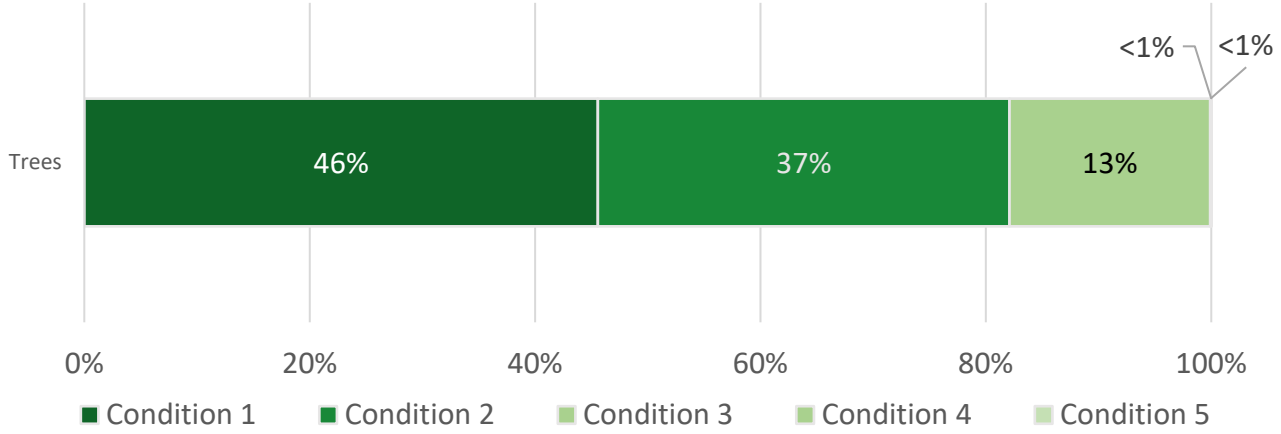


The chart below displays the average condition of each of the parks types based on area (sqm).

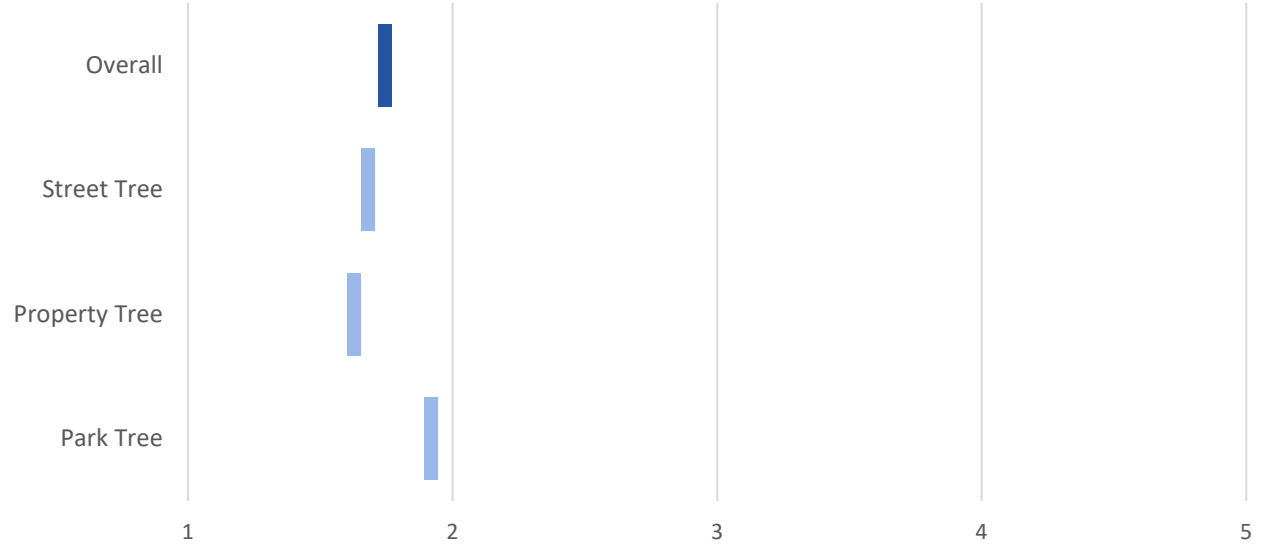


Asset Condition - Trees

The chart below shows the condition of all trees in the City of Sydney. All street trees, park trees and trees within City properties are now in one dataset in the corporate asset management system and their conditions are being assessed in the same way. As these are living assets these conditions are more of an indication of health.



The chart below shows the average condition of the trees per tree type.



Below are photographs that demonstrate the condition of Parks and Tree assets

Condition	Parks	Trees
Condition 1 Very Good		
Condition 4 Poor		

Asset Valuations

Listed below are written down value (depreciated value) and calculated Average Annual Asset Consumption used in the lifecycle and sustainability calculations.

Asset Type	Current Replacement Cost	Written Down Value	Average Annual Asset Consumption *
Parks and Open Spaces	661,553	268,978	21,332
Park Trees	34,514	34.514	950
Street Trees	86,346	86,346	1,550
Total	**782,413**	**355,359**	**23,782**

All figures are $k

* For the purposes of financial reporting, trees are not depreciated but in order to determine the lifecycle requirements notional consumption based on a typical life of trees are used.

Lifecycle Costs

The table below shows the trend for the last 5 years of infrastructure expenditure for the parks and open spaces and tree network. Operational and maintenance expenditure is obtained from the internal unit operational budgets and the renewal, upgrade and new expenditure from the capital work program.

Parks and Open Space

Year	Operating/ Maintenance	Renewal	Upgrade	Expansion
2016/17	15,429	8,775	2,013	27,398
2017/18	15,189	12,043	2,250	16,260
2018/19	16,565	5,597	1,156	7,411
2019/20	16,321	10,967	1,951	13,904
2020/21	19,326	12,068	2,773	18,390
5 year Average	**16,566**	**9,890**	**2,029**	**16,673**

Figures are $k

Image: City Farm, Sydney Park, St Peters

Tree Management

Year	Operating/ Maintenance	Renewal	Upgrade/Expansion
2016/17	7,701	1,721	804
2017/18	8,092	1,819	1,298
2018/19	8,301	2,084	1,547
2019/20	8,757	1,416	1,212
2020/21	8,987	617	800
5 year Average	**8,368**	**1,531**	**1,132**

Figures are $k

The costing of some tree maintenance activities is combined with general park maintenance activities which reduces the accuracy of these figures to some extent. Capital Upgrade and Capital Expansion for Trees is combined – both refer to new trees in this category.

Maintenance, Renewal and Upgrade costs

This table shows the Report on Infrastructure Assets as at 30 June 2021 in accordance with the Code of Accounting Practice and financial reporting. It shows the estimates to bring the open space assets to a satisfactory standard as described in the 'Estimate of Cost to bring asset to satisfactory condition' section of this report.

Asset Class	Asset Category	Estimated Cost to bring assets to satisfactory standard**	Estimated Cost to bring to the agreed service set by Council ##	2020/21 Required Maintenance	2020/21 Actual Maintenance
Open space & Recreational assets	Open Space	11,044	11,071	17,029	19,326

** As per Office of Local Government Requirements, reflects the estimated cost to restore all Council assets to condition '3' or better. These cost assessments remain highly subjective as in previous years

- reflects the estimated cost to restore all assets assessed to be at a condition beneath Council's minimum service levels. These standards (i.e. target conditions) reflect the strategy of maximising the consumption of the assets' service potential before renewal works are undertaken.

The City's general definition of agreed level of service is that any asset that has reached a Condition 4 – Poor or Condition 5 – Very Poor should be renewed as a matter of priority.

Park and Tree Assets - Financial Summary, Projections and Sustainability

Long Term – Lifecycle costs based on current expenditure

The table below shows the current sustainability index as projected using the average of the last 5 years estimated costs. This is the basis of the long term cost that the City will need to fund for the life of the assets.

Asset Type	Asset Consumption Cost	Operational, Maintenance, Renewal and Replacement Costs	Difference
Parks	**38,652**	**31,394**	**-7,258**
Trees	**10,748**	**10,518**	**-230**
	What we should be spending	What we are spending	

