

Report to the Future Melbourne Committee

Agenda item 6.8

Adoption of Asset Plan 2021-2031

5 October 2021

Presenter: Roger Teale, General Manager Property, Infrastructure & Design

Purpose and background

1. The purpose of this report is to seek Future Melbourne Committee approval for the draft Asset Plan 2021-2031 to be exhibited on Participate Melbourne prior to formal Council adoption at its meeting on 26 October 2021.
2. Section 92 of the *Local Government Act 2020* (Act) requires that the Council develop and adopt a 10 year asset plan.

Key issues

3. This draft Asset Plan aims to fully integrate with our current draft Financial Plan and we are therefore seeking to adopt the Asset Plan earlier than the requirements of the Act which requires adoption of the Asset Plan by 30 June 2022 and for that plan to take effect from the 1 July 2022. Any approved Asset Plan will be reviewed to ensure it remains consistent with the requirements of the Act.
4. The draft Asset Plan deals strategically with all Council assets, however only includes detailed strategies for Council's seven major infrastructure asset categories shown below that have their own asset plan:
 - 4.1 Bridges;
 - 4.2 Buildings;
 - 4.3 Drainage;
 - 4.4 Marine structures;
 - 4.5 Parks and outdoor recreation;
 - 4.6 Public metered lighting; and
 - 4.7 Roads and footpaths.
5. The Council's asset portfolio is valued at more than \$4 billion. The draft Asset Plan details expenditure of just over \$2.1 billion over the next 10 years to maintain, renew and upgrade this asset base.
6. The first stage of community engagement took place from July to August 2021. The engagement involved a workshop with Wurundjeri Traditional Owners as well as a community panel of diverse participants. The purpose of the community panel focussed on asset categories, service levels and community expectations.
7. Council's climate change actions in relation to our assets has been embedded throughout the document to promote a business as usual approach rather than addressing it in a single section of the report only.

Recommendation from management

8. That the Future Melbourne Committee approves the draft Asset Plan 2021-2031 (refer Attachment 2 of the report from management) to be exhibited on Participate Melbourne for community comments prior to formal Council adoption at its meeting on 26 October 2021.

Attachments:

1. Supporting Attachment (Page 2 of 131)
2. Draft Asset Plan 2021-2031 (Page 4 of 131)

Supporting Attachment

Legal

1. Section 92(1) of the Act provides that, subject to section 92(6) of the Act, a Council must develop, adopt and keep in force an Asset Plan in accordance with its deliberative engagement practices.
2. The asset plan must include information about the maintenance, renewal, acquisition, expansion, upgrade, disposal and decommissioning in relation to each class of infrastructure assets under the control of the Council.
3. Section 92(6) of the Act provides that the Asset Plan after the general election in October 2020 must be developed in accordance with the Council's community engagement policy and adopted by 30 June 2022.
4. Section of 92(7) of the Act provides that the Asset Plan adopted under section 92(6) of the Act has effect from 1 July 2022.

Finance

5. As at 30 June 2020, the Council had a total asset portfolio with a written-down fair value of over \$4.1 billion (less depreciation and re-valuations).
6. The land owned or under the management of the Council accounted for just over 50 per cent of this portfolio, with our infrastructure assets such as roads, buildings and parks making up the bulk of the remaining assets.
7. Over the past five years, our asset portfolio has grown by approximately 3 per cent per annum.
8. The forecast expenditure over 10 years for the major asset classes is \$2.105 billion made up of \$0.644 billion for renewal and \$1.461 billion for upgrade and new works.

Conflict of interest

9. No member of Council staff, or other person engaged under a contract, involved in advising on or preparing this report has declared a material or general conflict of interest in relation to the matter of the report.

Health and Safety

10. The Council is responsible for an extensive portfolio of assets, including our infrastructure assets and the interface with infrastructure managed by other authorities and property owners. It is vital that these assets are managed in a sustainable way to ensure they are fit for purpose and provide a safe environment for the community who utilise these assets in their everyday life. The Asset Plan identifies how the Council proposes to manage its portfolio of assets to achieve the best outcomes through the strategic delivery of our services and the realisation of our community vision.

Stakeholder consultation

11. The first stage of community engagement took place from July to August 2021. The engagement involved a workshop with Wurundjeri Traditional Owners as well as a community panel of diverse participants. The purpose of the community panel was to help us develop our Financial and Asset Plans.
12. The panel's deliberations regarding the Asset Plan centred on the three asset classes – parks, public buildings and streets. Their deliberations were in response to one fundamental question: what do you expect from the city's different types of parks, buildings and streets? Overall, the panel was supportive of our approach to classifying assets. However, they felt we needed more clarity on some asset categories.

13. The second stage of community engagement will follow the statutory requirements of the Act , which includes consideration of the draft plan at this Future Melbourne Committee, exhibition of the plan on Participate Melbourne for two weeks and final adoption by Council at its October meeting.

Relation to Council policy

14. The Asset Plan is consistent with Council's Asset Management Policy and an updated policy has been included in the Asset Plan for adoption by Council as part of this process.

Environmental sustainability

15. A key strategic driver in the Council Plan is the Climate and Biodiversity Emergency. The Response to Climate and Biodiversity Emergency was endorsed by Council in February 2020 with a key priority to embed climate change and biodiversity action into Council processes, programs and design and construction of assets.
16. A first-pass asset vulnerability assessment for Council's assets was undertaken in early 2020. The study was undertaken to assist and inform decisions concerning the renewal and maintenance of assets by providing a high level understanding of how asset types may be impacted by climate change and a vulnerability assessment of individual assets where possible. The study found that most of the assets impacted by sea-level rise and associated storm surge are located within Docklands, and to a lesser degree Southbank.
17. Council's climate change actions in relation to our assets has been embedded throughout the document to promote a business as usual approach rather than addressing it in a single section of the report only.

DRAFT ASSET PLAN 2021–2031

OUR 10 YEAR STRATEGIC ASSET MANAGEMENT PLAN



CITY OF MELBOURNE



DRAFT ASSET PLAN 2021–31 10-year Strategic Asset Management Plan

Acknowledgement of Traditional Owners

The City of Melbourne respectfully acknowledges the Traditional Owners of the land, the Wurundjeri Woi Wurrung and Bunurong Boon Wurrung peoples of the Eastern Kulin and pays respect to their Elders past, present and emerging. We are committed to our reconciliation journey because, at its heart, reconciliation is about strengthening relationships between Aboriginal and non-Aboriginal peoples, for the benefit of all Victorians.

melbourne.vic.gov.au
August 2021

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Foreword from the Lord Mayor

At the City of Melbourne we have a bold plan in place to realise our vision of becoming a city of possibility. Where the world meets and the extraordinary happens.

Realising this vision is reliant on the responsible stewardship of community assets – everything from the more than 80 facilities that foster community connection to our 170 outdoor artworks that add colour and vibrancy to our streets.

Careful management of our built environment ensures we maintain and develop our investments in line with the hopes and dreams our citizens have for our city. It is also through these assets that we are able to fund Melbourne's adaptive, sustainable and thriving future economy, particularly following the impacts of the COVID-19 pandemic.

While Melbourne has been tested, through careful planning, we are able to step up in unprecedented times to support and sustain our city's economic, social and cultural recovery.

Our 10-year Asset Plan outlines Council's asset management priorities for the next 10 years and the steps we will take to enhance this portfolio and deliver the best outcomes for our residents, visitors and ratepayers.

It plots how we will maintain our heritage buildings, renew much-loved areas, acquire, expand and future-proof spaces that will enrich everyone's experience of our city, and reimagine our resources to achieve our Council Plan 2021–25 and its partner strategic plans. Our Asset Plan should help us to deliver more open green space, more community facilities, more transport connections, more performance and creative spaces.

It outlines the challenges – including accessibility, inclusivity and climate change responsibilities – and the ways we will evolve to meet the ever-changing needs of our community and the city. For instance, we're committed to a circular economy and have already resurfaced some of our city streets with 50 per cent recycled plastic.

Our assets – including land, roads, buildings and footpaths – total more than \$4 billion and have grown over the past five years by about 3 per cent per annum.

If we are to continue this positive growth trajectory, we need a robust governance framework that ensures each decision we make now meets our commitments and sets us up for success in the future.

We are committed to monitoring and evaluating ourselves and these decisions along the way, reporting back on our progress to continually confirm we are delivering for our city and its people.

At the heart of this plan is our commitment to create a thriving city of possibility for many generations to come. We look forward to implementing this plan with our community's support over the next decade.

Sally Capp
Lord Mayor

1. Operating context

1.1 Purpose

Under Victoria's *Local Government Act 2020*, the City of Melbourne's primary role is to provide good governance in our municipality for the benefit and wellbeing of our community.

The *Local Government Act 2020* also requires that the Council develop an asset plan in line with our community engagement policy for at least 10 years. The asset plan must include information about the maintenance, renewal, acquisition, expansion, upgrade, disposal and decommissioning of each class of infrastructure assets under the Council's control.

Our Asset Plan outlines the Council's high-level asset management priorities for the next 10 years and how we will manage our portfolio of assets to deliver services effectively.

We prioritise achieving the best outcomes for our community, including future generations while promoting resilience and economic, social, cultural and environmental sustainability.

Our Asset Plan will provide

- an overview of how we manage assets at the City of Melbourne
- an outline of the operating context and challenges
- a policy and governance framework that describes our principle
- a management plan for each significant infrastructure asset category
- a framework to manage our asset risks, including managing the vulnerability of our assets to the impacts of climate change four-year improvement plan including monitoring and evaluation.



1.2 Managing our assets

Our assets enhance the delivery of our services

A vast infrastructure of transport, water, waste, energy, telecommunications and community facilities underpin our economy. The infrastructure assets of a capital city like the City of Melbourne can be critical to the fabric of life in our city. Yet, we can take assets for granted until they fail, or they no longer meet the community's expectations.

The City of Melbourne is responsible for an extensive portfolio of assets, including our infrastructure assets and the interface with infrastructure managed by other authorities and property owners.

Assets are capital investments. They are an upfront investment that delivers value over time. In economic terms, infrastructure assets are often described as 'fixed assets' because unlike liquid assets such as cash, their potential value is locked and realised over time. For example, users can experience assets such as roads, bridges, drains and buildings for up to 100 years or more.

End users and key stakeholders, including our ratepayers, typically weigh the benefits of our assets against any costs associated with using those assets. Therefore, asset management focuses on making sure the community benefits from the significant investment we make in these assets, while also ensuring cost-effective management strategies.

The Climate and Biodiversity Emergency declaration in 2019 recognised the serious risk to the people of Melbourne from climate change impacts and acknowledged more needs to be done to accelerate climate action. We have a strong commitment to continuous improvement in asset management. Integrating

sustainability and climate resilience into every aspect of the asset lifecycle will be a key aspect of the response which in turn will build the resilience of our community.

1.3 Life cycle management of assets

We consider our assets over their entire life cycle

- service planning
- service operations
- asset planning
- asset design
- asset construction
- asset maintenance
- asset operations including data and financials
- asset disposal and recovery.

The first step in the cycle is planning what services we will provide and how we will deliver them. This planning may include capital investment in acquiring assets to support these services.

After we have completed our planning, we then design and construct our infrastructure assets.

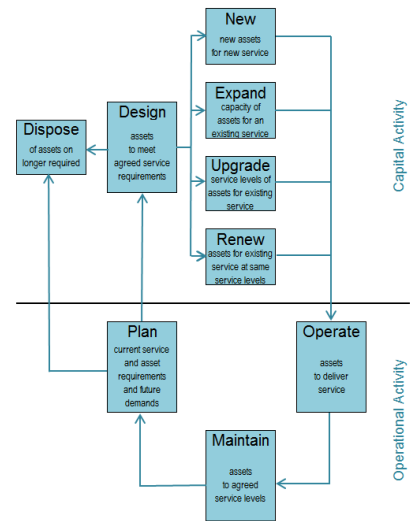


Figure 1:

Once the build is complete, we can activate these assets to deliver our service operations. We then continue to operate the asset by establishing processes for its ongoing maintenance.

Every year as part of our strategic and operational planning processes, we assess the need for and performance of the service and asset. This assessment may result in

- continued service delivery and ongoing asset maintenance
- further capital investment in their renewal or replacement to existing levels of service or their adaptation through upgrades or expansion
- additional capital acquisition of new assets to support new services
- disposal, decommissioning or recovery at the end of the asset's useful life or ceasing a service using circular economy principles.

Therefore, the planning, design, construction, operation, maintenance and disposal of infrastructure assets are core functions for the City of Melbourne. Infrastructure asset management is the systematic coordination of all the critical activity across the municipality to realise value from our assets.

Infrastructure asset management includes

- providing a defined level of service and monitoring performance
- managing the impact of changes through demand management and infrastructure investment
- taking a life-cycle approach, which means developing cost-effective management strategies for the long term to meet the defined level of service
- identifying, assessing and appropriately controlling risks
- building adaptive capacity of our assets to the impacts of climate change
- having a long-term financial plan which identifies required funding and expenditure.

The primary aim of asset management at the City of Melbourne is to effectively maintain a portfolio that meets current and future demands, while satisfying all legislative and regulatory requirements. It provides a framework to deliver and maintain assets that enable users and most vulnerable community members to prosper and thrive so that we can uphold acceptable public and staff safety standards and protect our assets from the impacts of climate change to meet our obligations under relevant safety legislation such as the *Occupational, Health and Safety Act* and *Local Government Act 2020* respectively.

1.4 Total asset portfolio

As of 30 June 2020, the City of Melbourne had a total asset portfolio with a written-down fair value of over \$4.1 billion.

The land owned or under the management of the City of Melbourne accounted for just over 50 per cent of this portfolio, with our infrastructure assets such as roads, buildings and parks making up the bulk of the remaining assets.

Over the past five years, our asset portfolio has grown by approximately 3 per cent per annum.

This asset plan focuses on critical infrastructure assets. These assets are central to our service delivery and are most likely to be the assets the community experiences. Our Property Strategy manages land assets.

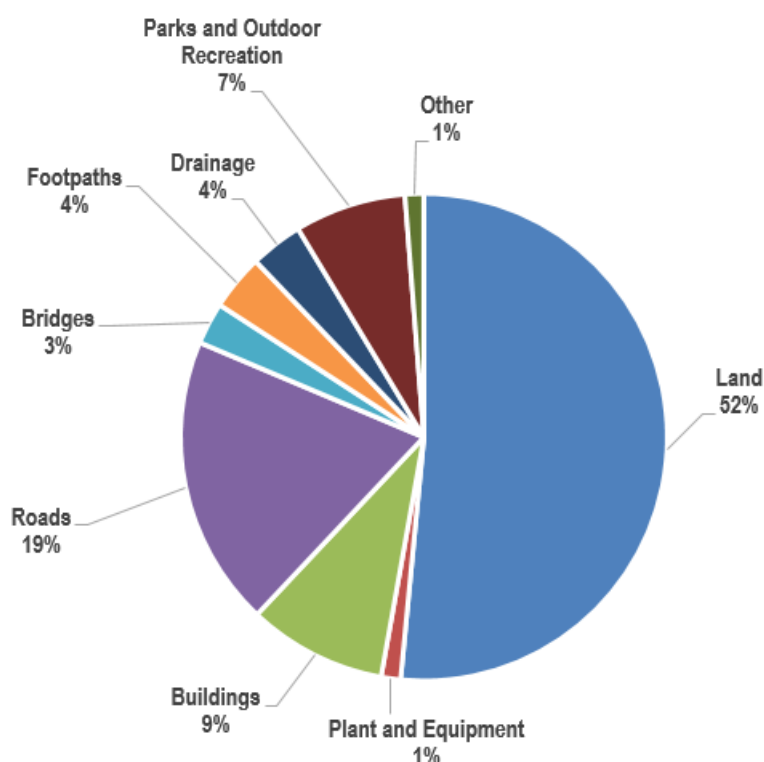


Figure 2:

Total asset portfolio Fair (written-down) value	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Forecast (\$'000)
Property					
Land	1,995,514	2,224,550	1,958,511	2,071,913	2,134,070
Buildings	335,170	365,777	368,126	378,152	389,497
Works in progress	21,300	28,931	22,893	55,901	57,578
Subtotal	2,351,984	2,619,258	2,359,530	2,505,966	2,581,145
Plant, equipment and machinery					
Plant and equipment	13,439	13,415	12,228	14,767	15,210
Fixtures, fittings and furniture	1,571	1,825	2,091	1,878	1,934
Computers and telecommunications	12,028	9,020	8,269	6,517	6,713
Library books	3,961	3,920	3,472	3,644	3,753
Works in progress	19,151	18,136	21,116	14,246	14,673
Subtotal	50,150	45,686	47,176	41,052	42,284
Infrastructure					
Roads	748,633	747,925	758,104	804,793	828,937
Bridges	107,866	108,345	108,942	111,492	114,837
Footpaths and cycleways	143,586	142,845	149,920	165,993	170,973
Drainage	135,309	142,885	150,467	156,957	161,666
Recreational leisure and community	5,243	4,895	6,668	5,143	5,297
Parks, open spaces and streetscapes	43,850	46,158	47,922	49,774	51,267
Other	213,399	213,604	222,958	233,793	240,807
Statues, sculptures and artworks	48,351	48,096	47,664	48,594	50,052
Works in progress	24,326	38,197	79,153	33,040	34,031
Subtotal	1,470,563	1,492,950	1,571,798	1,609,579	1,657,866
Totals	3,872,697	4,157,894	3,968,504	4,156,597	4,281,295

1.5 Main infrastructure assets

Our crucial infrastructure assets – excluding land, plant and equipment assets – account for around \$1.8 billion or 43 per cent of our total portfolio. However, we estimate these assets have a current replacement value of approximately \$4.8 billion.

Infrastructure categories	Primary services	Infrastructure asset class	Infrastructure asset sub-class	Indicative quantities	Replacement value (\$'000)	
Community	Arts and creative services	Buildings	Corporate	36	\$491,902	
			Community	30	\$60,252	
			Aquatic and Leisure	4	\$59,147	
	Civic services		Libraries and arts	10	\$116,405	
			Sports and recreation	44	\$32,606	
			Special purpose	11	\$18,170	
	Libraries and knowledge services		Public toilets	59	\$11,180	
			Other structures	83	\$8,316	
	Health and human services	Parks and outdoor recreation	Park land improvements	425ha	\$1,866,320	
			Trees	79,480	\$46,683	
			Irrigation	2,706,811m ²	\$31,762	
			Water features	30,307	\$22,572	
			Park furniture	5,821	\$14,864	
			Signage	1,176	\$1,622	
			Hard surface landscaping	600,012m ²	\$76,587	
			Play and exercise equipment	301	\$4,401	
			Sports artificial surfaces	9,394	\$1,665	
Small structures			40	\$827		
Recreation wellbeing and leisure services		Lighting	1,202	\$13,112		
		Roads and footpaths	Roads (base)	2,415,134m ²	\$621,213	
			Roads (wearing surface)	2,367,910m ²	\$61,205	
		Traffic and movement management		Roads (full depth)	139,018m ²	\$60,510
				Roads (unsealed)	1,015m ²	\$18
				Road footpaths	1,334,855m ²	\$266,482
				Kerb and channel	929,064m ²	\$321,385
				Street furniture	15,154	\$30,670
		Parking		Signs	49,813	\$15,368
				Parking devices	1,098	\$8,621
	Other street structures		19,727	\$9,678		
Public safety	Bridges	Major bridges	17	\$165,408		
		Minor bridges	6	\$6,892		
Recreation Wellbeing and leisure services	Marine infrastructure	Wharves	14	\$165,408		
		Floating structures	5	\$6,892		
Public lighting		Public lighting	2,947	\$7,438		
		Light poles	2,429	\$10,052		
		Pillars and Cabinets	310	\$1,814		

Water	Integrated stormwater management	Drainage	Pipes and channels	299,945m	\$108,630
			Pits	14,286	\$17,858
			Pollutant traps	90	\$6,455
			Pumping stations	8	\$1,663
			Harvesting systems	8	\$2,435
			Total		

2 Services

Our infrastructure assets play a critical role in enhancing the way we provide services to our customers and community. Therefore, the services we provide our community are the primary driver in managing our infrastructure assets.

Our service families are groups of services that share a common purpose. We constantly consider what we offer to our customers, the outcomes, benefits and how the needs of our community may change in the future.

Service type	Services
Assistance and care Supporting vulnerable people to enable safe and independent living.	<ol style="list-style-type: none"> 1. Assist independence. 2. Offer counselling and support. 3. Financial support to outsourced care providers. 4. Strive for food security. 5. Design targeted interventions for childhood development.
Economic development Fostering the development of Melbourne's economy.	<ol style="list-style-type: none"> 1. Enable positive experiences within Melbourne. 2. Support communities and businesses to prosper. 3. Encourage investment in Melbourne. 4. Promote Melbourne as a destination.
Safety management Ensuring people are protected and safe when accessing and using spaces.	<ol style="list-style-type: none"> 1. Safeguard public health. 2. Reduce the risk of accident and injury. 3. Plan for and responding to emergency and disaster events. 4. Respond to and managing city issues.
Welcome and connection Supporting people to experience and engage with Melbourne.	<ol style="list-style-type: none"> 1. Provide opportunities for social cohesion and connection with people. 2. Welcome visitors and provide opportunities to connect with the city. 3. Provide opportunities to enhance our connection with Country.
Early years development Supporting families with children to develop and thrive	<ol style="list-style-type: none"> 1. Provide access to toys and equipment. 2. Early learning and care. 3. Parent education and family health. 4. Delivery of language and literacy programs.
Waste and resource management Repurposing, recycling or disposing of waste and reducing resource waste in the municipality.	<ol style="list-style-type: none"> 1. Collect public waste. 2. Collect waste from ratepayers. 3. Sustainably manage resources.
Creativity and knowledge Providing opportunities to create, learn, connect, experience and share.	<ol style="list-style-type: none"> 1. Provide and promote access to creative opportunities, experiences and knowledge, information and education programs. 2. Activate and embed a culture that values creativity, inquiry and critical thought.

<p>Movement and traffic Facilitating movement into, around and out of the municipality.</p>	<ol style="list-style-type: none"> 1. Advise and respond to varied transport needs 2. Enable access through regulation and compliance 3. Provide and maintain movement infrastructure.
<p>Wellbeing and leisure Encouraging people to be healthy and active.</p>	<ol style="list-style-type: none"> 1. Plan, fund, and deliver wellbeing programs and events 2. Produce and distribute healthy living information and advice 3. Provide, maintain and manage access to recreation facilities and open space infrastructure.
<p>Sustainability and climate resilience</p>	<ol style="list-style-type: none"> 1. Embedding a culture and systems that supports innovation through carbon measurement and reduction and climate resilient infrastructure 2. Protecting our community, particularly the most vulnerable, from the impacts of climate change.

Several strategies guide our delivery of services and assets, including the Council Plan, which informs the organisation’s work during its four-year term. Through these plans, our service managers, planners and designers build on the things our city does well while responding to opportunities for improvement. These documents explain how we will improve services and assets to meet changing community needs.

3 Customers and community

Our Customer Focus Strategy commits us to being a customer-focused organisation. We use customer experience surveys, community engagement and third-party audits, and various communication platforms to research customer feedback.

We have several channels for customers to access information or provide feedback on our services and assets. Our channels include face-to-face, phone, emails and digital platforms such as online forms and apps. We are committed to improving the customer experience.

Customer segments	Expectations on cost and price	Expectations on benefits and levels of service
<ul style="list-style-type: none"> • Residents • Workers • Students • Shoppers • Event participants • Tourists • Commuters • Trades people • Venue visitors • People with special needs 	<p>Our customers tend to be relatively cost / price sensitive and generally expect an optimal midpoint that represents good value.</p>	<p>Our customers expect our assets to support the provision of the services, including</p> <ul style="list-style-type: none"> • quality – well maintained and fit for purpose • amenity – look clean and feel comfortable • safety – structurally sound, compliant and free from hazards • reliability – minimal downtime and free from defects • responsiveness – addressing complaints and change • sustainability – environmentally, socially and economically • resilience – responding to the impacts of climate change • timeliness – on time with minimal delays or waiting lists • accessibility – ease of entry and caters to all needs.

At critical points in the life cycle of our assets, we work closely with our customers and stakeholders to understand their values and expectations, and use their feedback to help us shape our asset management.

Life cycle phase	Customer and stakeholder research
Plan	The most critical point in the life of the asset is the planning phase. It is here at the establishment and significant reviews phase that customers and stakeholders play a crucial role. Depending on the type and significance of the service or asset, City of Melbourne uses community engagement techniques, in line with our community engagement policy, to determine the levels of service required of the asset. Council may endorse draft plans and strategies for community engagement before finalisation.
Design	As in the planning phase, the design phase may also use a range of community engagement techniques before construction to determine our assets' critical design elements and features. Where appropriate, Council will endorse draft concept plans or designs for community engagement before finalisation.
Construction	The construction phase often involves restricted access to the site of the asset. Still, it requires us to maintain a range of communication channels and platforms to allow customers and stakeholders to be informed and provide feedback on construction activity, including complaints and to assist in problem-solving.
Operation	During the operation of the asset, it is essential to maintain communication channels so that customers and stakeholders can provide feedback and report defects. We also collect customer feedback during this phase through community experience surveys.
Maintenance	The maintenance phase can include capital improvement work. This is like the construction phase and includes maintaining communication platforms to allow stakeholders to provide feedback on maintenance activity.

Disposal

Disposal is an inevitable phase as the asset reaches the end of its useful life. However, the community values some assets beyond their useful life, such as heritage assets. Therefore, we must engage with the community if we are considering the disposal of heritage assets.

3.1 Community engagement

Many people directly use and rely on our infrastructure assets in their daily activities. In addition, our stakeholders include a wide range of people and groups who, although not using our assets directly, have shared or competing interests in how we manage these assets. Therefore, we must understand customer and stakeholder expectations so we can manage our infrastructure assets effectively.

Our Community Engagement Policy outlines our commitment to community engagement. It details the principles that guide us to deliver sustainable outcomes for our city - through shared problem-solving, open dialogue and meaningful participation. The policy seeks to foster a deeper culture of public participation, provide a common language and strengthens our engagement. We commit to being inclusive and accountable for our decisions. Participate Melbourne is our online consultation platform, allowing everyone to shape Melbourne's future.

The platform hosts conversation tools and information for the community to provide feedback on projects and have their say in developing local government policies, programs and capital works. In addition, we use other engagement tools, including letter drops, community forums, receiving public submissions and people's panels to undertake participatory budgeting analysis.

Four principles guide our work

- place-based and community development
- accountability and transparency
- inclusivity and accessibility
- trust and respect.

3.2 Place and neighbourhoods

Conversations with our community reinforce the importance of applying a place-based lens to our services and infrastructure assets. We are committed to engaging creatively in the places and spaces where our community live, work, play and visit. We will work to strengthen the connections and understanding of local areas and issues. We will support the community to identify place-based opportunities, and we will work to address their concerns and realise their aspirations.

Our conversations with the community have tapped into the rich knowledge of the diverse neighbourhoods that make up Melbourne. We acknowledge the uniqueness and diversity of our areas and build strong connections with local stakeholders, Traditional Owners, community organisations, residents, workers, businesses, students, groups, leaders and individuals.

There are many neighbourhoods within our municipality. Each has its own character, story and set of service and infrastructure needs:

- Carlton
- CBD – Hoddle Grid
- Docklands
- East Melbourne
- Fishermans Bend
- Kensington
- North Melbourne
- Parkville
- Southbank
- South Yarra
- West Melbourne.

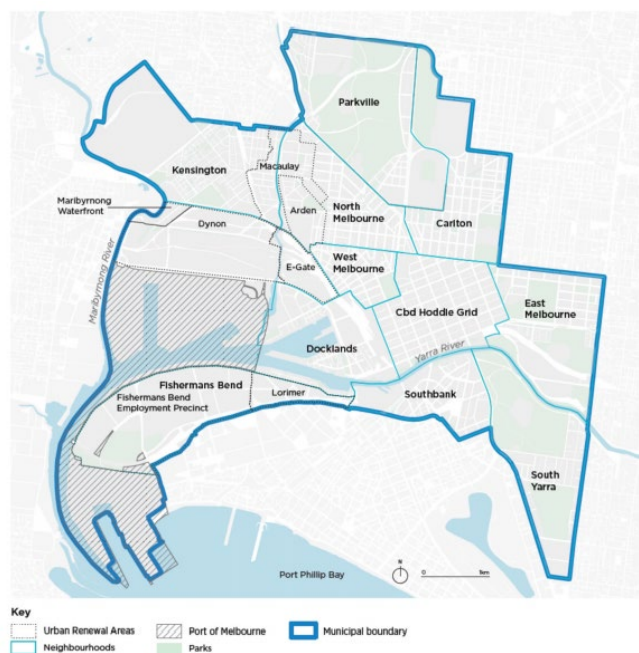


Figure 3:

We also know that each neighbourhood is experiencing the impacts of climate change differently, for example Southbank will be more exposed to the impacts of flooding and sea level rise and East Melbourne has a lot of green spaces that can be accessed during extreme heat.

Over time, the levels of service provided by our assets have evolved, and they will continue to evolve as the needs of our community change. We have established service standards through policies, strategies and master plans. We reflect these service standards in our design standards and contract specifications for works and maintenance. These documents also identify when the changing social, cultural, environmental and economic needs require us to vary these standards.

Our community experiences our services and infrastructure across the city when they visit one of our buildings or parks or use our roads or streetscapes.

We have divided these places into categories based on their service functions and assessing how critical they are, weighing up both the risks and opportunities.

Parks							
Premier park	Recreation park	Community park	Landscape park	Streetscape	Linear park	Civic park	Special purpose park
A unique site with many values, features and facilities that attract large numbers of people.	Larger sites used for organised sport and competition play.	Used for a range of recreation activities particularly children's play and family-based activities.	Predominately providing landscape values (grass and trees) and not usually used except for pedestrians passing through.	Predominately providing landscape values (grass and trees) and not usually used except for pedestrians passing through. Located on a road reserve.	Long narrow parks often associated with waterways that mostly cater for walking and cycling activities.	Area usually associated with civic buildings and designed as a place for people to congregate and have lunch or relax.	Parks that have a special purpose which restricts their use for other activities, such as golf courses, memorial sites, waterways

Buildings							
Aquatic and leisure building	Community building	Civic building	Libraries and arts building	Sports and recreation building	Public toilets	Structures	Special purpose and commercial
Buildings such as swimming pools, gyms, leisure facilities.	Buildings provide childcare, senior citizens, health and family services, community halls and meeting spaces.	Buildings primarily used for administrative activities.	Buildings used for libraries and arts.	Buildings for providing support of sporting activities, including pavilions, club rooms.	Building with the primary purpose of providing public convenience, including underground toilets.	Structures such as kiosks, news pillars, glasshouses, sheds, shelters, pergolas, pump stations, scorer's boxes, substations.	Buildings that have a special purpose which restricts their use for other activities.

Streetscapes							
Premier road streetscape	Public realm areas	Arterial road streetscape	Major local road streetscape	Minor local road streetscape	Residential street streetscape	Laneway streetscapes	Special purpose streetscape

streetscape							
A well-designed open tree-lined walkway with quality street furniture and assets. The area is accessible day and night, is well lit, frequently cleaned and well maintained. The amenity of the area attracts patronage and street activities such as busking and other events.	A premier designed public gathering space with a tram super stop for commuters in and out of the area. It is reserved for pedestrian activity. The area is accessible day and night, is well lit, frequently cleaned and well maintained. The amenity of the area attracts patronage and street activities such as busking and events.	Arterial roads carry longer distance traffic to, from and across the municipality. Arterial roads are managed by the Victorian Government. Council is responsible for footpaths only.	Provide connection between local collector roads and arterials. May also service industrial, commercial and residential areas.	Provide access to the distributor network from local access roads. May provide access to individual facilities and links to local shopping centres.	Provide access to individual properties. May also provide access to local tourist sites.	Provide access to individual properties. May also provide access to local tourist sites. Vehicle speed 10 km/h. Road shared between pedestrians and vehicles. Accommodate some kerbside cafes.	Road reserves that have a special purpose which restricts their use for other activities.

3.3 Community consultation on the Financial and Asset Plans

The first stage of community engagement took place from July to August 2021. The engagement involved a workshop with Wurundjeri Traditional Owners as well as a community panel of diverse participants. The purpose of the community panel was to help us develop our Financial and Asset Plans.

The community panel considered how Council can balance financial priorities, investments, resources and community and customer expectations to shape the next decade for Melbourne?

More than 100 people across all age groups applied to participate, including

- business owners and employees
- residents, ratepayers, students and visitors to the City of Melbourne
- Aboriginal peoples, people with disability, members of the LGBTIQ+ community
- different employment and education types, cultural backgrounds.

After random selection, a smaller group was identified, including a mix of voices from across our municipality. The panel's deliberations regarding the Asset Plan centred on the three asset classes – parks, public buildings and streets. Their deliberations were in response to one fundamental question: what do you expect from the city's different types of parks, buildings and streets?

Overall, the panel was supportive of our approach to classifying assets. However, they felt we needed more clarity on some asset categories.

Main themes included

- importance of bringing back the buzz, and how the assets can support this
- future purchasing of important buildings
- accessing assets

- agility in purchasing assets
- safety for all ages
- supporting people experiencing homelessness.

We will incorporate this feedback into the development of the Asset Plan and commit to the following actions

- Review asset category names and descriptions to better reflect the community understanding of these terms.
- Develop a community consultation model to determine better asset service levels desired by the community in preparing the next Asset Plan.

External operating drivers

Several external business drivers can significantly affect how we deliver services and the assets that support these services over the next decade. These drivers present significant risks and opportunities concerning our asset management. As a result, we will need to be agile and leverage these to our advantage.