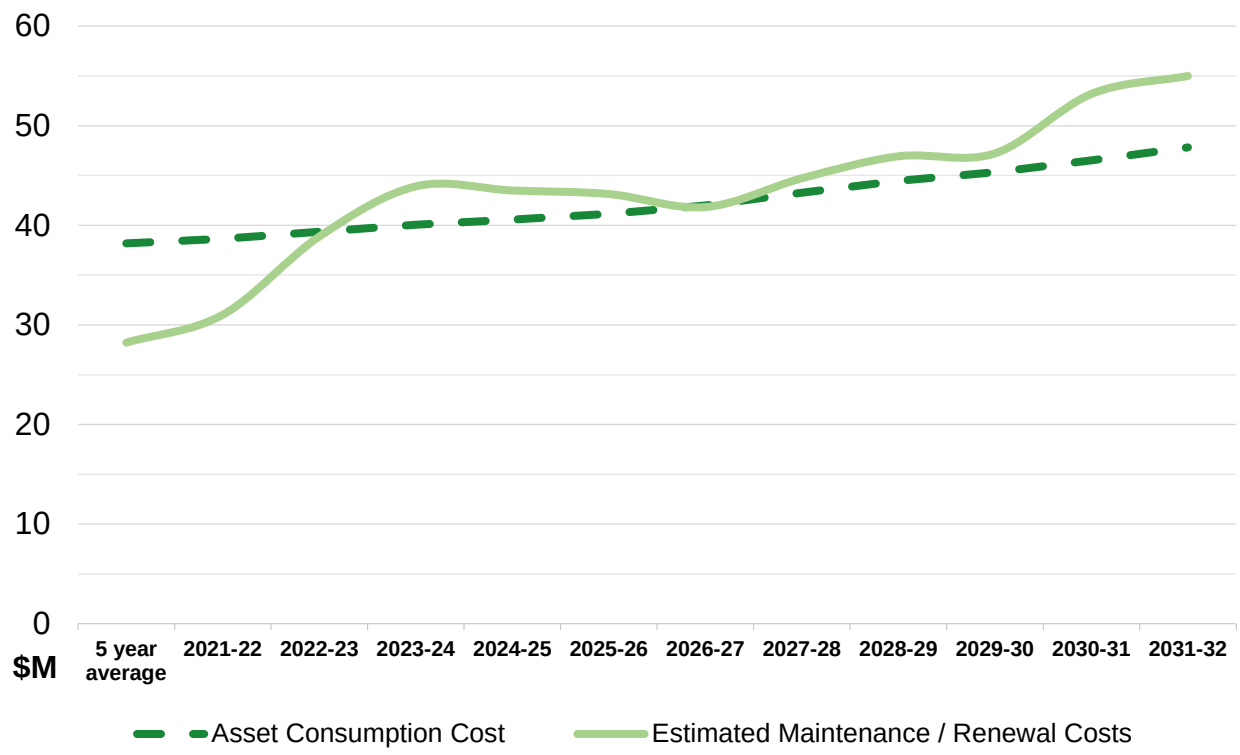
Figures are $k/yr

The estimate reflects a reduced average renewal and upgrade budget, primarily in Parks and Open Spaces in the last 3-5 years following a period of extensive refurbishment in the early to mid-2000's. The Long Term Financial Plan includes significant budget allocation to the renewal and upgrade/expansion of Parks and Open Spaces which will address difference over the medium term.

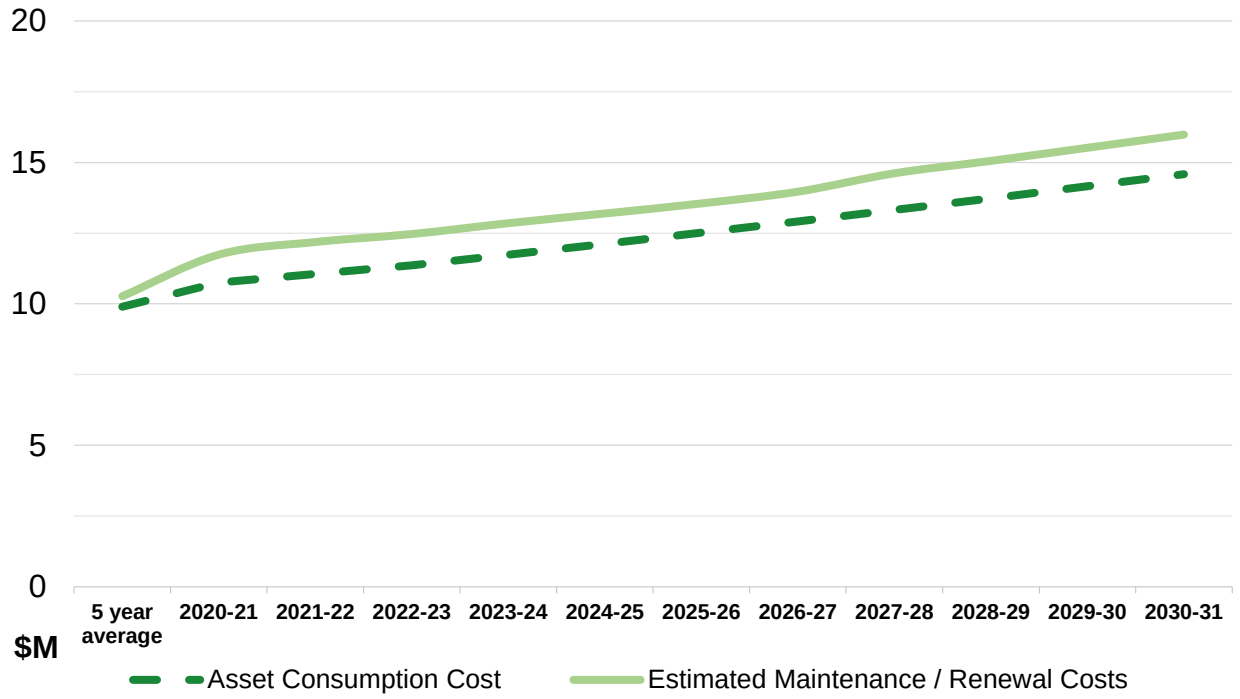
Medium Term – 10 year financial planning period

These charts show the relationship between the Asset Consumption Costs and the funded Long Term Financial Plan for estimated Operational, Maintenance and Renewal and Replacement costs

Parks

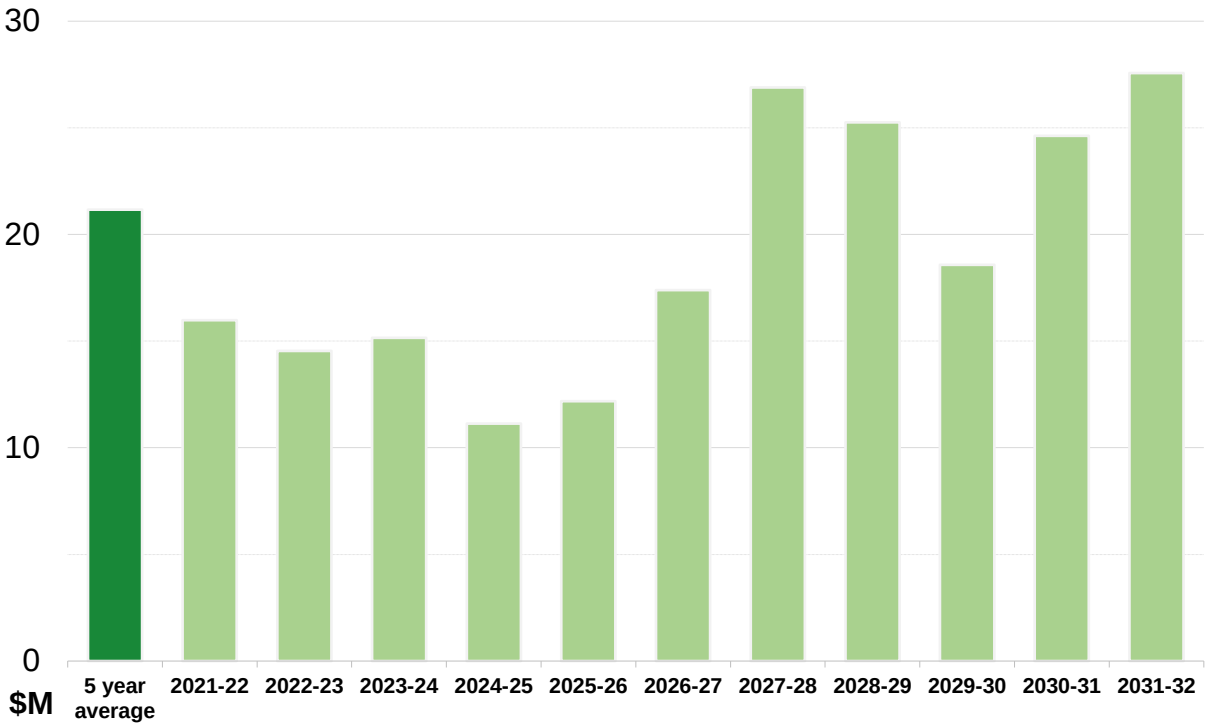


Trees

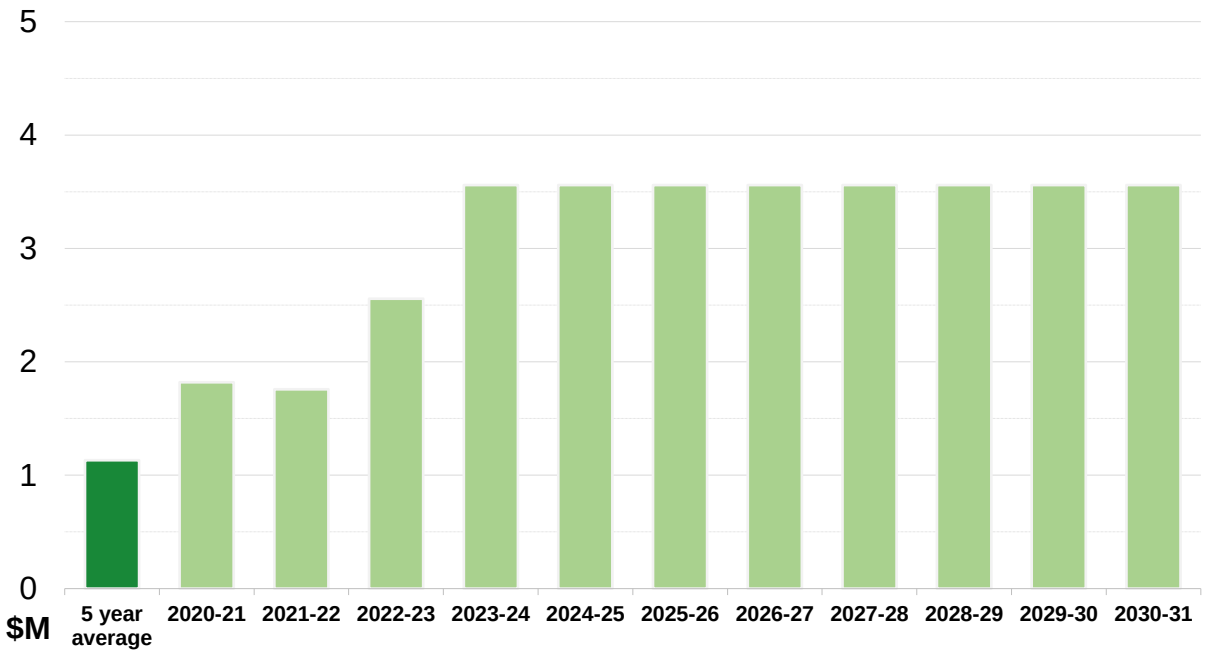


The chart below shows the proposed Upgrade and Expansion Expenditure as shown in the current Long Term Financial Plan.