Climate change

The recent Intergovernmental Panel on Climate Change Report indicates that it is unequivocal that humans are warming the planet and stronger emissions reduction pathways are required. Significant climate change impacts are already being felt around the world, with worse to come. Many of these changes, like sea level change, are already irreversible and the financial costs of adaptation and resilience will increase significantly with every additional incremental increase in warming.

We declared a Climate and Biodiversity Emergency on 16 July 2019. Melbourne's climate is changing dramatically. Climate change and extreme weather make it more likely we will experience local emergencies such as drought, heatwaves, flooding events and bushfires. By 2050, Melbourne will experience an increase in average 16 days greater than 35 degrees. It is projected that fire days will increase by 42 per cent, and there will be 20 per cent less spring rainfall. We will face far more severe rainfall events, flooding and storm surge, and sea levels will rise by 24 cm on 1990s levels.

The *Local Government Act 2020* requires that our Asset Plan must consider the municipal district's economic, social and environmental sustainability, including mitigation and planning for climate change risks.

Legislative obligations

One of the most significant external drivers for the City of Melbourne is the legislative context in which we operate, starting with the *Local Government Act 2020*. The Act defines the purposes and functions of local government. The Act specifies that we adopt an asset plan to manage the infrastructure assets within our municipality. Our asset plan must also include obligations set in the *Occupational Health and Safety Act*, *Road Management Act*, *Road Safety Act*, *Environmental Protection Act*, *Building Act*, *Planning and Environment Act* and the *Graffiti Prevention Act*.

Economy

City of Melbourne is a significant contributor to the prosperity of the state and the nation. In 2019, the City of Melbourne generated \$104 billion in economic value, representing 24 per cent of Victoria's gross state product and 7 per cent of Australia's gross domestic product. Victoria's economic prosperity is reliant on a productive central city economy. Our infrastructure assets will continue to play a critical role in that productivity, alongside our transport infrastructure. The efficient movement of people and goods is vital to the function of our city. Efficient transport powers economic growth and productivity.

Intermittent restrictions designed to slow the spread of COVID-19 have placed unprecedented limitations on economic activity. These measures could result in a sharper recession than any since Australia began collecting consistent economic data. As a result, City of Melbourne's gross local product is expected to be up to \$110 billion lower than pre-COVID-19 projections over the next five years.

Our economy will need to evolve to respond to the challenges of digital disruption and unemployment. Infrastructure will play a vital role in generating projects that can directly stimulate employment and business, support growth and attract visitors and business back into the city.

Health safety and wellbeing

Another critical factor that informs our infrastructure assets is our commitment to ensuring the city is accessible, affordable, inclusive, safe and engaging, and that it encourages health and wellbeing, participation and social justice.

Just before the pandemic began, 72 per cent of our residents self-reported that they were satisfied with life, and 83 per cent felt safe during the day, while 54 per cent during the night. There was 96 per cent support for community diversity, and 94 per cent believed the relationship with Aboriginal and Torres Strait Islanders was meaningful.

Research shows that psychological distress has increased since the outbreak of COVID-19. In comparison to 2019, there has been a 33 per cent increase in young people presenting to emergency departments for intentional self-harm and a 29 per cent increase in the use of phone mental health support across the country.

The pandemic has highlighted existing social inequality and disproportionately affects our most vulnerable communities, particularly those that face financial disadvantage, limited educational access, challenges communicating in English and poor internet access.

Population growth

According to official population estimates, the City of Melbourne was the fastest-growing municipality in Australia before the COVID-19 pandemic.

An estimated 178,955 people were living in our city as of 30 June 2019. From 2018 to 2019, the City of Melbourne's population increased by 8638 residents. The overwhelming majority of these – 99 per cent – came from overseas net migration. This growth has led to a significant increase in demand for infrastructure and open spaces.

Before the pandemic our population was expected to reach over 384,000 by 2041. Previous projections for population growth are expected to change once the longer-term impacts of COVID-19 on migration are confirmed. Travel restrictions have reduced the number of overseas arrivals to near-zero, resulting in less housing demand from overseas migrants.

Demographic change

Melbourne is home to people of diverse backgrounds, cultures, gender, sexualities, ages and family structures. The demographic profile of Melbourne is likely to continue to change over the next 10 years, and with it, our community's service and asset needs.

One of the most significant changes is the increase in families with children moving into the municipality, with a 70 per cent increase by 2031. Another leap will be in the number of one-person households in the city, rising from 18,765 in 2011 to 43,607 by 2031. These groups have very different service needs, from access to playgrounds and childcare to demand for late-night entertainment and affordable student housing. Melbourne is currently experiencing a shortage of affordable, accessible and quality housing.

Reconciliation

Our community recognises that Aboriginal peoples were the First Peoples of this land and have strived to retain their culture and identity through the period of European settlement for more than two centuries. Our Reconciliation Action Plan enshrines that respect and commits us to advance reconciliation – practical measures developed in consultation with Traditional Owner groups, Aboriginal organisations and the community. The actions include promoting and celebrating Aboriginal culture, heritage, and place through plaques, interpretive signage, public artwork, the dual naming of spaces, and a permanent outdoor ceremonial site.

The Asset Plan includes a commitment to undertake spatial research into the pre-European Aboriginal cultural landscape to inform strategic planning. We will also develop a 3D model to visualise pre-contact Melbourne. In addition, urban and landscape designs will include references to Aboriginal cultures in line with Aboriginal peoples cultural and intellectual property rights.

Waste and recycling

We have delivered the first stage of our Waste and Resource Recovery Strategy in the past year. We collected 31,837 tonnes of residential waste and 10,305 tonnes of recycling.

Technology

Technological advance is rapid, with digital technologies reshaping the way the city operates. These changes are affecting the way we think about and deliver services and our assets. They are also changing the way the community engages with government.

Keeping pace with new technology is a challenge, but technology also represents a phenomenal opportunity for our strategic asset management systems. Data is increasingly the link between the built form, the community and the City of Melbourne.

3.4 Internal operating drivers

We have identified internal drivers that can significantly change how we deliver services and the assets that support them. These drivers present opportunities for our asset management. It will be essential to be agile and leverage these to our advantage.

Integrated planning and reporting

Our planning framework describes how the City of Melbourne strives to realise the community's aspirations through a cascading hierarchy of long and medium-term priorities.

The framework outlines the Council's processes and decisions in the municipality's interests with direct input from the community under the *Local Government Act 2020* and other key legislation. Together, these inform the suite of Council's publications, illustrated below.

We have also committed to indicators to track Melbourne's performance against the United Nations Sustainability Development Goals (SDG) over time and benchmark our performance against other cities in specific areas. Our performance results will help us prioritise our efforts, share success and learn from others.

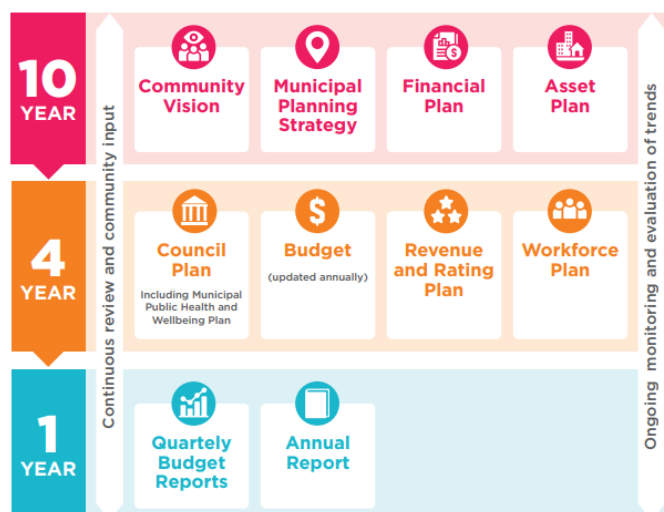


Figure 4:

Financial policies

Financial policies such as our Investment and Strategic Income Policy establish the parameters of asset management. The primary purpose of these policies is to reduce the City of Melbourne's reliance on rates income by improving our investment portfolio and strategic revenue.

Our strategic financial principles include being

- financially sustainable
- aligned with strategic aspirations
- fair, stable and predictable revenue and financing mechanisms
- effective and efficient capital managers
- optimising our assets and investments
- prudent financial risk managers.

Our financial policies recognise that risk, volatility and loss in purchasing power are present to some degree in all types of investment and strategic income. Council is reasonably risk-averse, and any investment we take should deliver a satisfying risk-adjusted return to the Council.

Our policies aim to achieve a low-to-medium risk to ensure financial sustainability, including minimum performance targets of 0.5 for asset renewal and upgrade capital expenditure to asset depreciation ratio and 1 for our total capital replacement expenditure to asset depreciation ratio.

Risk management

Managing the risks and opportunities associated with our assets is an integral part of our governance, good management practice and decision-making.

Risk is defined as something that can prevent you from achieving your objectives. Our responsibility is to manage risks and associated opportunities in all operations, including asset management. In addition, we need to ensure the efficient and ethical use of resources and services by ratepayers, residents, staff and visitors.

Three policies guide our risk management approach - Risk Management Policy, Crisis and Business Continuity Policy, and Fraud and Corruption Policy. Our risk policies are enacted through the Risk Management Framework and various processes and procedures. We base our approach on the international standard for risk management, ISO 31000.

In addition, Council has operated an audit and risk committee since 1999. The committee oversees the activities of our external and internal auditors. It provides independent advice on appropriate accounting, auditing, internal control, business risk management, compliance and reporting systems.

Climate change risk is a key strategic risk for City of Melbourne. The physical risks associated with more frequent and intense extreme heat, severe storms, flooding, sea level rise and bushfires will pose a significant challenge to managing our assets. The impacts to our community could be catastrophic, for example, the Black Saturday heatwave in 2009 caused an additional 374 deaths due to the extreme heat.

Climate change risk also presents financial risks associated with moves towards a low carbon economy including systemic risk, transition risk and stranded asset risk, and introduces the need to consider social inclusion and equity.

A first-pass asset vulnerability assessment for City of Melbourne's assets was undertaken in early 2020. The study was undertaken to assist and inform decisions concerning the renewal and maintenance of assets by providing a high level understanding of how asset types may be impacted by climate change and a vulnerability assessment of individual assets where possible. The study found that most of the assets impacted by sea-level rise and associated storm surge are located within Docklands, and to a lesser degree South Bank. Appendix F provides an overview.

Climate and Biodiversity Emergency

A key strategic driver in the Council Plan is the Climate and Biodiversity Emergency. The Response to Climate and Biodiversity Emergency was endorsed by Council February 2020 with a key priority to embed climate change and biodiversity action into Council processes, programs and design and construction of assets.

Information systems

In recent years, we have transformed our information systems while revitalising our IT platform operating model. This transformation will provide better access to timely data and insights. The model was co-designed as a customer-centric operating model, reimagining how we support staff and community, and accelerating an emerging digital culture.

The new operating model will provide increased flexibility and opportunities for cross skilling with the gradual introduction of Persistent Product Teams and Communities of Practice. It will deliver modern digital tools and empower staff and the community to make evidence-based decisions.

Workforce management

Our highly engaged, diverse and deeply committed workforce enables us to deliver our vision of being a city of possibilities. Workforce planning is about having the right people in the right place to deliver the organisation's goals. Our Branch Workforce Plans ensure we have the necessary roles and capacity to deliver core functions

including asset management. Asset management is a core skill for the City of Melbourne, as are project management, contract management, design, engineering, planning, and stakeholder management.

Our values guide our ideal culture. The ideal culture staff members want to experience encourages accomplishment of organisational goals through people development, promotion of teamwork and constructive interpersonal relationships. Staff members want a culture that values quality over quantity, encourages challenging goals and promotes individual growth. We are developing change plans across the organisation to achieve our ideal culture.

Procurement and supply chains

We have approximately 74 service contracts and we issue around 64 tenders each year. These tenders cover a wide range of service categories such as maintenance and cleaning services, civil infrastructure services, recreation management, park and tree management services, events services, marketing services, community services, consultancy, capital works, waste management and technology services.

Under the *Local Government Act 2020*, City of Melbourne has a procurement policy encompassing the procedures applied to the purchase of all goods, services and works. For service contracts with a value greater than \$150,000, we carry out reviews to ensure that the service is still required, analyse the supplier market and determine the best procurement methodology.

3.5 The state of the assets – current performance

We reviewed the implementation of our previous asset management strategy, including assessing its impact on the performance of the assets and our management systems.

The National Asset Management Assessment Framework was developed by the Australian Centre of Excellence for Local Government to provide nationally consistent criteria for assessing how local governments manage community infrastructure more sustainably through effective asset management and financial planning.

The core maturity framework questionnaire is made up of 79 questions across eleven subject categories. Core maturity is considered to have been achieved when a raw score of 1100 points is reached.

The implementation of our previous strategy has seen an 85-point improvement from our 2015 baseline of 826 points for a current score of 911. This leaves a total of 189 points remaining before core maturity is achieved. Initiatives to enhance the quality of Council’s asset data and to prepare asset management plans under a common framework have resulted in significant maturity gains.

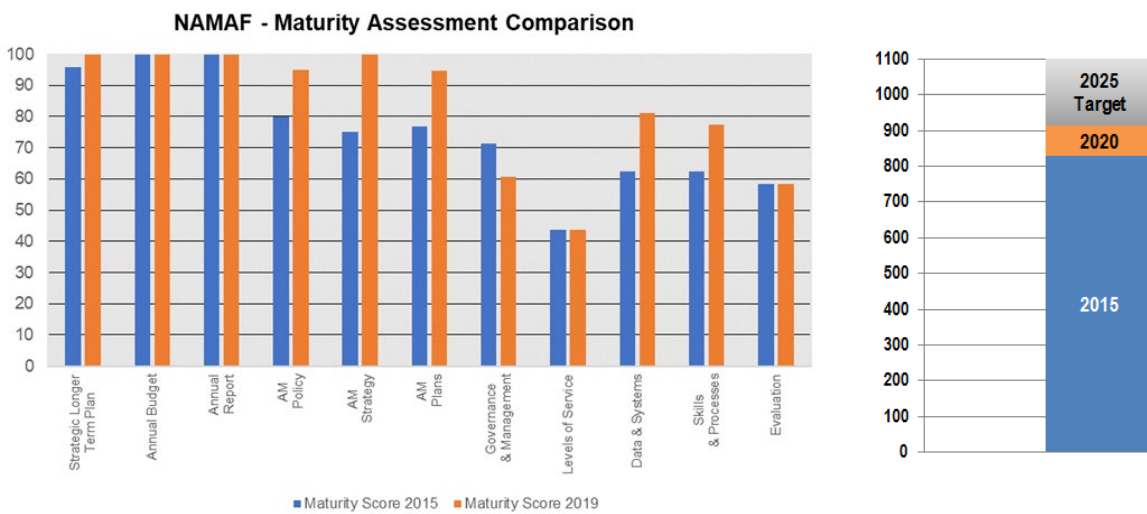


Figure 5:

Our independent assessor also acknowledged that staff who manage Council’s asset portfolio are working collaboratively. The decline within the governance and management element reflects our more rigorous assessment of the current reporting practices on the implementation of the Asset Management Strategy rather than any real loss of focus in this area.

The Asset Management Strategy Implementation Plan identified 24 improvement initiatives over four years from 2016–20. The initiatives helped us to develop our asset management systems, improve our maturity rating and deliver better asset management outcomes. Thirteen of these initiatives were completed and ten remain ongoing activities. One was discontinued.

Asset management objectives	Actions	Status
<p>RIGHT DECISIONS</p> <p>Establish an agreed approach to decision-making that is more evidence-based yet still allows for agility.</p> <p>Find more resourceful asset solutions and establish new ways of informing the community of our decisions, plans and performance.</p>	1. A new business case template implemented to establish a more consistent approach to asset related decisions.	Director City Strategy ✓
	2. A reviewed capital works program implemented to improve better cost allocation across asset groups and maximise funding and utility.	Manager Capital Works ✓
	3. An increased corporate asset management maturity rating score for governance and management.	General Manager Property, Infrastructure & Design Manager ✓
	4. Partnership agreements with key Victorian and Australian Government departments and agencies.	Executive Services ✓
	5. Identify financial and other mechanisms to fund necessary infrastructure and assets through Council or by third parties.	Director City Strategy ✓
	6. Centre-led procurement category management implemented, and contract variations initiated where cost reductions are achieved.	Chief Financial Officer ✓
	7. Incorporate consideration of asset repurposing in all business processes where changes to assets are being considered.	Director City Operations ⌛
	8. Increase utilisation of existing community facilities to cater to a variety of service needs.	Director City Communities Manager ⌛
	9. An annually published four-year capital works program and state of the assets report for each asset group including decisions and impacts.	Capital Works ✓
<p>RIGHT INFORMATION</p> <p>Find more innovative ways of engaging and collaborating with our community and strategic partners, including an ongoing exchange of information.</p> <p>Establish an agreed baseline of current design standards and service levels, set targets and report</p>	10. Comprehensive asset details available to be provided by data owners are used to inform community consultation and discussion.	Director City Operations X
	11. Increased information on municipal assets as an online catalogue, accessible to all city stakeholders. Known as the Open Data Platform.	Manager Smart City ✓
	12. Consolidated list of capital works from each strategic partner available to the community.	Manager Engineering Services ⌛
	13. New, more efficient ways for city users to share their asset experiences with Council.	Manager Strategic Relations ✓
	14. A defined service planning process and approach that assesses asset capacity and functionality.	Manager Governance ⌛
15. Documented asset management plans for all asset groups that are informed by service plans.	Director City Operations ✓	

on asset performance.	16. Base line design standards and service levels established and applied for all major classes of assets by agreed methodologies.	Director City Operations	✓	
	17. Asset performance targets exist for all assets, are reported on, including emissions and established in contracts and tenders.	Director City Operations	↻	
RIGHT DATA	Develop or enhance data, processes and systems capability to ensure more consistent, complete, accurate and timely data is available. Establish more effective ways of collecting, analysing and managing data from our assets, community and strategic partners.	18. A single integrated register for all asset data that ensures data security and integrity is in use and includes key best practice features.	Director City Operations	↻
		19. Reviewed opportunities to provide more asset data to the public.	Director City Operations	✓
		20. Develop an end-to-end capital works process that includes consideration of existing systems and best practice.	Manager Capital Works	↻
		21. Field force enablement and data capture solutions for asset related field work are in use.	Director City Operations	✓
		22. An Asset Training Program is established with agreed thresholds of competency for specific roles.	Manager Engineering Services	↻
		23. An online asset data map that is publicly available, enabled through improved integration between Asset Master and GIS.	Manager Smart City	↻
	24. The capability for customers to report on asset condition from anywhere at any time is delivered and in use.	Manager Customer Relations	✓	

Key: ✓ Compete ↻ In Progress – Carried Forward ✕ Cancelled

Levels of service

Our previous asset management strategy aimed to advance Melbourne without diminishing our net level of service. We assessed our key infrastructure asset classes in 2015, then again in 2020. These assessments showed that we have been able to maintain our service levels in terms of the functionality and capacity of our assets. However, there was a 3 per cent reduction in the condition of our assets.

Proportion of assets not in need of capital investment		2015	2020	Change
Condition	Bridges	100%	80%	
	Buildings	92%	86%	
	Drainage	93%	96%	
	Marine structures	100%	90%	
	Parks and outdoor recreation	90%	96%	
	Public metered lighting	90%	93%	
	Roads and footpaths	96%	97%	
Average		94%	91%	-3%
Functionality	Bridges	100%	85%	
	Buildings	80%	80%	

	Drainage	70%	95%	
	Marine structures	100%	95%	
	Parks and outdoor recreation	89%	92%	
	Public metered lighting	90%	96%	
	Roads and footpaths	99%	86%	
Average		90%	90%	-
Capacity	Bridges	95%	80%	
	Buildings	98%	90%	
	Drainage	70%	90%	
	Marine structures	100%	100%	
	Parks and outdoor recreation	90%	90%	
	Public metered lighting	95%	95%	
	Roads and footpaths	98%	97%	
Average		92%	92%	-

3.6 Challenges

Our previous four-year strategy also included a core commitment to work with our community and strategic partners on a range of interventions to reposition the way we do business, take up the right opportunities and adapt our assets to meet expected challenges.

We will continue to advance our municipality without diminishing our net level of service. Over the last four years we have advanced Melbourne through our assets, adapting them to respond to our city's key challenges

Challenges	Our response
Population growth Urban density, Changing demographics Customer expectation	<ul style="list-style-type: none"> • We continued to work with traders, the community and key stakeholders at the Queen Victoria Market on the careful restoration and revitalisation of this seven-hectare site in the heart of the city. The \$30 million restoration of the heritage sheds started in May 2020 following Heritage Victoria permit approval and a successful three-month trial in parts of Sheds A and C. The staged project represents the most significant restoration of the market sheds in 40 years. • Completed construction of the Lady Huntingfield integrated children and family centre. • In 2019, City of Melbourne commissioned a research project to focus on street art practice in Hosier Lane and public enjoyment of street art across the municipality. • We explored options for the future delivery of library services to inform design of the new city library and offerings at the other five library locations. • The Transport Strategy 2030 was endorsed by the Future Melbourne Committee October 2019. It sets the 10-year vision for transport and includes 25 priority actions to deliver a safe, efficient and sustainable transport network. • In 2019–20 City of Melbourne carried out approximately \$2 million worth of works as part of our cycle infrastructure program. • Arden is an urban renewal precinct in North Melbourne, located around the Metro Tunnel's new Arden Station. We worked in partnership with the Victorian Planning Authority and the Department of Jobs, Precincts and Regions to develop a structure plan to guide the development of Arden over the next 30 years. Arden will be an employment and innovation precinct for life sciences, health, digital technology and education and a thriving new neighbourhood for Melbourne's inner north-west. • An expanded visitor services presence was delivered through the opening of the new Melbourne Visitor Hub at Town Hall, the Queen Victoria Market Visitor Hub, tailored visitor services at key conferences and extending the City Ambassador Program. • To assist visitors to better navigate the city, map-based wayfinding signage was updated. New signage was also placed at the Queen Victoria Market, Melbourne Town Hall and around Melbourne Metro tunnel works. • Supporting the goal of being a city with an Aboriginal focus, an audio visual Wominjeka installation was delivered at the Melbourne Visitor Hub at Town Hall. Plaques acknowledging Traditional Owners were installed or updated across all visitor services sites. • The City of Melbourne Bike Lane Design Guidelines were developed to deliver best practice bicycle infrastructure and maximise the safety of cyclists. The guidelines draw upon an extensive review of existing bike lanes operating in Melbourne and many other cities. They provide guidance in selecting appropriate treatments, alternative materials and preferred dimensions that

should be used in the construction of bike lanes, separation devices and adjacent traffic lanes.

- City of Melbourne has been working to create 2.5 hectares of new open space through two major projects. The Southbank Boulevard and Dodd Street project is in Southbank, Melbourne's most densely populated suburb. Based in the heart of Melbourne's Arts Precinct, the project will transform this once-busy street into one of Australia's most pedestrian-friendly places.
- We also worked with the University of Melbourne and the Victorian Government to transform University Square, one of Carlton's oldest and most loved public squares. Through this project we have completed 8400 square metres of lawn area, planted 76 trees, created over 2000 square metres of biodiverse garden beds, street and park lighting upgrades, and the completed the Pelham Street gateway plaza.
- We finalised the review of the combined Reconciliation Action Plan and Aboriginal Melbourne Action Plan. The plan proposes research into Melbourne's Stolen Generation story, with recommendations on how best to commemorate the Stolen Generation through memorials or markers. It includes the development of an Aboriginal cultural learning strategy for councillors, executives and staff, and increasing the percentage of Aboriginal staff.
- The Reconciliation Action Plan involves cooperation with the Aboriginal community to promote understanding and good relations. We want to provide services in a way that demonstrates cultural understanding and ensures Aboriginal people feel respected and welcome.
- People with low vision or blindness can receive audio messages about potential obstacles in the central city thanks to new beacons along Bourke and Swanston streets. City of Melbourne commissioned Guide Dogs Victoria to develop this project.
- The first phase of community engagement for the redevelopment of the Kensington Community Recreation Centre sought to understand community interest and ideas. This informed the development of a draft concept design. The second phase of engagement was held in September and October 2019 and sought feedback on this concept plan.
- City of Melbourne has continued to protect the community from passive smoking by expanding smoke-free areas in the municipality. In mid-2019, a thorough consultation process was undertaken regarding a proposal to make a section of Bourke Street smoke-free.
- City of Melbourne continued to work closely with the Victorian Government and Victoria Police on the strategy and delivery of the Melbourne Protective Security Enhancement Program across the city. This included the completion of Flinders Street, Princes Bridge and Bourke Street Mall protective barriers.
- In 2019, City of Melbourne commissioned a research project to focus on street art practice in Hosier Lane and public enjoyment of street art across the municipality. In 2019–20, street art was audited across the central city to help identify and protect significant artworks. We developed guidelines to help improve street art quality and facilitate amenity upgrades in Hosier Lane and street art locations across the city.
- The City of Melbourne partnered with the Melbourne University Disability Institute to explore how we can make Melbourne more inclusive for people with disabilities. The research findings were presented at a community forum in May 2019. Over one hundred community members and staff attended the event. The findings will inform our updated Disability Action Plan.
- The City of Melbourne developed new community engagement research and resources to increase participation, inclusion and

accessibility for a diverse range of participants. These resources include a random selection guide and place-based community panel tool, research and guidelines on using social media for community engagement and a virtual reality test.

- We introduced several new Participate Melbourne online engagement tools, and together with the University of Melbourne, we are researching ways to make our engagement techniques more inclusive for people with disability.

Changing climate

- The City of Melbourne employed high resolution multispectral imagery as a new approach to mapping tree canopy cover in 2018–19. The imagery was analysed to determine that canopy cover was 23.7 per cent of the public realm. This approach also provided information about vegetation health and the extent of understorey vegetation throughout the municipality.
- We will use this data to establish species health benchmarks for monitoring tree health in the future. Delivery of the Urban Forest Strategy continued with more than 3000 trees planted annually.
- People can move through the central city in comfort thanks to microclimate sensors, urban greening and the new Cool Routes tool. These projects are just some of the ways City of Melbourne is working to build our city's resilience to climate change. Our new microclimate sensors capture temperature, humidity, wind, and air quality data to help us make public spaces more comfortable.
- As part of the City of Melbourne's work to build a circular economy, the asphalt along Flinders Street between Exhibition and Spring streets now contains recycled household waste. We've resurfaced these iconic city streets with 50 per cent recycled plastic.
- Opportunities from the Nature in the City Strategy were integrated into the design, delivery and renewal of open spaces and streetscapes including Southbank Boulevard, Gardiner Reserve, Elliott Avenue billabong and Market Street. This process has become a routine part of service delivery. To increase understorey planting in Royal Park, we worked with researchers from the University of Melbourne to test new planting techniques for establishing native grassy understorey using cost effective methods.
- There may be a need to change service levels over time due to the impacts of climate change. Some assets that are providing the designed service level now may not do so in 10 years. For example, drainage assets that were designed before climate change rainfall intensities were considered may not be sufficient as intensities are better understood and potentially increase. This should be considered when refining service levels.
- There is growing recognition of the upstream impacts of the materials and services we use in the design and construction of infrastructure and assets. Measurement and reduction of the embodied carbon in materials will ensure our supply chain carbon impacts are reduced. The sourcing of more local, recycled content will minimise the use of virgin materials and reduce the amount of waste entering landfill.

Disruptive technology
Digital innovation

- Melbourne Innovation Districts was publicly launched in June 2017 as a partnership between City of Melbourne, RMIT University, and the University of Melbourne. The vision is to build a world-class urban district and environment that supports and develops next generation Melbourne. The three organisations are working to create an innovation district in City North.
- Deliver digital tools in a defined precinct to communicate disruption to city users and enable them to report disruption to City of Melbourne. A partnership was set up to facilitate data sharing between the seven organisations accountable for disruptive works within the city. We also assessed the viability of sensor technologies to provide real time, onsite data. We developed two new digital tools – an interactive map illustrating disruptions in the city and the ‘Chatbot’ alternative digital channel for city users who prefer this method of communication.
- In 2019–20 City of Melbourne began transforming the Melbourne City DNA concept from a series of prototype exhibitions into a fully-fledged digital platform. Moving from prototype to finished products is a complex task. We have worked with industry experts to fully scope the design and delivery of a hub on the ground floor of Melbourne Town Hall. It will be powered by a sophisticated digital platform and emerging technology such as sensors located in the city. This means that data and stories can be published across a range of displays: anything from touch screens and mobile devices through to large projections.
- City of Melbourne worked with businesses, universities, researchers, start-ups and the community during 2019–21 to test new and emerging technology such as 5G and the Internet of Things (IoT). We established an emerging technology testbed with 26 partners in the Melbourne Innovation District City North. Testbed pilots aim to better understand how our streets and open spaces are used. This will allow us to make data-led decisions to create better city experiences.

3.7 Financial management

Understanding how assets depreciate over their useful service life is critical to allocating costs and setting income streams to support financial sustainability. Our assets are estimated to have depreciated by around \$300 million over the past five years, with an annual average of around \$60 million.

Depreciation	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Budget (\$'000)
Property					
Land	0	0	0	0	0
Land improvements	0	0	0	0	0
Buildings	4358	5165	4947	4896	5289
Building improvements	163	189	195	205	171
Heritage buildings	2976	2203	3012	3285	3391
Subtotal	7497	7557	8154	8386	8850
Plant and equipment					
Plant, equipment and machinery	2973	2640	2582	2978	2857
Fixtures fittings and furniture	426	284	307	301	362
Computers and telecommunications	4319	4520	3610	2994	2833
Library books	1596	1600	1654	1366	1424
Subtotal	9314	9044	8153	7639	7476
Infrastructure					
Roads	17,180	17,452	17,723	18,420	19,190
Bridges	1428	1612	1789	1673	1685
Footpaths and cycleways	6307	6521	6509	7429	15,157
Drainage	1822	1754	1899	2024	2132
Recreational leisure and community	391	401	386	639	454
Waste management	0	0	0	0	0
Parks, open spaces and streetscapes	0	0	0	0	0
Aerodromes	0	0	0	0	0
Off-street car parks	0	0	0	0	0
Other structures	13,778	14,166	13,276	14,838	9712
Subtotal	40,906	41,906	41,582	45,023	48,331
Totals	57,717	58,507	57,889	61,048	64,658
Five-year total depreciation (\$'000)					299,819
Five-year annual average depreciation (\$'000)					59,964

In response we have injected around \$615 million into our capital works program over five years with an annual average of around \$123 million.

Capital works (By asset class)	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Budget (\$'000)
Property					
Land	0	0	0	0	0
Land Improvements	0	0	43	6	0
Buildings	6257	7571	7652	9189	8622
Building improvements	6550	10,826	9572	28,738	48,957
Leasehold improvements	0	0	0	0	0
Heritage buildings	250	2083	5278	3704	12,706
Subtotal	13,057	20,480	22,545	41,637	70,285
Plant and equipment					
Plant, equipment and machinery	1813	3566	4078	3411	2842
Fixtures fittings and furniture	551	279	515	1587	666
Computers and telecommunications	12,483	14,665	15,149	14,722	18,373
Library books	1295	1427	1350	1500	1000
Subtotal	16,142	19,937	21,092	21,220	22,881

Infrastructure					
Roads	6932	7173	8431	8758	8245
Bridges	744	201	974	554	250
Footpaths and cycleways	8018	9092	7269	10,135	24,590
Drainage	7326	9905	5139	6340	5030
Recreational leisure and community	168	695	964	1527	3841
Waste management	0	0	0	0	2400
Parks, open spaces and streetscapes	25,295	32,712	43,558	17,825	38,803
Aerodromes	0	0	0	0	0
Off-street car parks	0	0	0	0	0
Other structures	643	5061	12,162	15,523	9912
Subtotal	49,126	64,839	78,497	60,662	93,071

Totals	78,325	105,256	122,134	123,519	186,237
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Capital Works (By capital expense type)	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Budget (\$'000)
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New acquisition works	16,840	36,157	43,335	38,116	59,182
Renewal works	45,813	50,420	47,418	52,090	53,705
Expansion works	8,295	10,401	23,077	13,567	18,187
Upgrade works	7,377	8,278	8,304	19,746	55,63

Totals	78,325	105,256	122,134	123,519	186,237
Five-year total depreciation (\$'000):					615,471
Five-year annual average depreciation (\$'000)					123,094

Financial policy ratios – asset renewal and upgrade expense to depreciation ratio

Capital expenditure has included \$348 million in renewal and upgrade works, which, as a proportion of the depreciation, means we have been able to invest in our existing assets by around 116 per cent.

Financial policy ratios – capital replacement ratio

Total capital expenditure of \$615 million – with an annual average of around \$123 million, compared to the estimated depreciated of around \$300 million and with an annual average of around \$60 million– has resulted in a capital replacement ratio of 205 per cent. This ratio is a critical measure of our sustainable financial management of our asset portfolio.

Capital works as a percentage of depreciation	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Forecast (\$'000)
Renewal works	45,813	50,420	47,418	52,090	53,705
Renewal and upgrade works	53,190	58,698	55,722	71,836	108,668
Depreciation	57,717	58,507	57,889	61,048	64,658
Renewal / depreciation totals	79%	86%	82%	85%	168%
Five-year average					83%
Renewal and upgrade / depreciation totals	92%	100%	96%	118%	168%
Five-year average					116%
All capital works / depreciation totals	136%	180%	211%	202%	288%
Five-year average					205%

External funding to total capital expense ratio

Our previous strategy recognised that in a constrained funding environment there is also an increasing need to make 'resourceful' decisions throughout the asset life cycle.

We need to work with all levels of government to secure funding to improve the infrastructure and functionality of the city. The total capital grant and contribution funding was \$198 million over the past five years, with an annual average of around \$40 million. This represented a third of our total capital expenditure.