Parks Upgrade and Expansion



Trees Expansion



This table shows the estimate of the Average Asset Consumption Costs, the Estimated Operational, Maintenance, Renewal and Replacement Cost, and the Sustainability Index 10 Year projection.

	Asset Consumption Costs	Estimated Operational, Maintenance, Renewal and Replacement Costs	Difference	Sustainability Index
	10 year projection calculated	10 year projection budgeted		10 Year period
Parks	**42,658**	**44,488**	**1,830**	**1.04**
Trees	**12,567**	**13,738**	**1,171**	**1.09**
	What we should be spending	What we are going to spend		Ratio of what we going to spend to what we should be spending

Figures are $k/yr

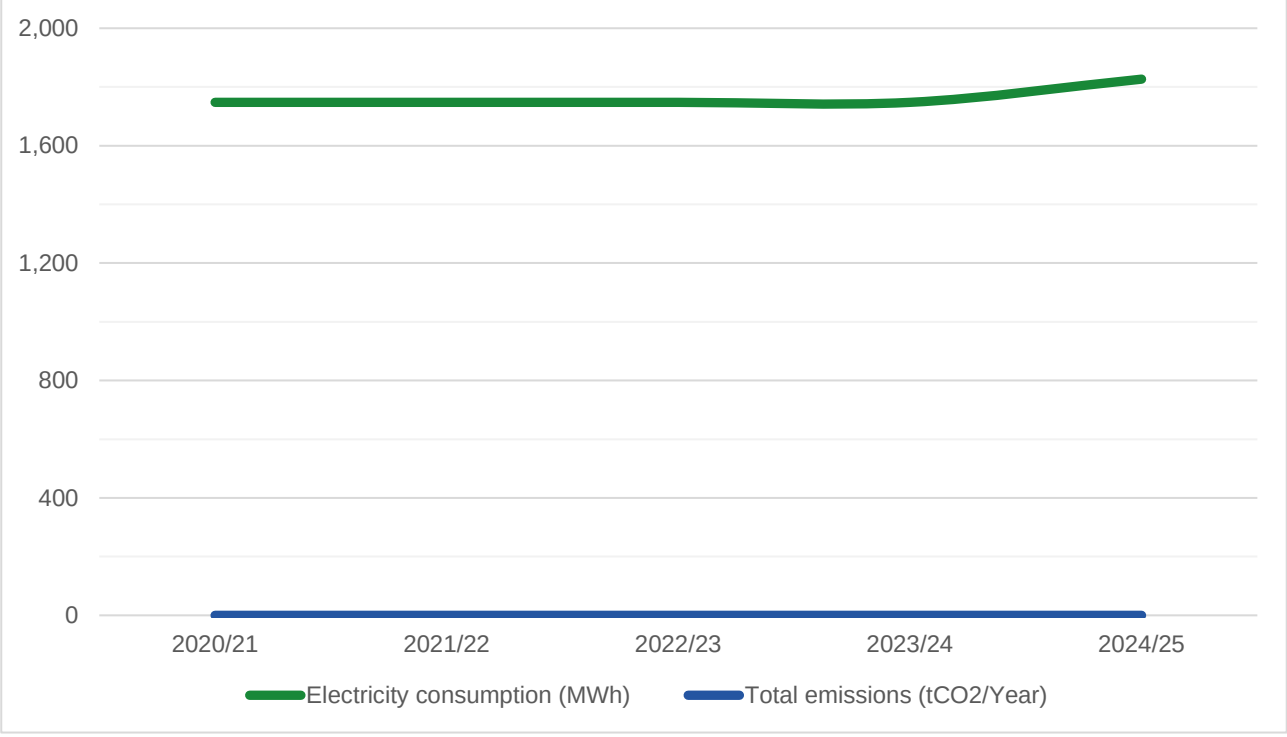
Park and Tree Assets - Environmental Summary, Projections and Sustainability

Operational emissions associated with the City of Sydney's parks, open space and trees relate to amenities buildings and park lighting. As of 2021/2022 all operational electricity is 100% renewable, either through onsite Solar PV or through the direct purchase of renewable electricity from a wind and two solar farms. There is no gas use associated with the operation of parks, open space and trees. Therefore, there are zero emissions associated with this asset class. This is expected to be maintained over the period covered by our Environment Strategy 2021-2025.

The Asset Emissions Forecast captures the impact of planned projects on our future emissions. It also tracks the effect of energy efficiency projects which will continue to be delivered as a core tactic for our ambition to be a net-zero organisation.

The forecast predicts that electricity consumption will remain steady in the next three years. There is a slight increase expected towards the end of the reporting period when Perry Park Stage 3 is delivered.

	2021/22	2021/22	2022/23	2023/24	2024/25
Electricity consumption (MWh)	1,748	1,748	1,748	1,748	1,827



Concluding Remarks

The information presented in the charts indicate that the City is allocating sufficient funding to provide for the maintenance parks infrastructure, with significant amounts being allocated to renewing and upgrading the parks and trees.

The City is managing the assets effectively and addressing the maintenance and renewal requirements and Special Schedule - Report on Infrastructure Assets cost to satisfactory requirements consistent with the Office of Local Government performance measures.

The weather and the effects of Covid 19 account for the reduction in spending in 2021/22. Amounts shown for Years 6 to 10 in the charts reflect the renewal provision for several parks and associated upgrades. Delivery contracts and resources are improving with greater efficiency to deliver renewal works.

The spike in the upgrade/expansion, and the associated dip in renewal and replacement, in the medium to long term is due to the implementation of the open space components of the Green Square Urban Renewal project. This plan also shows the allocation of funds for renewal projects while committing ongoing resources and maintenance budgets to these expanded assets.

The Greening Sydney Strategy commitments will expand the tree canopy and increase the total amount of trees in the city. This has been accounted for the medium to long term.

Image: Dyuralya Square, Zetland

Property Assets

Background

The City relies on its buildings and property to provide services to the community and its corporate and commercial tenants. The building assets held by the City cover a diverse range of property types such as indoor and outdoor aquatic centres, libraries, works depots, public toilets, and commercial property and community venues including the iconic Sydney Town Hall.

These buildings experience significant wear and tear. They are subject to regular inspections and ongoing risk assessment and compliance processes and condition assessments to assist officers to make informed decisions about reactive and planned maintenance requirements, capital expectations and long-term property strategy options.

The portfolio is currently divided into two distinct groups, community and commercial. The required level of expenditure on the renewal program for the City's buildings will vary from year to year and will reflect:

- Health and safety risk assessments;
- The age of the assets;
- The condition of the asset components;
- Budget priorities;
- Capacity constraints to deliver services;
- On-going maintenance demand;
- Changes to service requirements; and
- The nature of the asset and its heritage and cultural significance.

The Green Square Urban Renewal Project has resulted in substantial growth in population and a corresponding increase in demand for new community facilities and local services. The City has recently completed new facilities in this area including the Gunyama Park Aquatic Centre and the Green Square Creative Centre.

Community service demands are continually assessed for the entire local government area. New assets required to meet future community growth will be acquired progressively in line with population growth, development and funding priorities. New community facilities may require sites to be acquired or existing sites redeveloped or with some services consolidated to deliver integrated community facilities.

Timing and funding for these facilities will be influenced by budget allocations and potential development contributions and updated annually within the Long Term Financial Plan.

Assessing the condition of building assets can be a complex task as modern buildings are comprised of many building components, usually in differing states of condition. The City has set condition targets for buildings which are reflective of property strategy requirements, in some cases a building will have a poor or very poor condition rating and will be included as part of a major future redevelopment plan for the site or the site is closed.

The City has commissioned a detailed building component data collection project e.g. electrical components, structural components, roof details etc. These components will include individual assets where relevant, replacement values, current conditions and maintenance and renewal estimates. The detailed inventory of 60 high value or high use buildings is complete and is being utilised in the preparation of the annual maintenance and renewal projects and budgets. Recently we commissioned the financial revaluation of the building portfolio to give us a better indication of ongoing depreciation cost for the future.

The City currently has an external property services provider for facilities management. The contract includes building asset, condition and maintenance data collection for the entire portfolio which will inform how the City can improve property services and asset use.

Image: Darling Square Library, Darling Square, Haymarket

Property Assets – Asset Inventory

The table below shows the range, extent and asset replacement cost for the property assets detailed in the Community Asset Plan, together with some associated infrastructure for reference purposes.

Asset Type	Description	Quantity
Community Portfolio	Cost effective fit for purpose accommodation enabling the provision of services into the Community. Buildings include depots, community halls, childcare centres, libraries, public toilets etc	187
Commercial Portfolio	Buildings owned or utilised by the City for commercial or business purposes	66
Sydney Town Hall	Iconic heritage listed building used for public events, Council meetings, Councillor office accommodation and private hiring.	1
	Total	**254**

The total number of buildings includes buildings owned and managed by the City, managed by third parties e.g. Queen Victoria Building, Capitol Theatre, Capitol Square (Watkins Terrace), Manning Building or leased by the City.

Property Assets - Levels of Service

The table below shows key target and current levels of service.

Current

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
Function	Ensure each building is fit for purpose	Conducting regular maintenance and annual property inspections	Independent annual certification	Achieved
Safety	Minimise significant risks to the public, staff and contractor	Regular Property inspections	Reported monthly Audited annually	Achieved
Quality	Ensure each building is presented and maintained in an	Register of annual property inspections	Target Condition Index set building by building	Current average condition 2.42

Key Performance Category	Service Objective	Performance Measure Process	Target	Current Performance
	acceptable condition			
Environment	Ensure the City achieves the target of reducing emissions by 2021	Monitoring and reporting of targets through the SMART platform	Achieve reducing operational emissions by 44 per cent by 2021 from the 2006 baseline	Achieved
	Ensure the City achieves the potable water use by end June 2021	Monitoring and reporting of targets through the SMART platform	Zero increase in potable water use by end June 2021 from 2006 baseline, achieved through water efficiency and recycled water	Achieved
	Ensure the City achieves the resource recovery of waste from City managed properties by end June 2021	Monitoring and reporting of targets through the SMART platform	70 per cent resource recovery of waste from City managed properties by end June 2021	Achieved

Property Assets - Lifecycle Management

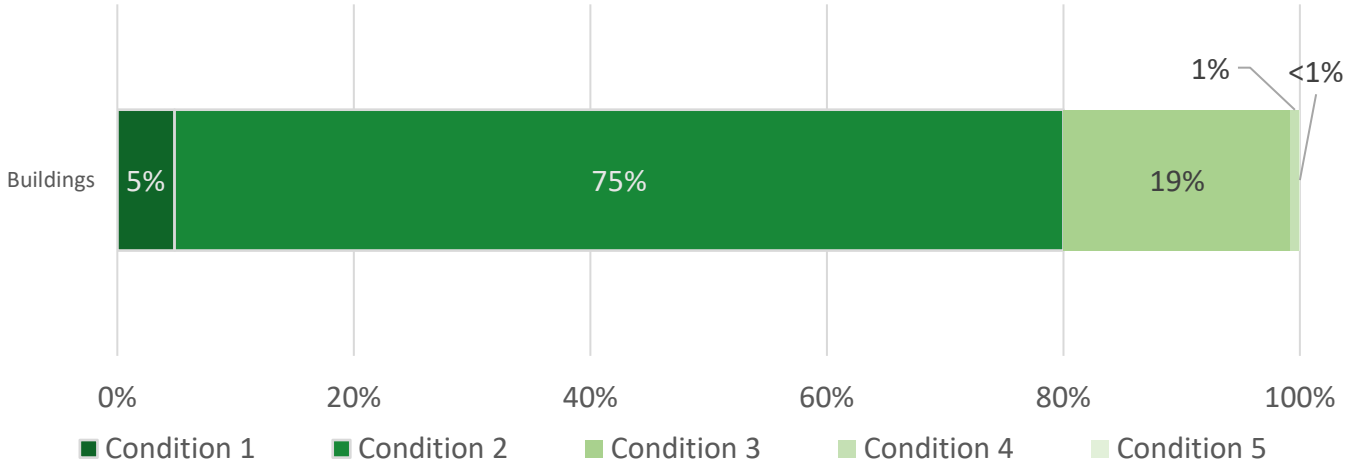
Asset Condition

The City has recently commenced a comprehensive detailed condition assessment of its properties. Due to the complexity of collecting structure, services, roof and facade conditions, it will take a few years to fully complete the survey. Plant and Equipment data has been collected initially. The conditions shown in this report are a snapshot at March 2021. There have been several assumptions used to derive the average condition. As the data collection process continues, and the data further refined, the condition rating will be more representative of actual condition.

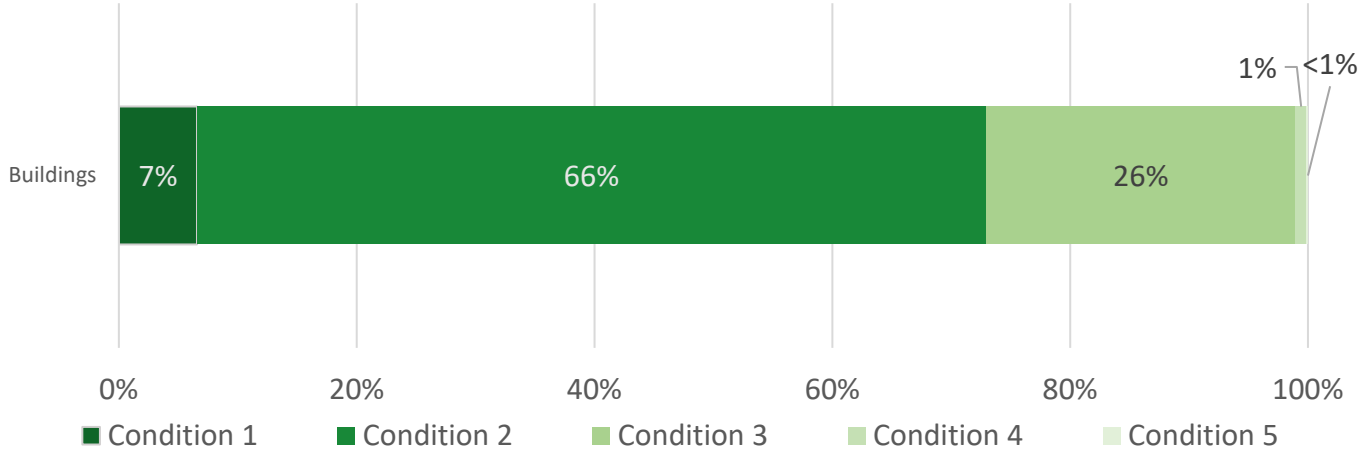
Sydney Town Hall has an insurance replacement value of $598 million which accounts for 26% of the overall property portfolio value and its current condition is assessed as condition 2 (i.e. Good).

Consequently, the value of the Sydney Town Hall can distort summary reports of the City's wider portfolio using condition categories and replacement values. The Sydney Town Hall equates to 11% of the condition band of "Good". As a result, two condition charts are provided.

The graph below represents the conditions of the City's property portfolio by replacement cost including Sydney Town Hall.



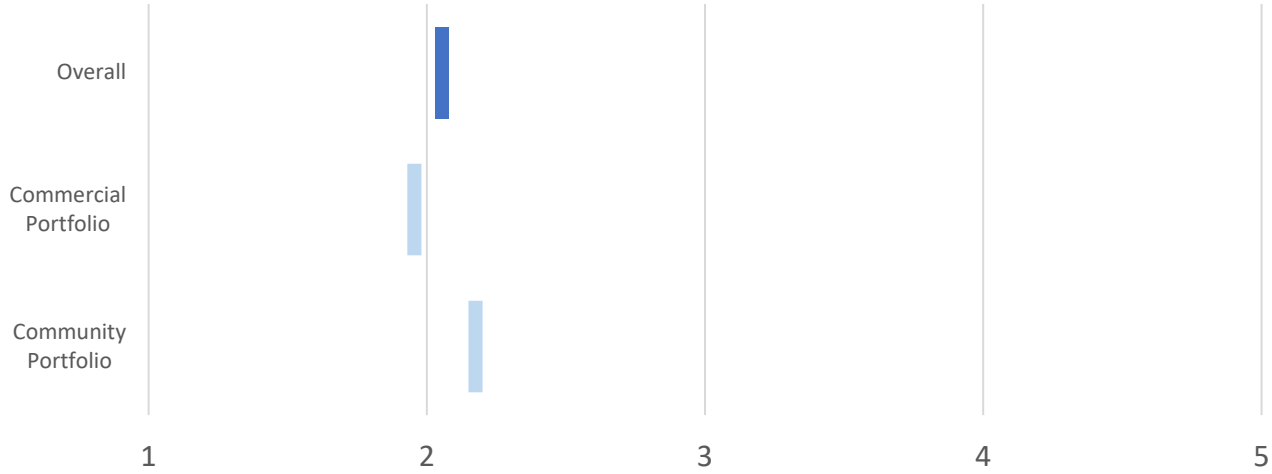
The graph below represents the conditions of the City's property portfolio by replacement cost excluding Sydney Town Hall.



Condition 1 – Very Good.

Condition 5 – Very Poor

The graph below shows the average condition of each of the portfolios and the overall average building condition. This is calculated by replacement cost and includes Sydney Town Hall.



This data presents the derived conditions of the buildings. It has been updated at March 2021. This demonstrates the overall average condition of the buildings is 2.13 and <3% of the buildings falls within categories 4 or 5

Asset Valuations

Listed below are the current replacement, current insurance replacement value, written down value (depreciated value) and calculated Average Annual Asset Consumption amounts used in the lifecycle and sustainability calculations

Asset Type	Current Replacement Cost	Written Down Value	Current Insurance Replacement Cost	Average Annual Asset Consumption *
All Building Portfolios	1,501	1,222	1,738	28.5
Sydney Town Hall	527.5	357	598	4.1
Total	**2,028**	**1,579**	**2,336**	**32.6**

All figures are $M

Other valuation methods are used within this category of assets.

Financial accounting valuation – this is based on the replacement value of all buildings excluding investment properties which are based on market value. The financial statements recognise assets leased to or by the City in some instances, for example, Queen Victoria Building, over which the City does not have day to day maintenance control.