External funding as a percentage of total capital works	2016–17 Actual (\$'000)	2017–18 Actual (\$'000)	2018–19 Actual (\$'000)	2019–20 Actual (\$'000)	2020–21 Forecast (\$'000)
Total capital works	78,325	105,256	122,134	123,519	186,237
Total capital grants and contributions	27,607	26,836	35,137	61,161	46,972
Totals	35%	25%	29%	50%	25%
Five-year average					33%
Five-year total capital grants and contributions (\$'000)					197,713
Five-year annual average capital grants and contributions (\$'000)					39,543

4 Policy

4.1 Purpose

This policy describes City of Melbourne's commitment to sustainable and effective life cycle management of all physical assets to support service delivery and realise our vision as a bold, inspirational, and sustainable city.

We will ensure that

- Melbourne continues to be one of the most liveable cities in the world.
- Strategic risks relating to maintenance, renewal and development of physical assets are mitigated.
- Financially, environmentally, and socially sustainable assets support service delivery.

4.2 Scope

We are responsible for an extensive asset portfolio valued at more than \$4 billion, which represents a significant investment made over many generations. This asset portfolio plays a vital role in the provision of services to the community and businesses. Prudent management of these community assets is a core Council function. It is critical to ensure service delivery for the forecast population growth and preserve the ongoing liveability and long-term financial sustainability of the city.

We acknowledge we have a responsibility to ensure that our physical assets are effectively managed, are functional, adaptable and innovative, and provide service to the community. We are committed to working with the community and partners to adapt our assets to meet future challenges, without diminishing levels of service.

This policy applies to all councillors and employees, agency staff and contractors whose tasks involve any element of asset management or provision of services that rely on physical assets which are owned or controlled by the City of Melbourne. Our assets include roads, footpaths, bridges, buildings, drainage assets, open space assets, marine structures, information technology assets and artworks.

The City of Melbourne will acquire, maintain, manage and adapt its assets to deliver Council's services, responding innovatively to the challenges and opportunities presented by change, ensuring its resilience and realising the vision and strategic objectives for the municipality.

4.3 Principles

Six principles guide us

1. Asset management planning – including the development of policies, strategies and plans – will be integrated and aligned with the Council's planning framework and the relevant long-term objectives of the Community Vision, Council Plan, strategies, and 10-year Financial Plan.
2. A whole of life cycle, long-term financial sustainability approach will focus on real options analysis in planning asset investment and management decisions. Our approach will include a cost-effective asset portfolio that prioritises funding for non-discretionary asset renewal needs before discretionary expansion, upgrade, or new asset needs.

Discretionary needs will be assessed on their return on the capital and ongoing operating investment. Planning will consider all costs incurred throughout the full life cycle of the assets, from acquisition to disposal.

3. Resource allocation decisions for our infrastructure assets will be based on all meaningful and relevant evidence provided by the analysis of asset life cycle risks, costs and performance. Decision making will be consistent, transparent and consider all methods for service delivery. Methods include engaging the private sector, non-asset solutions and demand management strategies. Asset-related risks will be fully integrated into the organisational risk management framework.
4. Service delivery will be the core of asset management activities. Planning will support service delivery throughout the municipality. Service levels applied to our infrastructure assets will be based on industry

standards and respond to community needs, while ensuring that infrastructure assets support service delivery in a sustainable and resilient manner.

5. Our asset information systems will be maintained at a level that meets data, information, decision-making and reporting requirements. The systems will provide continuous improvement to support asset management, aligned with best practice as outlined in ISO 55000 and the National Asset Management Assessment Framework. They will enable effective data management capability while providing analytics to estimate future demand and a transition to more integrated and digital systems.
6. Asset management will be undertaken within a culture that encourages accomplishment through people development, promotion of teamwork, and constructive interpersonal relationships. Roles and responsibilities throughout the asset life cycle will be clearly defined and allocated.

4.4 Roles and responsibilities

We will undertake skill development and training programs to build internal asset management capacity. Our asset management framework will outline the systems and processes that form the critical asset management activities.

An asset management accountability framework will define the relevant responsibilities and accountabilities. We will also establish ownership, control, accountability and reporting requirements for each asset class.

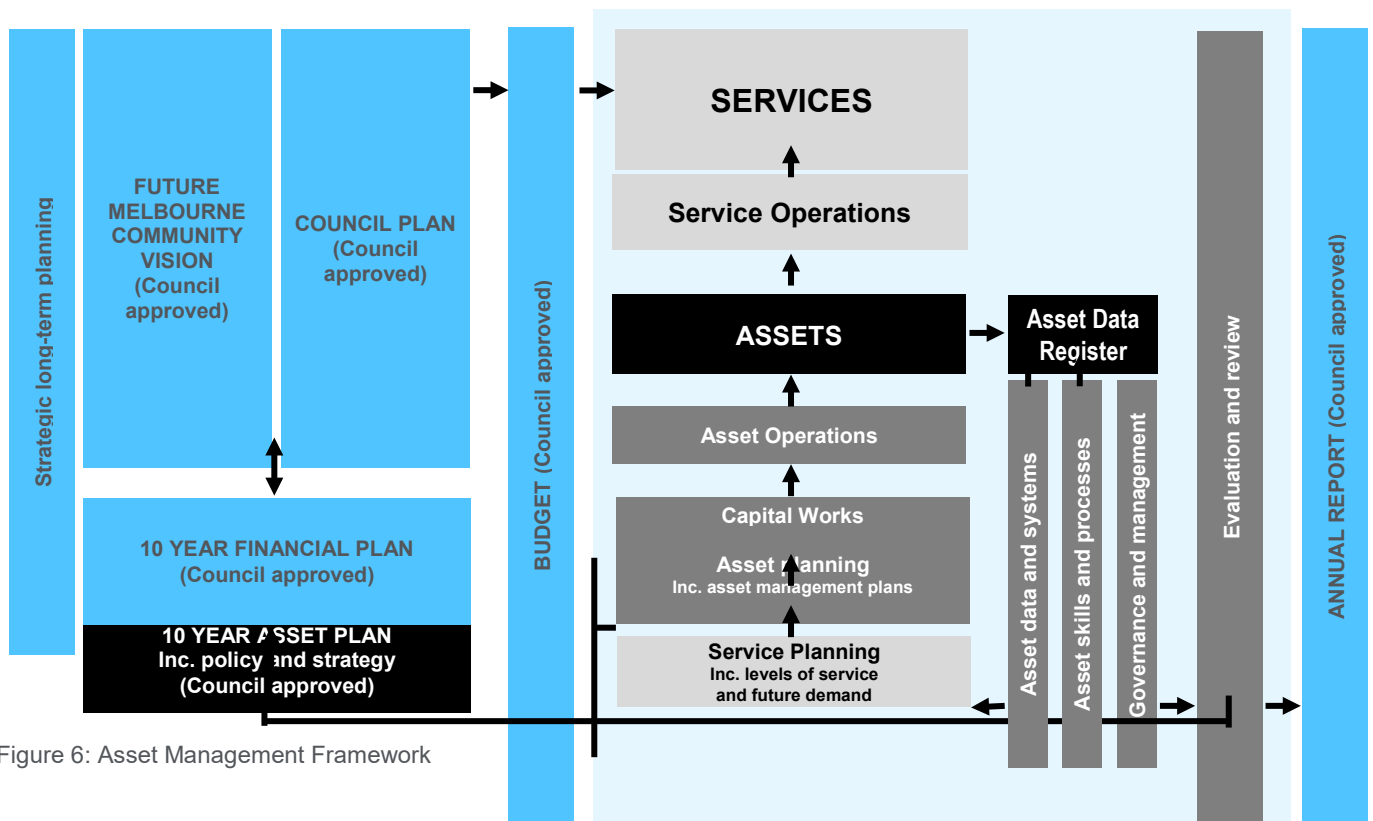


Figure 6: Asset Management Framework

Council will
Act as steward for community infrastructure assets and set corporate vision and policy for asset management.
Approve resources to maintain community assets for delivering the agreed levels of service.
Delegate responsibility to the CEO for ensuring that appropriate strategies, plans and systems are implemented for long-term sustainability of assets and service delivery.
CEO and Executive Leadership Team will
Foster an asset management culture and implement consistent, compliant and best practice asset management across the organisation.

Ensure that the asset management policy and strategic plans are integrated into the corporate integrated planning and governance frameworks.

Ensure that sustainable long-term financial plans are developed to reflect the state of the assets and agreed levels of service.

Ensure that accurate and reliable information is presented to Council for optimal decision-making purposes.

Report on the performance and state of the assets to Council.

Asset Management Steering Committee will

Provide a co-ordinated and collaborative approach to asset management and improvements consistent with this policy.

Promote good asset management practices throughout the organisation.

Monitor and evaluate asset management practice and implementation of the asset plan.

Report to the Executive Leadership Team on asset management performance.

Asset and Service Managers will

In line with our community engagement policy, consult with the community and stakeholders to deliver levels of service to agreed risk and cost standards.

Develop asset management plans to deliver on agreed levels of services.

Develop policy operating statements for their respective areas in asset management and service delivery.

Implement asset maintenance, renewal, upgrade, expansion and new acquisition works programs in line with asset management plans and service delivery needs.

Use an integrated asset management information system to record, view and analyse asset life cycles.

Report on asset performance in delivering the required services.

Finance and procurement team will

Ensure the long-term sustainability of asset expenditure.

Ensure compliance to relevant standards for financial reporting on assets.

Employees and contractors will

Apply agreed asset management practices in their area of work.

Ensure all service contracts that impact on the acquisition, expansion, upgrade, renewal and maintenance of assets are structured to support this policy.

5 Challenges

We have identified the following challenges and opportunities through analysis, community feedback and independent research. Our Asset Plan prioritises a range of infrastructure projects to respond to them.

Challenges	Our response	Council Plan objective
Population growth, urban density, changing demographics and customer expectations	<ul style="list-style-type: none"> Partner with the Victorian Government and other stakeholders to deliver specific components of the Greenline along the north bank of the Yarra River including the implementation of the Yarra River – Birrarung Strategy. Protect Queen Victoria Market as a traditional open-air market, through heritage restoration and the provision of essential services and facilities. Enhance the customer and trader experience, specifically through projects such as the Shed Restoration, Food Hall, Trader Shed, Market Square, waste and logistics facilities and future developments to the south of the market. Deliver Queen Victoria Market precinct improvements through quality public open space, new connections to the city, community services and facilities such as the Munro Community Hub. Deliver public art projects that reflect Melbourne's unique culture and heritage, attract visitors to the city and help stimulate our city's recovery. Increase the amount of public open space in the municipality with a focus on areas of greatest need, such as Southbank and emerging urban renewal areas. Play a lead role in facilitating the delivery of high-quality and climate-adapted urban renewal in Arden and Macaulay, Fishermans Bend, and Docklands to deliver the emerging and future neighbourhoods of Melbourne in partnership with the Victorian Government and other partners. In Arden and Fishermans Bend, realise the place and investment conditions to support globally competitive innovation districts. Champion high-quality development and public realm design through delivering the Design Excellence Program, including implementing the City of Melbourne Design Review Panel and a Design Excellence Committee for strategic planning work. Celebrate, partner and advocate for investment in the city's three key waterways, the Yarra River – Birrarung, the Maribyrnong River and Moonee Ponds Creek, to connect these key recreational and biodiversity assets of our city. Complete heritage reviews and implement associated planning scheme amendments to protect and celebrate heritage in our municipality. 	Unique identity and place
	<ul style="list-style-type: none"> Commence planning for a co-designed First Nations Cultural Precinct with First Peoples – a place to retain, maintain and recreate in a culturally specific geography, where First Peoples can practice continuity of customs and traditions, through uninterrupted connection to lands and waters. 	Aboriginal Melbourne
	<ul style="list-style-type: none"> Increase and upgrade accessible, inclusive spaces for women in City of Melbourne sports facilities. Implement a 'Neighbourhood Model' by working with communities to develop neighbourhood plans and neighbourhood service centres that respond to the local community's existing and projected needs. 	Access and affordability

	<ul style="list-style-type: none"> • Deliver a revitalised library network, including pop-up libraries, to increase access for our diverse community and to help revitalise the city. • Deliver the Disability Access Plan 2020–24 including ensuring our services and events are more accessible, increasing the number of accessible adult change facilities, and partnering with community and transport groups to make transport more accessible. 	
	<ul style="list-style-type: none"> • Continue to implement the Transport Strategy 2030, including delivery of a protected bike lane network, station precincts as key gateways, Little Streets as streets for people, safer speed limits, micro-mobility trials, more efficient traffic signal timing and bicycling encouragement programs. • Create the new entity 'Homes Melbourne', to coordinate and facilitate more affordable housing for key workers and people on low incomes, and progress a demonstration project on Council-owned land, support the Make Room accommodation project and new homelessness support hubs for vulnerable citizens to access essential support services including food, showers, lockers, information, and housing and homelessness advice. • Continue to work with Victoria Police and other agencies to deliver a range of initiatives that improve physical safety on the streets of Melbourne and within our communities. • Deliver and maintain a clean city through the Rapid Response Clean Team initiative. 	<p>Safety and wellbeing</p>
<p>Climate and biodiversity emergency</p>	<ul style="list-style-type: none"> • Progress a planning scheme amendment to improve the environmental performance of buildings to reduce emissions to zero by 2040. • Deliver on our Urban Forest Strategy including tree canopy, private greening incentives and city-greening. • Support the development of battery storage and renewable energy in the municipality and electric vehicle charging stations through the Power Melbourne initiative. • Implement the Climate and Biodiversity Emergency Action plan. • Lead the reduction of food waste and diversion of waste from landfill, by continuing the existing Food Organics, Green Organics rollout and the development of a circular economy through Waste and Resource Recovery Hub Expansion program and community neighbourhood projects, including the container deposit scheme, alternative waste technologies and partnered/aggregated demand to stimulate end markets. 	<p>Climate and biodiversity emergency</p>
<p>Changing economy and workforce</p>	<ul style="list-style-type: none"> • Continue to strengthen Melbourne's economic recovery, including through precinct and shopfront activation. • Facilitate increased investment in unique Melbourne events to further activate and celebrate the city. • Drive economic growth and resilience by implementing the Economic Development Strategy, focusing support on existing and emerging industry sectors. This will include close collaboration with industry and universities, development of globally competitive innovation districts (particularly in our renewal areas), strengthening of the creative sector, facilitation of digital and technology innovation, support for re-establishment of international education and efforts to unlock climate capital. • Work in partnership with the Victorian Government and other stakeholders to advocate for and deliver integrated high-quality public and active transport in urban renewal areas including the Melbourne Metro 2 and tram to Fishermans Bend and tram to connect the Arden precinct. • Increase visitation to Docklands by partnering with the Victorian Government and key stakeholders to enable reconstruction and redevelopment in Central Pier and surrounds. 	<p>Economy of the future</p>

	<ul style="list-style-type: none"> • Partner with industry to support the development of globally competitive innovation ecosystems, including through international engagement, emerging technology trials and digital infrastructure delivery. • Continuing to coordinate on the delivery of our Transport Strategy 2030 as one of the critical levers for the city's economic recovery and future prosperity. 	Safety and wellbeing
Disruptive technology and digital innovation	<ul style="list-style-type: none"> • Deliver programs that will build digital literacy skills and capabilities, improve access to free Wi-Fi from our community facilities, and advocate for appropriate digital infrastructure to improve digital inclusion, particularly for vulnerable groups. • Drive economic growth and resilience by implementing the Economic Development Strategy, focusing support on existing and emerging industry sectors. This will include development of globally competitive innovation districts and facilitation of digital and technology innovation. • Partner with industry to support the development of globally competitive innovation ecosystems, including through emerging technology trials and digital infrastructure delivery. 	Access and affordability
Financial constraints and long-term sustainability	<ul style="list-style-type: none"> • Develop a corporate strategy for the City of Melbourne to drive exemplary customer service, digitise services and operations, improve productivity and identify new revenue opportunities. 	Economy of the future

6 Asset management objectives

Asset management objective	Strategic alignment
<p>1. Integrated long-term planning</p> <p>We will implement a 10-year Asset Plan that includes an asset management policy and strategic plan that aligns with the objectives of our Community Vision, Council Plan and Financial Plan.</p> <p>We will also implement a project management framework, including prioritisation and resource allocation. This will deliver a pipeline of infrastructure asset investments and promotes asset management principles in our long-term planning.</p>	<p>Community Vision and Council Plan</p> <ul style="list-style-type: none"> • Planning provisions guide development in the city and ensure that our neighbourhoods and buildings are built to the highest quality and environmental standard. • City of Melbourne is a financially sustainable and highly effective organisation. • We celebrate and protect Melbourne's unique places. • Our environment, parks and waterways are protected, restored and managed well. • Our built, natural and cultural heritage is protected. New buildings, streets and spaces exhibit design excellence to create sustainable and enduring places and our renewal areas are emerging as high-quality inner-city precincts. • Spaces and buildings showcase world-leading sustainable design principles to enhance liveability and lead innovative responses to climate change, including protecting communities from the impact of extreme weather events. • The city continues to strengthen its dense network of green streets and spaces so that plants and animals can thrive, and communities can come together. • Biodiversity, habitat, green spaces, water quality and tree canopy cover are increased in the city. • Eliminate waste through circular economies. <p>Financial Plan</p> <ul style="list-style-type: none"> • Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans. <p>Asset policy principle</p> <ul style="list-style-type: none"> • Asset management planning including the development of policies, strategies and plans will be integrated and aligned with the Council's planning framework and the relevant long-term objectives of the Community Vision, Council Plan, strategies and 10-year Financial Plan.

2. Life cycle financial sustainability

We will contribute to the long-term financial sustainability of the city by continuing to issue competitive tenders for all asset maintenance and cleaning contracts.

We will establish an improvement program that ensures the backlog of maintenance and renewal works for any of our infrastructure asset groups is no greater than 5 per cent.

We will also implement a project management framework that includes a prioritisation criterion that increases annual renewal funding to bring backlogs back within the acceptable threshold.

The framework will ensure that project bids identify the total cost of ownership through asset life cycle costing.

Community Vision and Council Plan

- City of Melbourne is a financially sustainable and highly effective organisation.
- Doing business in the city is made more attractive by streamlining processes and alleviating costs.
- Our city remains vibrant and diverse by being affordable for everyone.
- The city economy is stronger, resilient and fully recovered from the impacts of COVID-19.

Financial Plan

- Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with Council's financial policies and strategic plans.
- Capital Replacement ratio to remain above 1.0x at the end of the financial year.
- Council will aim to achieve an asset renewal and upgrade expense to depreciation ratio of at least 0.5x at the end of each financial year.

Asset policy principle

- A whole of life cycle, long-term financial sustainability approach will focus on real options analysis in planning asset investment and decisions. The approach will include a cost-effective asset portfolio that prioritises funding for non-discretionary asset renewal needs before discretionary expansion, upgrade or new asset needs.
- Discretionary needs will be assessed on their return on the capital and ongoing operating investment, with management accounting for all costs incurred throughout the life cycle of the assets.

Asset management objective

Strategic alignment

3. Risk and evidence-based decision making

We will review our processes for collecting accurate and timely data on the risks and performance against service levels associated with the condition, capacity and functionality of infrastructure assets.

We will also implement a project management framework that includes prioritisation criteria that take into

Community Vision and Council Plan

- City of Melbourne is a financially sustainable and highly effective organisation.
- Members of the community feel empowered to contribute their ideas and knowledge to the decision-making process, finding solutions to complex problems that will work for everyone.

	<p>consideration the risk and performance ratings of existing assets in allocating the available capital resources.</p>	<p>Financial plan and asset policy principle</p> <ul style="list-style-type: none"> Resource allocation decisions for our infrastructure assets will be based on all relevant evidence provided by the analysis of asset life cycle risks and costs, and performance against key performance indicators, agreed levels of service and the monitoring the achievement of Council outcomes. Decision making will be consistent, transparent and consider all potential methods to meet the demands for service delivery, including engaging the private sector, non-asset solutions and demand management strategies. Asset-related risks will be fully integrated into the organisational risk management framework.
<p>4. Community and place-based levels of service</p>	<p>We will continue to improve our engagement with our customers and stakeholders to supplement our technical assessment data. This engagement will help to identify the future demands of infrastructure.</p> <p>We will also improve our long-term planning practices to identify future infrastructure needs and implement a project management framework that prioritises investments based on levels of service engagement.</p>	<p>Community Vision and Council Plan</p> <ul style="list-style-type: none"> The city's places and spaces bring people together and create spaces where they feel supported and can foster a sense of belonging. Economy of the future - a financially sustainable and highly effective City of Melbourne organisation. The city is made up of safe and accessible places and services where everyone can come together. Melbourne's diverse communities are celebrated. First Peoples' experts are consulted and lead sustainable land management practices and implement 'Caring for Country' principles in the management, planning and development of city land. We embrace and promote our First Peoples' identity across all areas of the city, including city design, and give voice to the treaty process with First Peoples. <p>Financial Plan and asset policy principle</p> <ul style="list-style-type: none"> Service delivery will be at the core of all asset management activities. Service planning will include evaluating all potential methods to meet demands for service delivery. Service levels applied to our infrastructure assets will be based on industry standards and respond to community needs, while ensuring that infrastructure assets continue to support service delivery in a sustainable and resilient manner.

Asset management objective	Strategic alignment
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5.	Community Vision and Council Plan
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	<p>Continuous systems improvement</p> <p>We will implement improvement initiatives to consolidate core maturity in asset management practices in accordance with the National Asset Management Assessment Framework.</p> <p>We will establish a continuous improvement process that ensures a single source of asset data and allows us to progress toward advanced maturity.</p> <p>We will move to an enterprise asset management specific platform which integrates with financial and geographic information systems and enables us to build our analysis and systems modelling capability.</p>	<ul style="list-style-type: none"> • City of Melbourne is a financially sustainable and highly effective organisation. • Doing business in the city is made more attractive by streamlining processes and alleviating costs. <p>Financial Plan and asset policy principle</p> <ul style="list-style-type: none"> • Our asset information systems will be reviewed and maintained at a level that meets organisational data, information, decision making and reporting requirements. They will provide reliable and continuous improvement in the support to asset management, aligned with best practice as outlined in ISO 55000 and the National Asset Management Assessment Framework. • The systems will enable effective data management capability while providing analytics on future demand and a transition to more integrated and digital systems.
<p>6. Constructive and accountable culture</p>	<p>We will implement improvement initiatives that build a collaborative and accountable culture in all asset management activities.</p> <p>We will increase integrated service planning and asset management across the organisation. We will also update our roles and responsibility matrix.</p>	<p>Community Vision and Council Plan</p> <ul style="list-style-type: none"> • City of Melbourne is a financially sustainable and highly effective organisation. • The City of Melbourne champions diversity in the workforce, driving a stronger and more resilient economy, with opportunity for all. <p>Financial Plan and asset policy principle</p> <ul style="list-style-type: none"> • All asset management activity will be undertaken within a culture that encourages people development, teamwork, and constructive interpersonal relationships. Roles and responsibilities for all stages of the asset life cycle will be clearly defined.
<p>7. Sustainability and Climate Resilience</p>	<p>We will implement best practice whole of lifecycle asset management by integrating sustainability and climate resilient solutions throughout every phase of the lifecycle.</p>	<p>Community Vision and Council Plan Climate and Biodiversity Emergency Climate Change Mitigation Strategy 2050 Climate Change Adaptation Strategy Emissions Reduction Plan 2021-26</p>

7 Our 10-year infrastructure asset plan

7.1.1 Revitalising Melbourne's economy

Melbourne's economy was hit hard by COVID-19 and to help our community during these challenging times, the City of Melbourne's 10-year Asset Plan delivers record investment in infrastructure particularly in the first four years. The aim is to activate the city, support businesses and keep Melburnians in jobs.

It shows how we plan to rebuild the economy of the future, improve access and affordability for all, and strengthen our safety and wellbeing. Over the coming four years and beyond, we will also address the climate and biodiversity emergency, protect Melbourne's unique identity and place, and focus on Aboriginal Melbourne.

In partnership with the Victorian Government, a \$200 million Melbourne City Revitalisation Fund will accelerate economic recovery by boosting infrastructure, events and business support over the next two years. In 2021–22, \$100 million of this joint fund will be allocated. The city will emerge in better shape because of targeted investment in services and fast action to deliver programs such as expanded outdoor dining, as well as infrastructure in every neighbourhood.

The City of Melbourne will invest a record \$244.7 million in infrastructure over the coming year, delivering much-needed community services, creating hundreds of construction jobs and stimulating our economy. This marks the largest investment in capital works ever delivered by the City of Melbourne, including \$114.1 million for new assets, \$44.2 million for renewing assets, \$63.7 million for upgrades and \$8.6 million for expansion works. \$23.7 million is allocated to the major maintenance of city assets.

We will also invest in the new Kensington Community Recreation Centre and Greenline, as well as Southbank Public Open space and upgrades as part of City Road Masterplan, in addition to making safety improvements to our footpaths and roads. This record infrastructure investment will require Council to borrow \$147.7 million, in addition to the financial grant support from Victorian Government to deliver this budget.

These projects will deliver jobs and set the city up for prosperity and liveability.

Capital investment										
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
	Budget	Projection	Projection	Projection	Projection	Projection	Projection	Projection	Projection	Projection
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0
Improvements										
Buildings	16,716	32,284	13,500	5,500	12,144	11,498	11,643	11,484	10,024	12,956
Building										
Leasehold	62,377	50,953	61,850	54,643	52,018	49,251	49,871	49,190	42,936	55,495
Heritage	0	0	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	2,190	2,074	2,100	2,071	1,808	2,337
Subtotal	79,093	83,237	75,350	60,143	66,353	62,824	63,614	62,746	54,767	70,788
Plant and Equipment										
Plant and equipment	6,424	2,755	2,640	2,140	3,455	3,271	3,313	3,267	2,852	3,686
Fixtures fittings and furniture	744	774	809	809	757	717	726	716	625	808
Computers and telecommunications	16,900	15,400	13,300	14,200	18,900	19,500	20,400	19,900	20,700	20,500

Heritage plant and equipment	0	0	0	0	0	0	0	0	0	0
Library books	1,400	1,400	1,400	1,400	1,243	1,177	1,192	1,176	1,026	1,327
Subtotal	25,468	20,329	18,149	18,549	24,356	24,666	25,631	25,060	25,204	26,321
Infrastructure										
Roads	6,137	5,068	5,564	6,135	6,799	6,438	6,519	6,430	5,612	7,254
Bridges	0	3,850	3,700	3,700	3,125	3,125	3,125	3,125	3,125	3,125
Footpaths and cycleways	29,561	43,700	44,813	17,905	27,470	26,009	26,336	25,977	22,674	29,307
Drainage	9,545	6,534	3,803	3,997	5,361	5,608	5,866	6,136	6,418	6,431
Recreation, leisure and community	2,640	10,000	946	0	2,339	2,215	2,243	2,212	1,931	2,496
Waste management	1,188	1,194	1,221	0	666	630	638	629	549	710
Parks and streetscapes	64,389	86,662	77,761	76,861	58,393	55,286	55,982	55,218	48,197	62,296
Aerodromes	0	0	0	0	0	0	0	0	0	0
Off-street car parks	0	0	0	0	0	0	0	0	0	0
Other structures	12,554	5,920	4,420	4,420	7,921	7,500	7,594	7,490	6,538	8,450
Subtotal	126,014	162,928	142,228	113,018	112,074	106,811	108,302	107,217	95,044	120,068
Totals	230,575	266,494	235,727	191,710	202,784	194,301	197,547	195,022	175,015	217,177

Capital expense type

Renewal works	44,187	44,262	50,246	66,103	70,552	67,134	75,570	74,340	75,919	76,579
Upgrade works	8,569	0	0	0	0	0	0	0	0	0
Expansion works	63,741	63,223	68,466	45,313	0	0	0	0	0	0
New acquisition works	114,078	159,009	117,015	80,294	132,232	127,167	121,977	120,683	99,095	140,599
Totals	230,575	266,494	235,727	191,710	202,784	194,301	197,547	195,022	175,015	217,177

Capital funding type

Grants	44,783	70,609	72,304	44,142	14,307	14,337	14,368	14,399	14,431	14,464
Contributions	42,469	27,900	20,300	26,400	38,301	31,860	31,860	26,860	30,610	26,954
Council cash	72,016	85,178	133,452	121,168	150,176	148,103	151,319	144,437	129,974	175,760
Borrowings	71,307	82,807	9,671	0	0	0	0	9,326	0	0
Totals	230,575	266,494	235,727	191,710	202,784	194,301	197,547	195,022	175,015	217,177

Renewal as a percentage of depreciation

Total depreciation	66,841	77,043	86,185	93,495	97,903	101,002	104,286	102,837	105,614	103,004
Renewal	44,187	44,262	50,246	66,103	70,552	67,134	75,570	74,340	75,919	76,579
Percentage	66%	57%	58%	71%	72%	66%	72%	72%	72%	74%

Renewal and upgrade as a percentage of depreciation

Depreciation	66,841	77,043	86,185	93,495	97,903	101,002	104,286	102,837	105,614	103,004
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Renewal and upgrade	52,756	44,262	50,246	66,103	70,552	67,134	75,570	74,340	75,919	76,579
Percentage	79%	57%	58%	71%	72%	66%	72%	72%	72%	74%

New works

In 2021–22, we will spend \$114.1 million on new works. Major projects include new Southbank open space reserve (\$20 million), business initiatives (\$10.9 million), Kensington Community Recreation Precinct Redevelopment (\$10.2 million), urban renewal open spaces (\$10 million), St Kilda Road – Metro Bike Lane (\$5.0 million), Stubbs Street pump station upgrade (\$4.2 million), and parking technology services (\$3.4 million).

New Works	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Bridges	0	0	0	0	0	0	0	0	0	0
Buildings	4,197,000	4,392,000	4,596,000	4,810,000	5,034,000	5,268,000	5,513,000	5,769,000	6,034,374	0
Drainage	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	310,000	310,000	310,000	310,000	310,000
Marine Structures	0	0	0	0	0	0	0	0	0	0
Parks and Outdoor Rec	4,900,000	7,240,000	7,240,000	7,240,000	7,240,000	7,240,000	5,140,000	5,140,000	5,140,000	0
Public (Metered)										50,000
Lighting	286,400	597,800	285,800	461,000	50,000	50,000	50,000	50,000	50,000	0
Roads and Footpaths	9,767,000	9,767,000	31,052,000	31,052,000	30,052,000	30,052,000	30,052,000	30,052,000	30,052,000	0
All Other Assets	0	0	0	0	0	0	0	0	0	0
Total										
Capital Costs	21,650,400	24,496,800	45,673,800	46,063,000	44,876,000	42,920,000	41,065,000	41,321,000	41,586,374	360,000

Expansion

In 2021–22, we will spend \$8.6 million on expanding existing assets. This includes Dodds Street Linear Park (\$5.2 million) and Southbank Boulevard (\$3.4 million).

Expansion works	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Bridges	0	0	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	0	0	0	0	0	0
Drainage	0	0	0	0	0	0	0	0	0	0
Marine Structures	0	0	0	0	0	0	0	0	0	0
Parks and Outdoor Rec	7,137,882	7,323,467	7,513,877	7,709,238	7,909,678	8,115,330	8,326,328	8,542,813	8,764,926	0
Public (Metered)										50,000
Lighting	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0
Roads and Footpaths	0	0	0	0	0	0	0	0	0	0
All Other Assets	0	0	0	0	0	0	0	0	0	0

Total Capital	7,187,88	7,373,46	7,563,8	7,759,2	7,959,6	8,165,	8,376,3	8,592,8	8,814,9	50,0
Costs	2	7	77	38	78	330	28	13	26	00

Upgrade

In 2021–22 year, we will spend \$63.7 million on upgrading existing assets. This includes the renewal of the Queen Victoria Market (\$50.2 million), North and West Melbourne and Docklands Transport and Amenity Program (\$6.5 million), Flinders Street heavy vehicle mitigation (\$1.9 million) and a new city library (\$1 million).

Upgrade Works	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Bridges	0	0	0	0	0	0	650,000	0	0	0
Buildings	0	0	0	0	0	0	0	0	0	0
Drainage	2,500,000	3,000,000	2,000,000	3,000,000	1,000,000	2,000,000	0	0	0	0
Marine Structures	1,880,000	0	0	0	0	0	0	0	0	0
Parks and Outdoor Rec	5,950,800	6,105,521	6,264,264	6,427,135	6,594,241	6,765,691	6,941,599	7,122,081	7,307,255	0
Public (Metered)										350,000
Lighting Roads and Footpaths	314,834,000	211,000,000	211,000,000	211,000,000	350,000,000	350,000,000	350,000,000	350,000,000	350,000,000	350,000,000
All Other Assets	0	0	0	0	0	0	0	0	0	0
Total Capital Costs	26,989,634	28,619,521	42,104,264	39,657,135	20,351,241	27,343,691	24,601,599	24,047,081	24,294,255	350,000

Renewal and refurbishment

In 2021–22, we will spend \$44.2 million on renewal and refurbishment of existing assets. Significant projects include roadways and footpaths renewal (\$10.4 million), parks renewal (\$6.5 million), property renewals (\$6.4 million), information technology renewal (\$6 million), drains renewal (\$2 million), Melbourne City Marina Renewal (\$1.9 million) and flood mitigation renewal (\$1.9 million).