Current Replacement value (insurance value) for the entire portfolio – this represents the actual cost incurred if the buildings under the City's control needed to be replaced as a whole and is generally what the property is insured for. This is the figure used in calculating the average asset consumption and sustainability, and does not include buildings not under the City's direct maintenance control e.g. Queen Victoria Building, Capitol Theatre.

The Average Annual Asset Consumption for Sydney Town Hall is proportionally lower than the general portfolio due to the long life of the building which is currently assessed as 200 years.

Lifecycle Costs

The table below shows the trend in the last five years in infrastructure expenditure for the property assets portfolio. Operational and maintenance expenditure is obtained from the Business Unit operational budgets and the renewal, upgrade and new expenditure from the capital work program reports. The five year average is the basis for the long term lifecycle costs.

Year	Operating/ Maintenance	Renewal	Upgrade/Expansion
2016/17	32,794	30,613	32,955
2017/18	26,224	15,004	50,275
2018/19	30,163	9,291	43,707
2019/20	39,501	8,398	43,983
2020/21	36,196	14,955	26,897
5 Year Average	**32,976**	**15,652**	**39,563**

All figures are $k

Maintenance, Renewal and Upgrade costs

This table shows the Report on Infrastructure Assets as at 30 June 2021 in accordance with the Code of Accounting Practice and financial reporting. It shows the estimates to bring the building assets to a satisfactory standard as described in the 'Estimate of Cost to bring asset to satisfactory condition' section of this report.

Asset Class	Asset Category	Estimated Cost to bring assets to satisfactory standard**	Estimated Cost to bring to the agreed service set by Council ##	2020/21 Required Maintenance	2020/21 Actual Maintenance
Buildings	Non Specialised	10,333	33,028	34,939	34,360
	Specialised	5,078	2,284	1,908	1,836

** As per Office of Local Government Requirements, reflects the estimated cost to restore all Council assets to condition '3' or better. These cost assessments remain highly subjective as in previous years

- reflects the estimated cost to restore all assets assessed that are at a poorer condition than Council's set minimum service levels. These standards (i.e. target conditions) reflect the strategy of maximising the consumption of the assets' service potential before renewal works are undertaken.

The City sets a Target or Minimum asset condition for each building in the portfolio. These are reflective of the current strategy for the building, in some cases a building will have a poor condition rating as the target because it is identified for upgrade or closed. The City's general definition of agreed level of service for Property is the cost to reach the condition Target for that building.

Property Assets - Financial Summary, Projections and Sustainability

Long Term – Lifecycle costs based on current expenditure

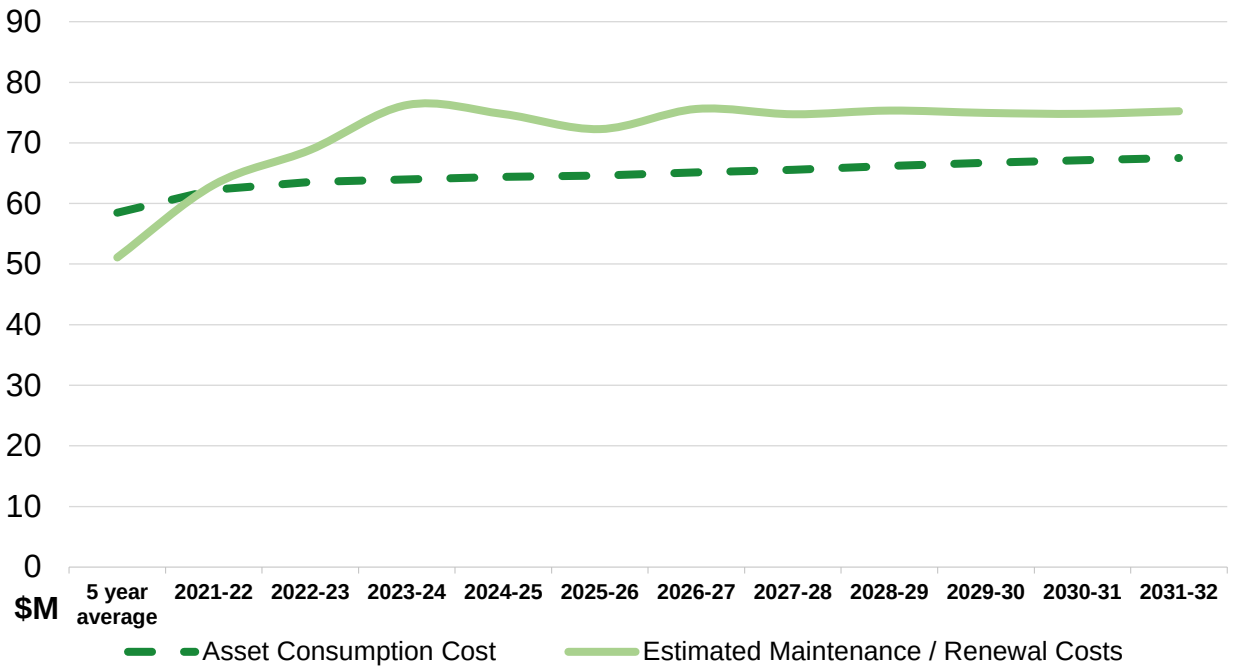
The table below shows the current sustainability index as projected using the average of the last 5 years estimated costs. This is the basis of the long term cost that the City will need to fund for the life of the assets.

Asset Consumption Cost	Operational, Maintenance, Renewal and Replacement Costs	Difference
62,275	**51,091**	**-11,184**
What we should be spending	What we are spending	

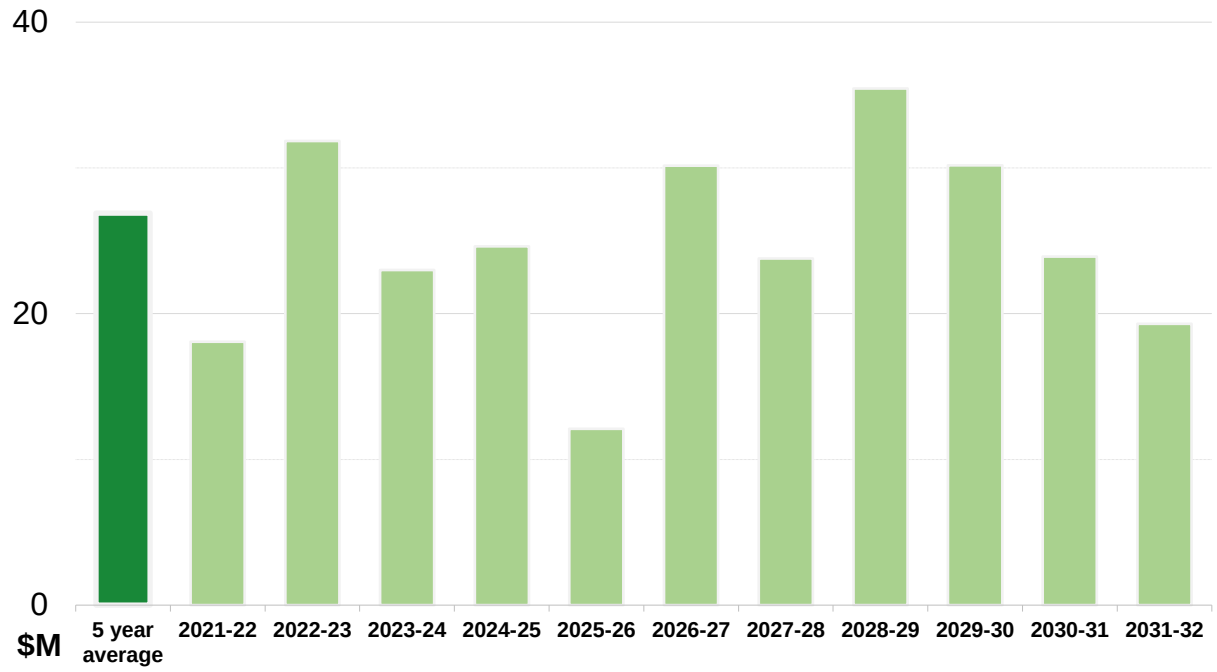
Figures in $k

Medium Term – 10 year financial planning period

This chart shows the relationship between the Asset Consumption Costs and the funded Long Term Financial Plan for estimated Operational, Maintenance and Renewal and Replacement costs



The chart below shows the proposed Upgrade and Expansion Expenditure as shown in the current Long Term Financial Plan



This table shows the estimate of the Average Asset Consumption Costs, the Estimated Operational, Maintenance, Renewal and Replacement Cost, and the Sustainability Index 10 Year projection.

Asset Consumption Costs	Estimated Operational, Maintenance, Renewal and Replacement Costs	Difference	Sustainability Index
10 year projection calculated	10 year projection budgeted		10 Year period
65,189	**73,257**	**8,067**	**1.12**
What we should be spending	What we are going to spend		Ratio of what we going to spend to what we should be spending

All figures are $k

Image: Green Square Night Markets, City Of Sydney

Property Assets - Environmental Summary, Projections and Sustainability

The City of Sydney's property portfolio generates emissions via electricity use in all buildings, gas to heat pools and run our cogeneration and trigeneration plants, and refrigerants used in air-conditioning systems. As of 2021/2022 all operational electricity is 100% renewable, either through onsite Solar PV or through the direct purchase of renewable electricity from a wind and two solar farms. Therefore, there are zero emissions associated with electricity from this asset class. This is expected to be maintained over the period covered by our Environment Strategy 2021-2025.

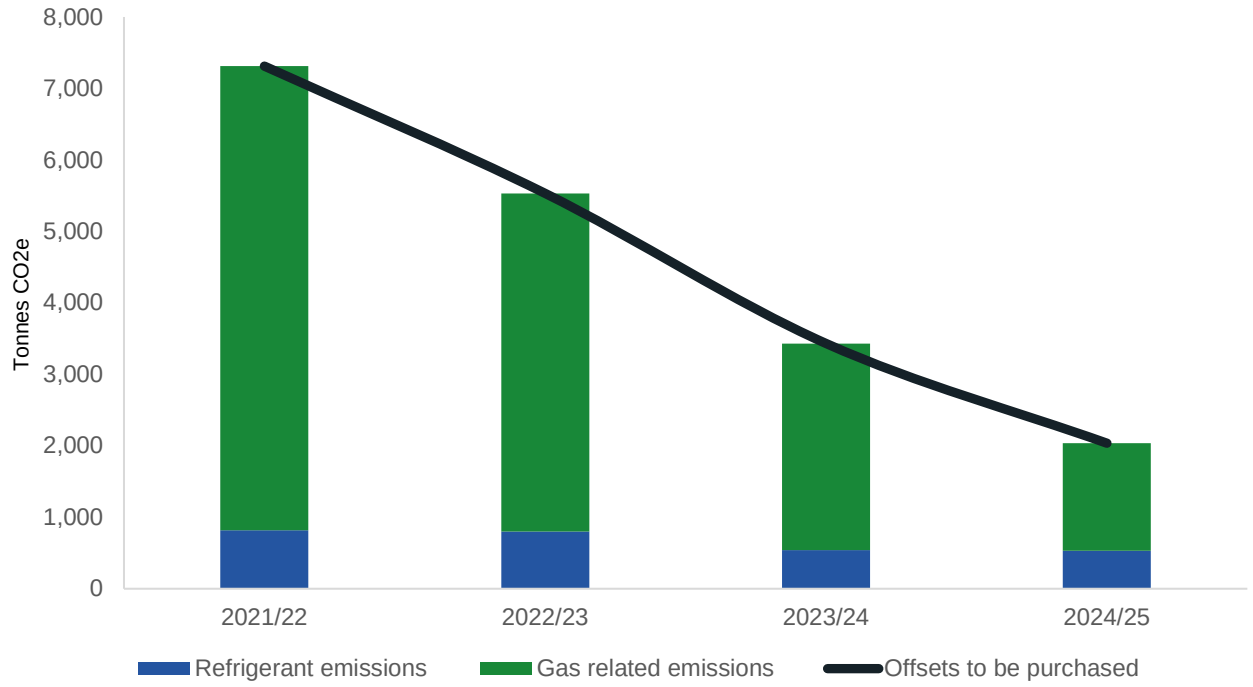
The Asset Emissions Forecast captures the impact of planned projects and property portfolio changes on our future emissions. It also tracks the effect of energy efficiency projects which will continue to be delivered as a core tactic for our ambition to be a net-zero organisation.

The forecast predicts that emissions associated with this asset class will decline over the next three years, despite an increase in the total number of properties owned by the City of Sydney. None of the additional properties are forecast to use gas, and all additional electricity use will be emissions free due to our 100% renewable electricity contract.

The reduction in gas emissions is forecast to be achieved through changes in how we heat pools in our aquatic centres. These emissions will decline as we are expecting to purchase renewable gas to complement our 100% renewable electricity contract. The City of Sydney will also be developing a capital project to reduce refrigerant emissions.

Our certified carbon neutral status will be maintained each year through the purchase of verified offsets for those net emissions we cannot eliminate, as we have since 2007..

Forecast emissions properties assets



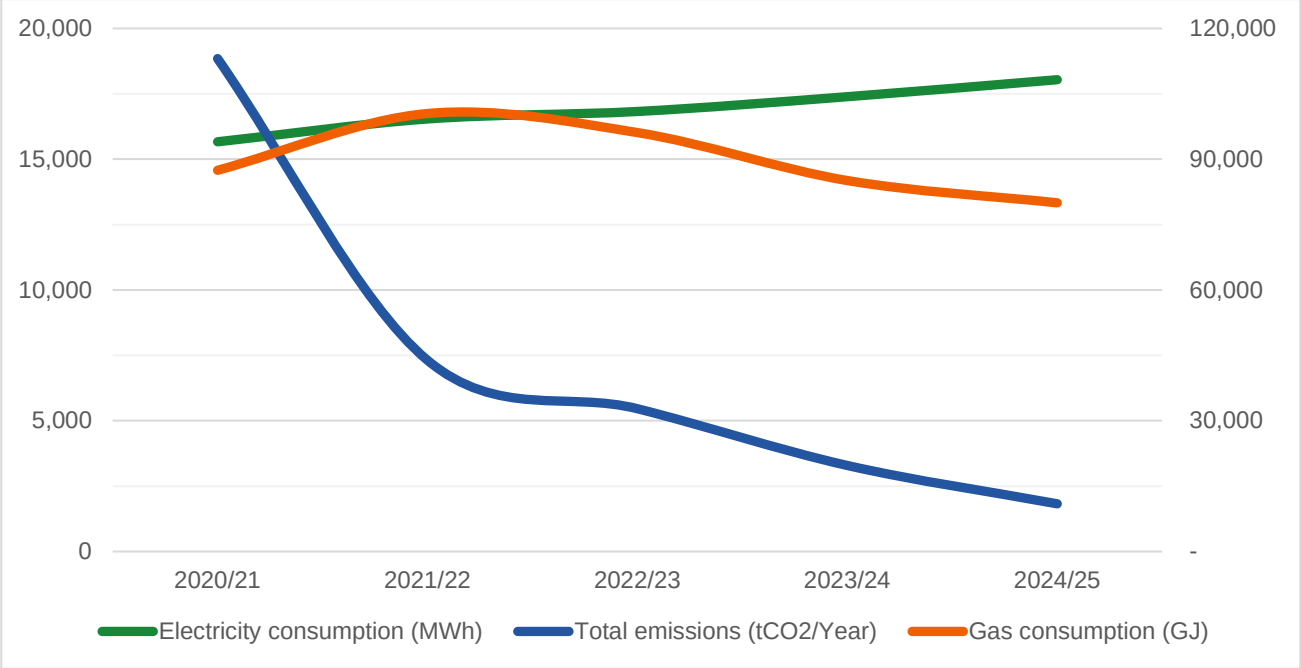
The forecast predicts that electricity consumption will increase in the next three years. This is due to a project to electrify the equipment that heats Victoria Park Pool and Andrew Boyd Charlton Pool. This project will reduce gas consumption and have a beneficial effect on our carbon

emissions. We plan to deliver an LED replacement program and perform a property benchmarking exercise which will deliver further electricity savings.

The table and chart below show the change in electricity and gas use for the reporting years of the Environment Strategy.

	2021/22	2021/22	2022/23	2023/24	2024/25
Electricity consumption (MWh)	15,667	16,540	16,826	17,391	18,041
Gas consumption (GJ)	87,464	100,486	96,112	85,108	79,998

Properties energy consumption and total emissions



Emissions associated with fleet and contractor fuel use, and waste generation are included in the City's carbon reporting, however we are not able to reliably attribute these emissions to properties activities.

Concluding Remarks

The City is allocating sufficient funding to provide for the renewal of the Property infrastructure, with significant amounts being allocated to renewing and upgrading the property infrastructure in the next six years.

Significant upgrade and expansion projects are scheduled between until 2023. These include building works in the Green Square Urban Renewal precinct and new community facilities across the local government area.

The challenges facing council is the ability to resource the delivery of the capital works program. In the short term, internal resources will shift from upgrade/expansion projects to renewal projects.

The modelling will be continuously updated in future revisions of this plan and the Draft Detailed Asset Management Plan for property following the completion of the overarching Property Strategy.

The estimate indicates that the City is budgeted to renew the Property assets at a sustainable rate over the next ten years while keeping the current level of service. We are managing the assets effectively and addressing the maintenance and renewal requirements and Special Schedule - Report on Infrastructure Assets requirements consistent with the Office of Local Government performance measures.