Renewal Works	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Bridges	1,000,000	3,663,500	3,663,500	3,663,500	3,125,000	3,125,000	3,125,000	3,125,000	3,125,000	3,125,000
Buildings	6,430,000	6,430,000	6,430,000	6,430,000	6,558,600	6,689,772	6,823,567	6,960,038	7,099,239	7,241,224
Drainage	4,900,000	4,900,000	4,900,000	5,125,400	5,361,168	5,607,782	5,865,740	6,135,564	6,417,800	6,430,787
Marine Structures	0	0	0	0	0	0	0	0	0	0
Parks and Outdoor Rec	13,031,876	13,370,705	13,718,344	14,075,021	14,440,971	14,816,436	15,201,664	15,596,907	16,002,427	0
Public (Metered)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000

d) Lightin g Roads and Footpat hs All Other Assets	19,065, 000	24,222, 000	24,385, 000	23,465, 000	22,116, 000	17,345, 000	24,104, 000	22,572, 000	22,525, 000	0
Total Capital Costs	0	0	0	0	0	0	0	0	0	0
	49,820, 876	58,538, 205	59,611, 844	59,873, 921	59,216, 139	55,724, 218	63,814, 404	63,666, 471	65,051, 829	9,605,7 87

7.2 Bridges

This section of the asset plan details our bridge assets. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the last five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

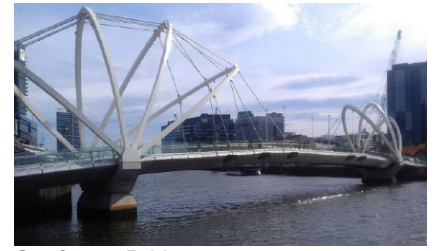
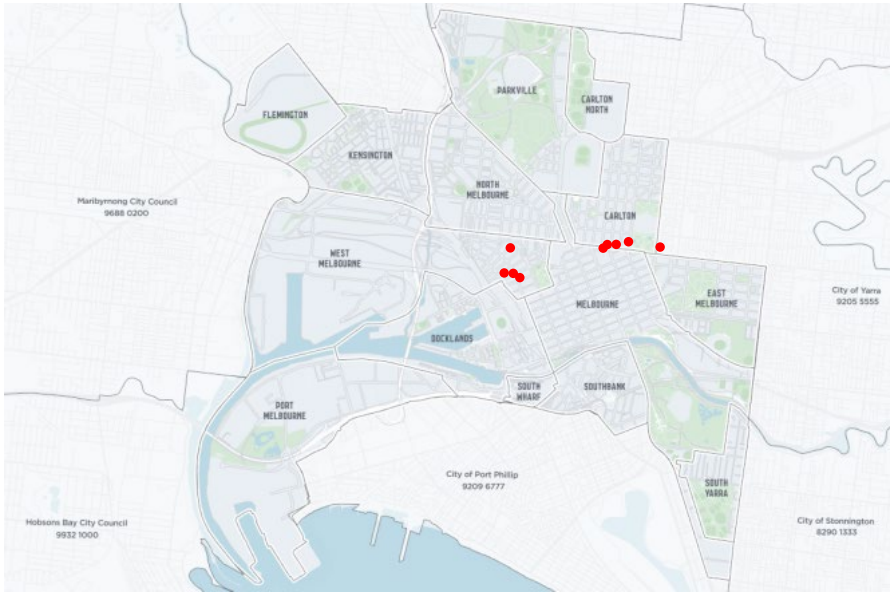
It is important that our asset plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year Financial Plan and determined in the annual Budget.

7.2.1 Profile

Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (years)	Written down value (\$'000)	Replacement value (\$'000)
Transport	<p>Primary functions of bridges are to facilitate movement of vehicles, pedestrians and bicycles into, around and out of the municipality.</p> <p>Our bridges play a critical role in maintaining vital transport corridors across natural and built obstacles such as rivers and rail lines, ensuring key linkages that maintain access and movement while connecting communities.</p>	<p>Community</p> <p>Industry</p> <p>Public transport providers</p>	Major vehicle and pedestrian bridges	17	100–200	\$104,536	\$165,408
			Minor pedestrian structures	6	20–100	\$4,539	\$6,892
Total				23	20–200	\$109,075	\$172,300

We have added a small number of new bridges to our portfolio over the past five years. Most of these were handed over by the Victorian Government in urban renewal areas. There are some plans to build new bridges and widen and upgrade existing bridges as part of Structure Plans for Arden Macaulay and Fishermans Bend.

Asset locations



Seafarers Bridge



Morell Bridge

Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves
<p>Bridges have three key components - sub-structure, wearing surfaces, and support elements including barriers.</p> <p>Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.</p> <p>There are currently no bridge assets identified as at high risk in our Asset Plan.</p>	<p>Level 1 and Level 2 inspections annually (alternative years).</p> <p>Level 3 inspections on as required basis (identified in Level 2 inspections).</p> <p>Routine and minor maintenance as required based on Level 1, 2 or 3 inspections.</p> <p>Routine operations and maintenance cover all works in relation to the bridge structures that are required to be undertaken on a regular basis, for the ongoing operation of the structure. Such works include</p> <ul style="list-style-type: none"> • routine inspections • engineering inspections and assessments • timber decking maintenance • spot repairs of paintwork • graffiti removal • clearing debris and vegetation. 	<p>Every bridge is different in size, material, method of construction, design life and it is not possible to have a single depreciation and degradation curve to represent all bridges. Consultants Pitt & Sherry developed depreciation curves for each of our bridges.</p> <p>Princes Bridge</p>

Heritage: six bridges have a heritage listing including Princes, Morell, Sandridge, Stock Subway, The Avenue Pedestrian Underpass and Queens Bridge.

7.2.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our bridge assets include

Service manager	Asset manager	Exceptions
Director Infrastructure and Assets	Director Infrastructure and Assets Responsible for Council owned bridges and bridges managed under Committee of Management Agreements.	Dynon Road Bridge over Dynon Rd wildlife reserve is the only road bridge within a park reserve. Infrastructure and Assets is the asset manager and Parks and City Greening the service manager.

Service planning	Service operations	Asset planning	Asset design	Asset construction	Asset maintenance	Asset disposal	Asset data	Asset financials
Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets Team Leader Infrastructure Design Infrastructure and Assets	Principal Engineer Infrastructure and Assets Team Leader Infrastructure Design Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Financial Controller Finance and Investment

Collaborators								
Team Leader Transport Strategy Planning and Climate Department of Transport	Team Leader Transport Strategy Planning and Climate Department of Transport	Team Leader Transport Strategy Planning and Climate Department of Transport	Director City Design Studio Department of Transport		Director Procurement and Contract Management	Financial Controller Finance and Investment		

Contractors and consultants								
	Citywide Civil	Pitt and Sherry			Citywide Civil			

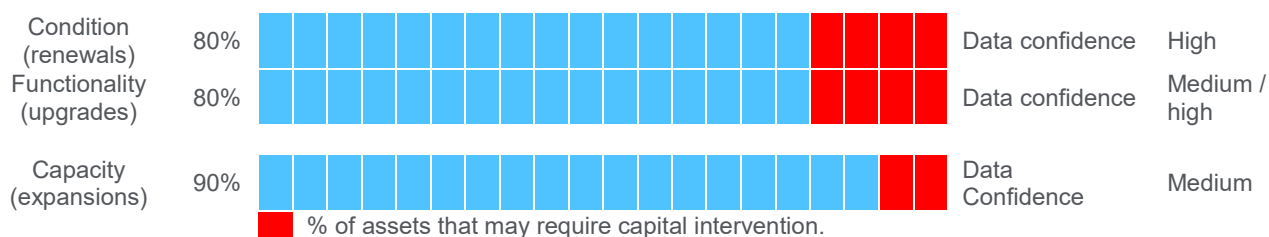
7.2.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our bridge assets:



Criteria for levels of service				
Condition	Functionality			Capacity
Ability to meet service technical requirements	Ability to meet service delivery needs			Ability to meet service demand
	Social and cultural	Economic	Environmental	
Deterioration	Quality and amenity	Timeliness	Energy consumption	Utilisation
Damage	Safety and reliability		Waste generation	Traffic volumes
Distress	Accessibility		Pollution	Traffic flow
Unusual behaviour due to environmental impact, fire or flood.			(Emissions generation)	Load capacity

Overall performance rating

Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.

We currently carry out condition assessments annually for bridge structures as per the VicRoads Roads Structures Inspection Manual 2018. These level 1, 2 and 3 inspections continue to identify opportunities on a small number of our bridges to undertake painting, waterproofing, and masonry repairs.

We need to fund the improved functionality and optimise lane configuration to meet growing traffic demands including greater cycling and pedestrian numbers.

Other than the embedded energy in the construction materials, bridges do not directly generate any waste or pollution or require any material energy.

Due to the variety in age and type of structures, there is significant variation between the structural capacities of the assets in this plan. We need to fund improving volume and load capacity to meet growing traffic demands including greater cycling and pedestrian numbers.

Financial performance

Expenditure	2016–17 Actuals	2017–18 Actuals	2018–19 Actuals	2019–20 Actuals	2020–21 Forecast
Scheduled and reactive maintenance	70,000	70,000	80,000	100,000	311,620
Depreciation	1,427,278	1,609,268	1,789,788	1,717,112	1,791,890
Maintenance works	317,750	317,750	325,000	308,000	375,650
Operating expenditure Subtotal:	1,815,028	1,997,018	2,194,788	1,817,112	2,479,160
Renewal works	323,335	518,801	974,789	526,750	276,266
Upgrade works	518,558	312,640	0		
Expansion works	0	0	0		
New works	0	0	0		1,297,108
Capital expenditure Subtotal:	841,893	831,441	974,789	526,750	1,573,374
Expenditure totals	2,656,921	2,828,459	3,169,577	2,343,862	4,052,534

Renewal and upgrade as a % of depreciation	59%	52%	54%	30.7%	15.4%
Income	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
Fees and charges	0	0	0	0	0
Operating grants	0	0	0	0	0
Total operating income	0	0	0	0	0
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Total capital income	0	0	0	0	0
Total income (cost recovery)	0	0	0	0	0
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%

7.2.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>1. Economy of the future Building a strong and adaptive city economy and a sustainable future city.</p> <ul style="list-style-type: none"> An efficient and affordable transport network is a basic element of an accessible city and a strong economy. <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <ul style="list-style-type: none"> The city is made up of safe and accessible places and services where everyone can come together. <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <ul style="list-style-type: none"> The City of Melbourne commits to renewable energy and circular economies to ensure Melbourne remains liveable for future generations. 	<p>The increase in infrastructure needs to support a growing population has been a major consideration in the development of the 10-year Financial Plan. Over the next decade the plan identifies the need to invest \$1.4 billion in infrastructure to ensure Melbourne remains a global liveable city.</p> <p>The plan identifies a step change investment in three key areas to support the growing population, maintain liveability and renew the Queen Victoria Market for future generations. In addition, it is equally important to ensure existing assets and infrastructure is maintained at appropriate levels to service the community's needs.</p> <p>We will</p> <ul style="list-style-type: none"> Implement an asset management strategy to optimise spend on renewal of existing assets. Prioritise any new identified capital investment within available resources. Access borrowings to fund infrastructure that will generate an appropriate return or 	<p>The Council Plan preserves and progresses the city in six strategic objectives</p> <p>1. Economy of the future Building a strong and adaptive city economy and a sustainable future city.</p> <p>2. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city.</p> <p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <p>6. Aboriginal Melbourne Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.</p>	<ul style="list-style-type: none"> Asset Management Strategy Transport Strategy 2030 Climate Change Adaptation Strategy Various Master Plans such as City Road Master Plan Arden Macaulay Plan Community Infrastructure Plans

prevents rapidly increasing costs.

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations <input checked="" type="checkbox"/> Climate and biodiversity emergency <input checked="" type="checkbox"/> A changing economy and workforce <input checked="" type="checkbox"/> Disruptive technology and digital innovation Financial constraints and long-term sustainability	<p>The performance and future demand profiles indicate that we will need to continue to allocate funding towards improving the safety and accessibility of our bridges. This funding will improve functionality and optimise lane configuration and load capacity to meet growing traffic demands including greater cycling and pedestrian numbers.</p> <p>Current funding bids for bridge works include requests for renewal funding for masonry rehabilitation on Princes Bridge and waterproof member installation on Sandridge Bridge. Other major forecasted expenditure includes installing anti-throw screens on La Trobe Street Bridge and widening of Macaulay Road Bridge in 2020–21 repainting Queens Street Bridge in 2022–24 and strengthening work on the Sims Street Bridge in 2024–25.</p>	<p>If funding is not made available and these renewal works are delayed, there is a risk that the rate of deterioration may increase, causing major damage. Significant damage would require higher repair costs in future years.</p>

7.2.5 Future investments

Future investments	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Depreciation	1,767,000	1,812,000	1,860,000	1,908,000	1,958,000	2,008,000	2,061,000	2,061,000	2,061,000	2,061,000
Maintenance works	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Operating expenditure subtotal	2,157,000	2,212,000	2,260,000	2,308,000	2,358,000	2,408,000	2,461,000	2,461,000	2,461,000	2,461,000
Renewal works	1,000,000	3,663,500	3,663,500	3,663,500	3,125,000	3,125,000	3,125,000	3,125,000	3,125,000	3,125,000
Upgrade works	0	0	0	0	0	0	650,000	0	0	0
Expansion works	0	0	0	0	0	0	0	0	0	0
New works	0	0	0	0	0	0	0	0	0	0
Capital expenditure subtotal	1,000,000	3,663,500	3,663,500	3,663,500	3,125,000	3,125,000	3,775,000	3,125,000	3,125,000	3,125,000
Total expenditure	3,157,000	5,875,500	5,923,500	5,971,500	5,483,000	5,533,000	6,236,000	5,586,000	5,586,000	5,586,000
Renewal and upgrade as a % of depreciation	57%	202%	197%	192%	160%	156%	183%	152%	152%	152%

Future returns	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
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Fees and charges	0	0	0	0	0	0	0	0	0	0
Operating grants	0	0	0	0	0	0	0	0	0	0
Total operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	0	0	0	0	0	0	0	0	0	0
Total capital income	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0	0	0
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Webb Bridge All bridges All bridges	Repainting steel elements Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	1,000,000 55,000 300,000	2021–22
Princes Bridge All bridges All bridges	Stone conservation works (Stage 1) Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	3,663,000 55,000 300,000	2022–23
Princes Bridge All bridges All bridges	Stone conservation works (Stage 2) Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	3,663,000 55,000 300,000	2023–24
Princes Bridge All bridges All bridges	Stone conservation works (Stage 3) Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	3,663,000 55,000 300,000	2024–25
Queens Bridge All bridges All bridges	Repainting steel elements (Stage 1) Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	3,125,000 60,000 300,000	2025–26
Queens Bridge All bridges All bridges	Repainting steel elements (Stage 2) Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Renewal maintenance Maintenance	3,125,000 60,000 300,000	2026–27
Sims Street Bridge All bridges All bridges	Strengthening for heavy loads Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Upgrade maintenance Maintenance	650,000 60,000 300,000	2027–28
All bridges	Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Maintenance	300,000	2028–29
All bridges	Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Maintenance	300,000	2029–30
All bridges	Level 1 and 2 inspection / cathodic protection monitoring Minor bridge maintenance works	Maintenance	300,000	2030–31

7.3 Buildings

This section of the Asset Plan details critical information about our building assets, including a profile of their support services and their attributes. We will also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the 10-year financial plan and determined in the annual budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation.

7.3.1 Profile

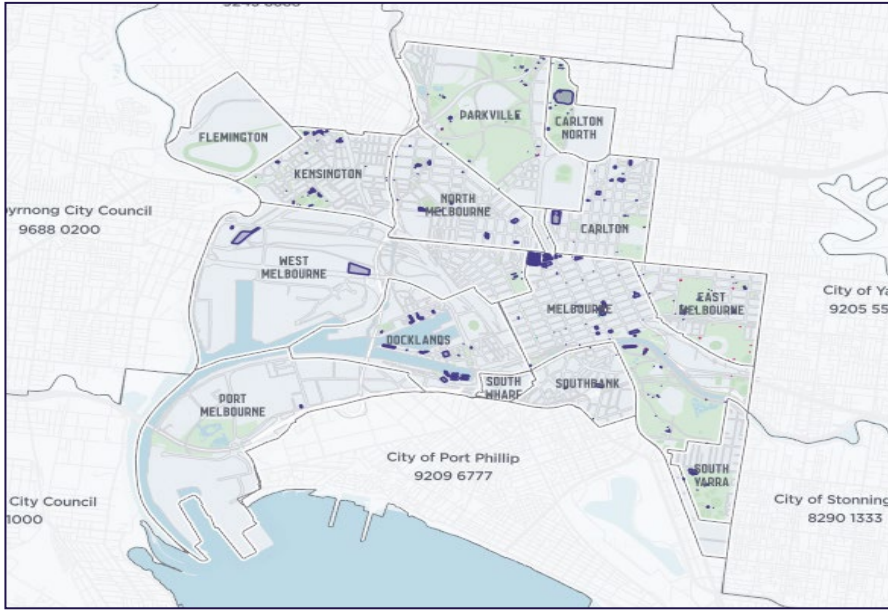
Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (Years)	Written down value (\$'000)	Replacement value (\$'000)
Civic, community and recreation	Council's buildings provide a way to service the community. More than 1 million people are expected to enter the city daily by 2022, including workers, visitors and residents. That number is predicted to grow to 1.4 million by 2036. Council's buildings will need to facilitate the daily movements of people and establish highly liveable places through the early delivery of community facilities.	Community City of Melbourne staff	Aquatic and leisure	4	40–100	26,099,935	59,147,146
			Community	30	40–100	34,748,222	60,251,997
			Corporate	36	40–100	188,940,532	491,902,134
			Libraries and arts	10	40–100	57,386,064	116,404,687
			Public toilets	59	40–100	6,285,620	11,180,163
			Special purpose	11	40–100	46,957,061	18,170,236
			Sports and recreation	44	40–100	25,588,489	32,605,947
			Other structures	83	40–100	2,959,397	8,316,088
Totals				277	40–100	388,965,320	797,978,398

Note - Useful life for buildings is 40 years for most buildings and 100 for heritage buildings.