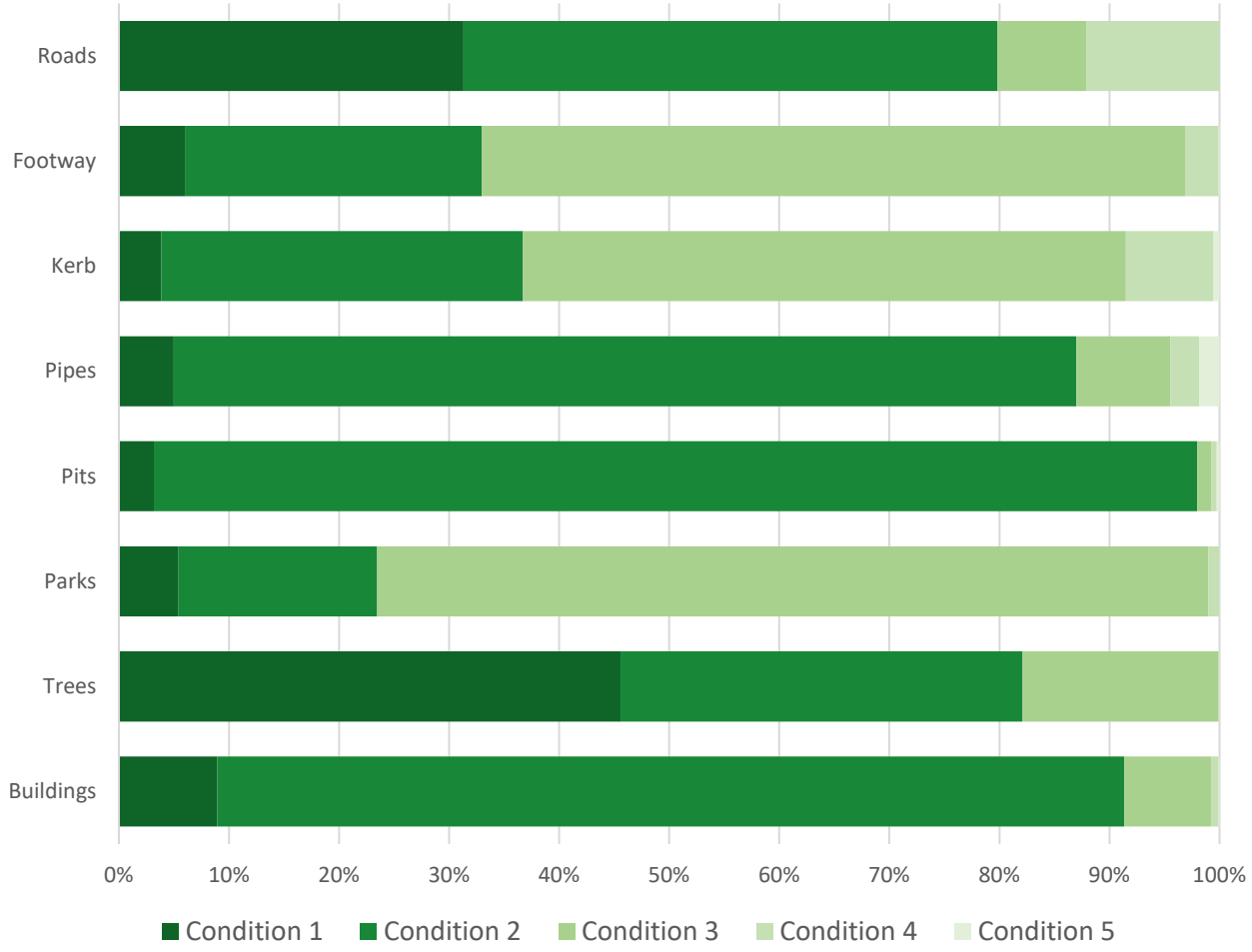
Image: Customs House, Circular Quay

Conclusion

Conditions

The information contained in this Community Asset Management Plan shows that the City is providing and maintaining a strong and vibrant city with most assets in an excellent to good condition. The city is providing adequate funding to sustain the critical infrastructure assets for the next 10 years and is managing the assets effectively and addressing renewal requirements consistent with the Office of Local Government performance measures.

This table is a summary of conditions for the critical assets within the city.



The method of calculation for the conditions is explained in each of the critical asset sections, such as the number of units or replacement value.

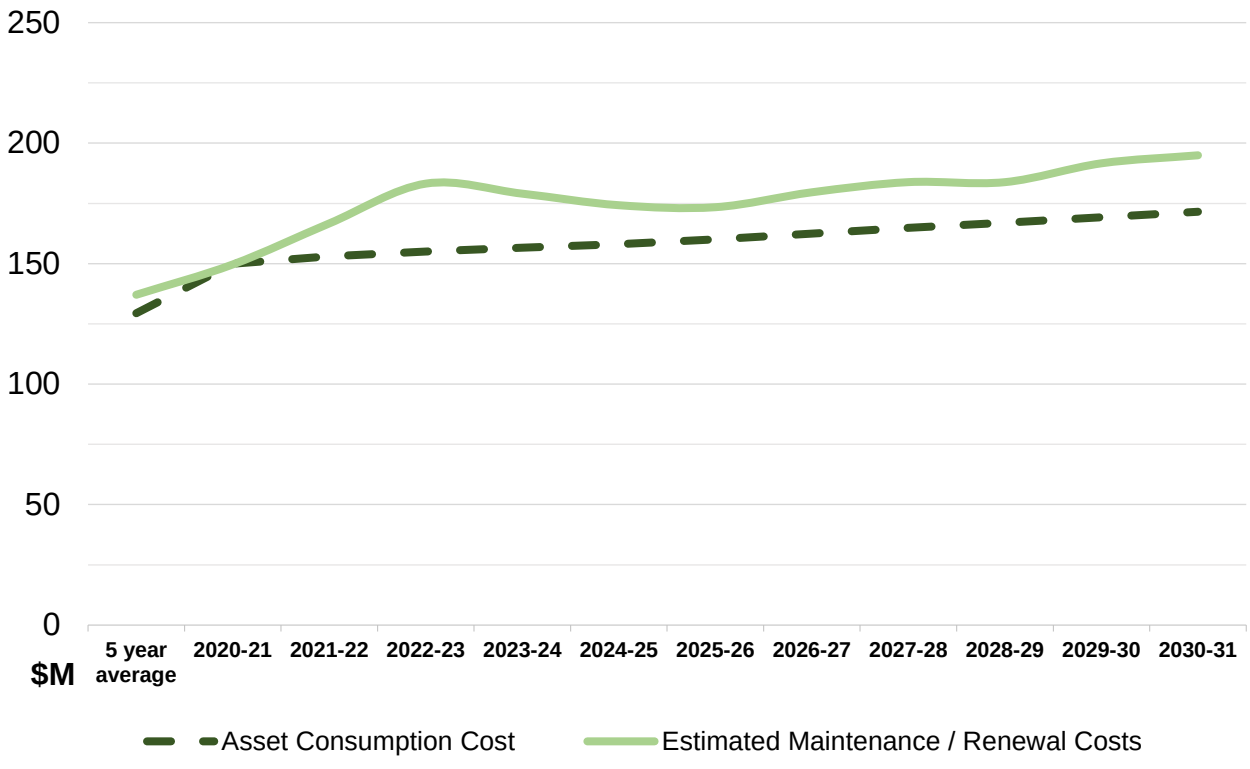
The Table below shows the Average Asset Consumption Costs and the Average Estimated Replacement Costs and the Sustainability Index ten year projection for the four critical asset classes contained in this plan.

Asset Category	Asset Consumption Costs	Estimated Operational, Maintenance, Renewal and Replacement Costs	Difference	Sustainability Ratio
	What we should be spending	What are going to spend		
Roads	33,363	40,084	6,721	1.20
Stormwater Drainage	6,915	6,618	297	0.96
Parks and Open Space	42,658	44,488	1,830	1.04
Trees	12,567	13,738	1,171	1.09
Property	65,189	73,257	8,067	1.12
TOTAL	**160,691**	**178,185**	**17,494**	**1.11**

All Figures in $k/yr

Asset Consumption Costs

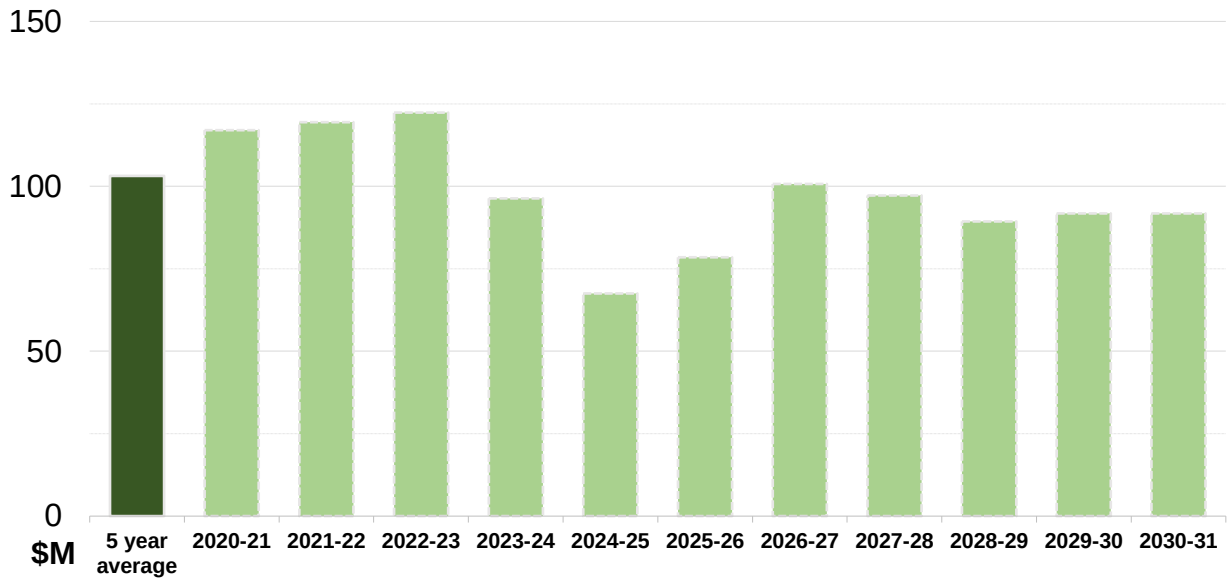
The chart below shows the relationship between the whole Councils Asset Consumption Costs estimates and the funded Long Term Financial Plan for the four Critical Asset Categories.



There is a slight dip in maintenance, renewal and replacement spending in the last few year into 2022/23 in relation to the estimate of how much should be spent. This is attributed to the substantial upgrade and expansion works during that period, particularly the Green Square Urban Renewal project and the City Transformation – Light Rail project, which has diverted funds from renewal projects. As these projects have been complete and delivery resources will be focusing on renewal based capital works.

Upgrade and Expansion

The chart below shows the upgrade/expansion proposed for the combined Critical Asset Categories assets in the Long Term Financial Plan.



The graph above aligns with the typical growth of assets as our resident and visitor population grows. It also accounts upgrades when assets are being renewed to allow for the asset to make provision for community needs

Image: While I live I will Grow, Joynton Avenue, Zetland

Appendix A -Asset Management Policy.

Asset Management Policy

Purpose

The purpose of the Asset Management Policy is to ensure that the City has information, knowledge and understanding about the long-term and the cumulative consequences of being the custodian of public infrastructure.

This is achieved by ensuring that the systems and processes are in place to enable people to determine the most effective and efficient options for delivering infrastructure related services while controlling exposure to risk and loss.

The Asset Management Policy also provides the framework that together with the Community Strategic Plan enables the asset management strategy and specific asset management plans to be produced.

Context

The NSW Local Government Act 1993 places a number of obligations on Councils in relation to asset management.

The City must account for and plan for all of the existing assets under its control, and any new assets proposed in its Community Strategic Plan and Delivery Program and associated Resourcing Strategy.

The City must:

- Prepare an Asset Management Strategy and Asset Management Plan(s) to support the implementation of the Community Strategic Plan and Delivery Program.
- Ensure that the Asset Management Strategy and Plan(s) cover a minimum timeframe of 10 years.
- Ensure that the Asset Management Strategy includes an overarching Council endorsed Asset Management Policy.
- Ensure that the Asset Management Strategy identifies assets that are critical to the City's operations and outline risk management strategies for these assets.
- Ensure that the Asset Management Strategy includes specific actions required to improve the City's asset management capability and projected resource requirements and timeframes.

Figure 1 below shows the components of the Integrated Planning and Reporting Resourcing Strategy that frame the Asset Management requirements.

Figure 1 – City of Sydney Asset Management Framework

The City first adopted an Asset Management Policy in 2006 which has been reviewed and updated regularly since that time.

The policy is linked to Sustainable Sydney 2030 Strategic Direction 10, Implementation through effective governance and partnerships and specifically, - Objective 10.3 the City of Sydney is financially sustainable over the long term

Scope

This policy applies to all infrastructure related service provision such as road and transport, stormwater drainage, community services delivered by the City's buildings and facilities, parks and open spaces, sport and recreation, information and technology assets and environmental protection.

Definitions

Term	Meaning
Policy	A statement of the City's attitude and preference of direction.
Asset Management	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner
Resourcing Strategy	This document collates the long-term resources required to achieve the objectives established by the Community Strategic Plan. The strategy includes long-term financial planning, workforce management planning and asset management planning

Term	Meaning
Asset Management Gateway Panel	Strategic and operational panel to provide outcome focussed oversight and management control for the City's asset management policy, strategy, objectives and targets.
Asset Management Plan	A specific plan developed with an outline to acquiring, operating, maintaining, renewing and disposing of the assets within the asset class in the most cost effective manner possible, whilst providing a specific level of service.
Long Term Financial Plan	The Long Term Financial Plan (LTFP) is a ten year financial planning document that contains financial strategies and accompanying performance indicators that the City considers when making significant strategic decisions about financial resource allocation.
Asset Management Strategy	The asset management strategy is a strategic document that demonstrates how the City's asset portfolio supports the service delivery needs of the community into the future. The strategy contains • A description of the current status of the council's asset management practices (processes, asset data and information systems) • Specific actions to be undertaken to improve or enhance the council's asset management capability (a gap analysis), including resource requirements and timeframes • Specific actions to be undertaken to achieve the council's strategic objectives.

Policy Principles

The City's Asset Management policy is based on the following principles to guide sustainable management of infrastructure assets. They are:

- A lifecycle approach – the City applies a whole of life methodology for managing infrastructure assets including planning, acquisition, operation, maintenance, renewal and disposal
- Sustainable environmental performance – the City considers the long term cumulative impacts of its assets and how they are managed
- Best value – balancing financial, environmental and social outcomes
- Evidence based decision making – core systems will include up to date infrastructure asset information to inform decisions
- Alignment with long term financial planning
- Addressing community needs – including as they change over time through transparent service levels
- Effective management of risk
- Increasing resilience - planning and renewing the City's assets to be more resilient to future acute shocks and chronic stresses

Policy Objectives

The following policy objectives guide the City to meet desired outcomes for the City's assets consistent with the Community Strategic Plan, Integrated Planning and Reporting legislation and other strategic documents.

1. Provide infrastructure and services to sustain the City of Sydney communities that:

- Supports the quality of life and amenity, urban environment and cultural fabric appropriate to City of Sydney;
- Adapts to emerging needs in sustainable transport;
- Facilitates the changes to infrastructure needed to cater for changing communities.
- Enhance the resilience of the City's infrastructure and communities

2. Implement a life-cycle approach to the management of infrastructure assets where:

- Asset planning decisions are based on an evaluation of alternatives that consider the "whole of life" of an asset through acquisition, operation, maintenance, renewal and disposal;
- The asset management cycle considers the current and future environmental, economic, cultural and social outcomes.

3. Ensure that service delivery needs are the primary driver for infrastructure asset management practices by:

- Establishing and monitoring levels of service for each asset class through the Community Asset Management Plan and Detailed Asset Management Plans;
- Identifying and monitoring individual and network risks to assets and service levels for each asset class;

4. Provide a sustainable funding model that provides assets aligned with the City's long term plans and community needs with a:

- Funded model for all asset related services extending at least 10 years into the future that addresses the need for funds, considers renewal peaks and troughs and identifies how the funds will be sourced.

5. Develop and implement best value environmentally sustainable asset management practices that:

- Encourage a flexible and scenario based approach through systems and plans to allow for innovative use of assets, particularly in recycling and environmental initiatives.
- Acknowledge climate change adaptation, environmental protection and enhancement protocols are fundamental to sustainable asset management planning;
- Minimise energy and water use, waste generation and air quality impacts through our own initiatives and by working with stakeholders;
- Utilise low energy products, infrastructure materials and methods wherever possible;
- Incorporate sustainability criteria into infrastructure projects and procurement.

6. Create a resilient city by modelling and planning to make it adaptable to acute shocks and chronic stresses.

- Identify and renewing critical assets that are vulnerable to future acute shocks and chronic stresses
- Perform return on investment studies when delivering renewed or new assets in the resilience context

- Include resilient assets when renewal planning in the long-term models and long term financial plans.

7. Provide reliable asset and infrastructure data thorough supported digital platforms demonstrated by:

- Distribution of open sourced for community use where appropriate;
- Implementation of sound data governance and data quality management;
- Access to systems and information by mobile technology wherever possible.

8. Implement an integrated decision support system that:

- Provides systems and knowledge necessary to achieve policy outcomes;
- Proactively interrogates and models data to support informed decisions;
- Minimise risk of corporate knowledge and data loss;
- Manages information as efficiently as possible through the appropriate use of software, hardware and communication tools; and
- Reduces data duplication

9. Ensure compliance with legislative requirements by:

- Having clear policies, processes and information to ensure that organisational objectives and legislative requirements are met.

10. Allocate Asset Management responsibilities where:

- The roles and responsibilities of Council, the Chief Executive Officer and Asset Managers are clearly identified.

Responsibilities

Lord Mayor and Councillors adopt the policy objectives and ensure sufficient resources are applied to manage the assets.

The Chief Executive Officer has overall responsibility for developing infrastructure asset management systems, policies and procedures and financial models and reporting on the status and effectiveness of asset management within the City.

The Asset Management Gateway Panel is responsible for ensuring that all asset management activities are consistent with the objectives of Community Strategic Plan, integrated planning and the City's Long Term Financial Plan.

The Asset Management Gateway Panel is responsible to oversee that people, processes and systems are in place and work together to deliver services and meet the corporate infrastructure asset management objectives. They will also oversee the development and implementation of asset and risk management plans and capital renewal plans for all asset classes.

Divisional Directors and **Business Unit Managers** are responsible for developing and implementing infrastructure asset management plans, systems, policies and procedures.

The Chief Finance Office is responsible for preparing the Long Term Financial Plan to support the delivery of the asset management plans

Employees with management or supervisory responsibility are responsible for the management of assets within the area of responsibility as determined under asset management plans.

Consultation

The policy has been reviewed with asset owners and relevant stakeholders. The Asset Management Gateway Panel and the Executive have approved the policy.

The policy is advertised for public comment as part of the Resourcing Strategy.

References

Laws and Standards
Local Government Act 1993
Local Government (General) Regulation 2005
National Asset Management Framework
IPWEA NAMS.PLUS3 Templates for Asset Management Plans
International Infrastructure Management Manual
Policies and Procedures
Matrix of Responsibilities for Assets
Roads Capitalisation Procedure
Corporate Asset Management System Data Management Procedure
IT Products and Services Acquisition, Management and Retirement Policy

Review period

This policy will reviewed be in 2 years.

Approval Status

Council approved this policy on [DD MONTH YYYY].

Approval History

Stage	Date	Comment	TRIM Reference
Original Policy	25 June 2012	Approved by Council	2012/049285
Reviewed	27 June 2016	Approved by Council (Appendix to Resourcing Strategy (2016) – Integrated Planning and Reporting Program and Budget (2016/2017))	2016/576823
Reviewed	Septemeber 2022	Endorsed by Executive 1 September 2021. [Add Council approval date TBC]	20XX/XXXXXX (Governance to populate)
Commence Review Date	[ ] Aug 2024		
Approval Due Date	[ ] June 2024		

Ownership and approval

Responsibility	Role
Author	Asset Strategy and Systems Manager
Owner	Chief Operations Officer
Endorser	City of Sydney Executive
Approver	City of Sydney Council