Asset locations



Council House 2 (CH2)



Melbourne City Baths

Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves
<p>Property assets are predominantly made up of buildings, small structures and building components. The definition of a building is a structure with a fixed and permanent foundation or footing, roof and walls connected to form an enclosed or partly enclosed space, mostly above ground and permanently at the site. Building components are a constituent part of a building (or other built asset) which is manufactured as an independent unit, subsystem or subassembly, which can be joined or blended with other elements to form a more complex item. Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequence.</p>	<p>Building maintenance Building cleaning Building services Ground play equipment General maintenance Furniture removal</p> <p>Frequent asset inspections.</p>	<p>Depreciation is calculated on a straight-line method, with differing rates depending on the classification of a building, i.e. heritage, investment, lease improvement or non-specialised or specialised building.</p> <p>Current predictive modelling and curves are based on a RMIT modelling using the Markov deterioration model.</p>

7.3.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our building assets include

Service manager	Asset manager	Exceptions
<p>Director Property</p>	<p>Director Property Responsible for Council-owned assets and assets managed under Committee of Management Agreements.</p>	

Service planning	Service operations	Asset planning	Asset design	Asset construction	Asset maintenance	Asset disposal	Asset data	Asset financials
Director Property	Director Property Director Community Services Director Creative City	Director Property	Director Property	Director City Projects Director Property	Director Property	Director City Projects Director Infrastructure and Assets	Director Property	Financial Controller Finance and Investment Director Property
Collaborators								
Property Creative City Community and City Services	Property Creative City Community and City Services	Property	City Design Property Key stakeholders	Capital Works	Property Stakeholders	Property City Projects Infrastructure and Assets	Property	Finance Property
Contractors and consultants								
BGIS GJK								

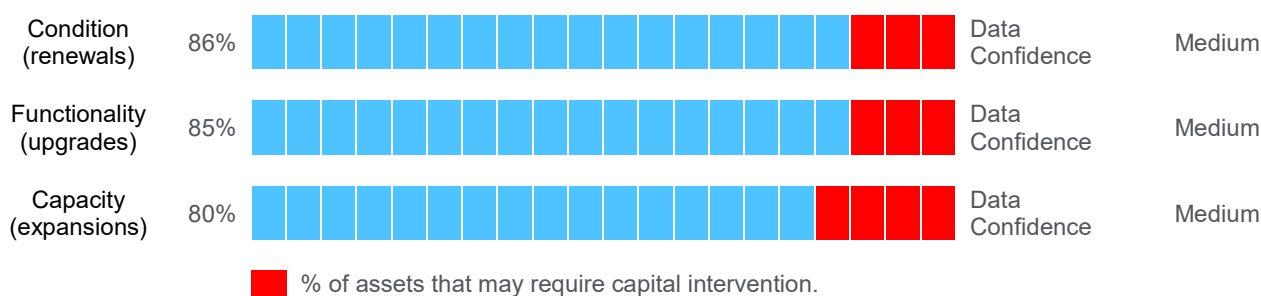
7.3.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our building assets



Criteria for levels of service		
Condition	Functionality	Capacity
Ability to meet service technical requirements	Ability to meet service delivery needs	Ability to meet service demand
	Social and cultural	Economic
		Environmental

Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood.	Quality and amenity Safety and reliability Accessibility	Timeliness	Energy consumption Waste generation Pollution (emissions generation)	Utilisation Traffic volumes Traffic flow Load capacity
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Overall performance rating

Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.

Condition assessment of assets is carried out on a cyclical basis over a two-year period. Annual audits are undertaken to verify all life cycle condition reports. A combination of internal and external condition reports is used depending on type of asset class and technical requirements.	The buildings are fit for purpose for the service being provided. There are eight property categories which deliver different functions with various applicable levels of service. Each category and level of service has a matrix of asset provision.	Environmental strategies and contracted requirements for service provider to have environmental management plans Energy and Water Management Plans.	Facility available when required. Percentage of use of Council facilities over 24-hour period. Percentage of facilities that have a wait list such as Carlton Baths, which has a waiting list for swimming lessons.
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Financial performance

Expenditure	2016–17	2017–18	2018–19	2019–20	2020–21
	Actual	Actual	Actual	Actual	Actual
Scheduled and reactive maintenance	5,073,301	5,240,516	5,514,614	5,440,636	5,426,910
Depreciation	8,672,728	8,488,392	9,100,125	9,329,034	9,728,084
Maintenance works	881,086	1,002,780	1,080,608	1,619,331	1,300,915
Operating expenditure	14,627,115	14,731,688	15,695,347	16,389,001	16,455,909
Renewal works	5,666,831	7,979,536	8,978,111	13,401,421	12,865,568
Upgrade works	0	0	0	0	0
Expansion works	0	0	0	0	0
New works	1,162,178	1,293,374	1,180,663	659,193	0
Capital expenditure	6,829,009	9,272,910	10,158,774	14,060,614	12,865,568
Totals	21,456,124	24,004,598	25,854,121	30,449,615	29,321,477
Renewal and upgrade as a % of depreciation	65%	94%	99%	144%	132%

Income	2016–7	2017–18	2018–19	2019–20	2020–21
	Actual	Actual	Actual	Actual	Actual
Fees and charges	10,389,799	7,635,604	5,524,296	6,342,419	4,159,603
Operating grants	0	0	0	0	0
Operating income	10,389,799	7,635,604	5,524,296	6,342,419	4,159,603
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Capital income	0	0	0	0	0
Totals	10,389,799	7,635,604	5,524,296	6,342,419	4,159,603

Income as a % of expenditure (cost recovery)	48%	32%	21%	21%	14%
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7.3.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>2. Melbourne’s unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city.</p> <ul style="list-style-type: none"> Melbourne’s unique streetscapes, open and green spaces, built environment and neighbourhood character are protected and enhanced as the city grows and evolves. <p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <ul style="list-style-type: none"> The city’s places and spaces bring people together and create spaces where they feel supported and can foster a sense of belonging. All people who work in, live or visit the city can do so, and feel safe, at any time of the day or night. The City of Melbourne’s policies, spaces and services support the community’s physical health and mental wellbeing for the benefit of all. <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <ul style="list-style-type: none"> Our city remains vibrant and diverse by being affordable for everyone. The city is made up of safe and accessible places and services where everyone can come together. <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <ul style="list-style-type: none"> Planning provisions guide development in the city and ensure that our neighbourhoods and 	<p>Rates Strategy Property Strategy. Please note that years 2025–30 for new works will not include any strategic decisions on buildings. Also the figures exclude Queen Victoria Market precinct.</p>	<p>The Council Plan preserves and progresses the city in six strategic objectives</p> <ol style="list-style-type: none"> Economy of the future Building a strong and adaptive city economy and a sustainable future city. Melbourne’s unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life. Access and affordability Reducing inequality by ensuring access to housing, core services and information. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change. Aboriginal Melbourne Ensuring that First Peoples’ culture, lore, knowledge, and heritage enrich the city’s growth and development. 	<p>Identify opportunities for knowledge sharing with other branches and minimise duplication.</p> <p>Identify minimum standards for assessing asset capacity and functionality at City of Melbourne and identify tools for that data collection.</p> <p>Service Managers to set priorities and timelines around a data collection plan that will support their service planning and delivery.</p>

buildings are built to the highest quality and environmental standard.

- The City of Melbourne commits to renewable energy and circular economies to ensure Melbourne remains liveable for future generations.

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations	<p>Seven new growth areas have been identified across metropolitan Melbourne.</p> <p>The impact to the City of Melbourne's building assets is significant. This increase in demand for services and infrastructure comes at a time when capacity within the municipality is limited.</p> <p>The cost of inner-city land and development as well as the scarce availability of unused public land and limited acquisition opportunities must be factored into the plans for these growth areas.</p>	<p>Focus must be given to upgrade and maintenance of building components on levels 1 and 2, if funding is not provided, Council's ability to maintain safety and provide levels of service required by the community will be at risk.</p> <p>Ability to adjust and retrofit buildings to meet minimum OH&S requirements such as disability access requirements must be considered.</p>
<input checked="" type="checkbox"/> Climate and biodiversity emergency	<p>It will not be adequate for Council to simply expand its asset building base to match the increasing population of the area. The changing service expectations of the community need to be taken into consideration. These changes in demographics impact on the design, construction and maintenance of building assets.</p>	<p>The City of Melbourne's existing building assets will require deliberate staged renewal funding as the volume of daily users steadily increase putting stress on service provision and Council budgets.</p>
<input checked="" type="checkbox"/> A changing economy and workforce	<p>The seven factors listed as future challenges will all have an impact on future iterations of the Asset Plan for Council buildings.</p>	<p>Plans are in place to accommodate the forecasted population and the necessary infrastructure to deliver community services within these new hubs, but ongoing maintenance costs will not be fully known until built.</p>
<input checked="" type="checkbox"/> Disruptive technology and digital innovation	<p>Condition audits of buildings and customer expectations of buildings performance need to be a high priority of the Plan for Council buildings.</p>	<p>City Analytics has commenced modelling these changes in demographics and impacts on assets within the municipality, including Council-owned buildings. The outcomes will be included in future iterations of this Asset Plan.</p>
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.3.5 Future investments

Future investments	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	5,461,164	5,570,387	5,681,795	5,795,430	5,911,339	6,029,566	6,150,157	6,273,160	6,398,624	6,526,596
Depreciation	10,229,000	10,600,108	12,117,424	12,846,753	13,111,895	13,312,303	13,440,342	13,570,576	13,703,049	13,977,109
Maintenance works	1,256,000	1,314,000	1,375,000	1,439,000	1,506,000	1,576,000	1,650,000	1,726,000	1,805,396	1,841,503
Operating expenditure	16,946,164	17,484,955	19,174,219	20,081,183	20,529,234	20,917,869	21,240,499	21,569,736	21,907,069	22,345,208
Renewal works	6,430,000	6,430,000	6,430,000	6,430,000	6,558,600	6,689,772	6,823,567	6,960,038	7,099,239	7,241,224
Upgrade works	0	0	0	0	0	0	0	0	0	0
Expansion works	0	0	0	0	0	0	0	0	0	0
New works	13,472,065	3,000,000	13,400,000	10,400,000	500,000	510,000	520,200	530,604	541,216	552,040

Capital expenditure	19,902,065	9,430,000	19,830,000	16,830,000	7,058,600	7,199,172	7,343,767	7,490,642	7,640,455	7,793,264
Totals	36,848,229	26,914,495	39,004,219	36,911,183	27,587,834	28,117,041	28,584,266	29,060,378	29,547,524	30,138,472
Renewal and upgrade as a % of depreciation	63%	61%	53%	51%	50%	51%	51%	52%	52%	52%

Future Income	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Fees and charges	5,107,000	6,054,000	6,737,000	6,906,000	7,001,000	7,097,000	7,195,000	7,295,000	7,395,000	7,497,000
Operating grants	0	0	0	0	0	0	0	0	0	0
Operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	0	0	0	0	0	0	0	0	0	0
Capital income	0	0	0	0	0	0	0	0	0	0
Totals	5,107,000	6,054,000	6,737,000	6,906,000	7,001,000	7,097,000	7,195,000	7,295,000	7,395,000	7,497,000
Total income (cost recovery)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Major investments through our Council Works program include

Ten-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Various buildings across the building portfolio	Life condition audit reports across various sites	Renewal maintenance	6,430,000	2021–22
	Maintenance Items across portfolio	New	1,256,000	
	Kensington Community Rec Centre	New	10,216,000	
	Redevelopment	New	356,065	
	Make a room – 602 Little Bourke Street	New	400,000	
	Sustainability new works across various sites	New	1,000,000	
	City Library	New	500,000	
Various buildings across the building portfolio	North Community Centre Redevelopment	New	1,000,000	2022–23
	Various library popups			
	Life condition audit reports across various sites	Renewal maintenance	6,430,000	
	Maintenance items across portfolio	New	1,314,000	
Various buildings across the building portfolio	Kensington Community Recreation Centre	New	23,784,000	2023–24
	Redevelopment	New	400,000	
	Sustainability new works across various sites			
	Life condition audit reports across various sites	Renewal maintenance	6,430,000	
	Maintenance items across portfolio	New	1,375,000	
Kensington Community Rec Centre	Redevelopment	New	8,000,000	
	Sustainability new works across various sites	New	400,000	
	North Community Centre Redevelopment	New	5,000,000	

Various buildings across the building portfolio	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites North Community Centre Redevelopment	Renewal maintenance New	6,430,000 1,439,000 400,000 10,000,000	2024– 25
Various buildings across the building portfolio	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites	Renewal maintenance New	6,558,000 1,506,000 500,000	2025– 26
Various buildings across the building portfolio	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites	Renewal maintenance New	6,689,772 1,576,000 510,000	2026– 27
Various buildings across the building portfolio	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites	Renewal maintenance New	6,823,567 1,650,000 520,200	2027– 28
Various buildings across the building portfolio	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites	Renewal maintenance New	6,960,038 1,726,000 530,604	2028– 29
Various buildings across the building portfolio.	Life condition audit reports across various sites Maintenance items across portfolio Sustainability new works across various sites	Renewal maintenance New	7,099,239 1,805,396 541,216	2029– 30

7.4 Drainage

This section of the asset plan details our drainage assets. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

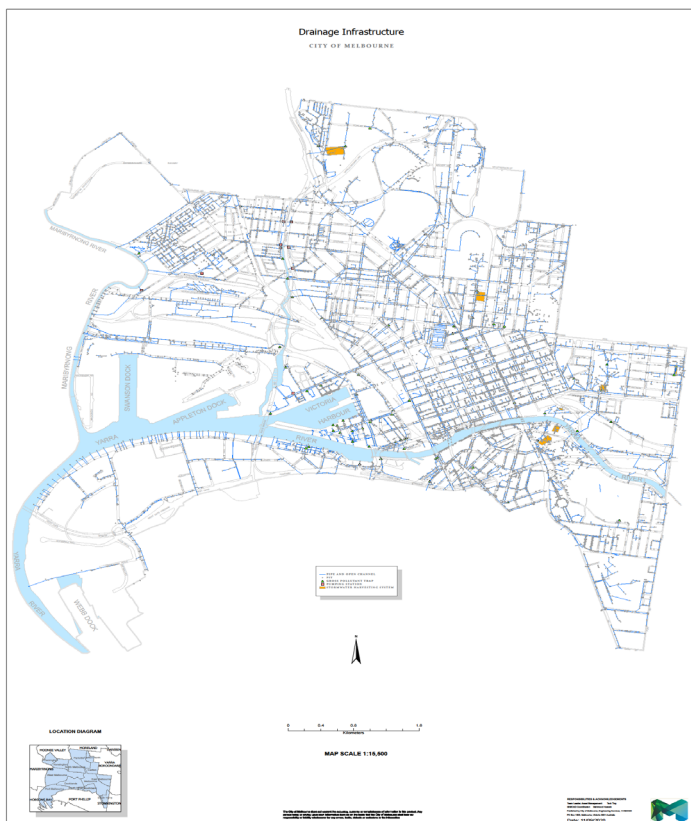
It is important that our asset plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year financial plan and determined in the annual budget.

7.4.1 Profile

Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (Years)	Written down value (\$'000)	Replacement value (\$'000)
Stormwater	Primary functions of drainage infrastructure are to convey stormwater runoff, stormwater harvesting and flood mitigation within the municipality. Our drainage infrastructure plays a critical role in flood mitigation and maintaining a good level of service to the community.	Community Industry Public transport providers	Pipe and open channel	299,954	173.3	\$108,630,411	\$108,630,411
			Pits	14,286	90	\$17,858,251	\$17,858,251
			Pumping stations	8	90	\$1,663,499	\$1,663,499
			Gross pollutant traps	56	90	\$6,455,228	\$6,455,228
			Stormwater harvesting systems	8	40	\$2,434,732	\$2,434,732
Totals				314,312	40–180	\$137,042,122	\$137,042,122

Expansion rate - There are number of pits / pipes constructed annually as part of the Council drainage capital works program, private development works, Victorian Government projects such as Metro Tunnel project and Yarra Trams projects. No other works are planned for assets in the above table other than upgrades to Stubbs Street and Clarendon pump stations.

Asset locations



Installation works



Stormwater harvesting at Queen Victoria Market

Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves										
<p>Key components</p> <ul style="list-style-type: none"> • Pipe and open channel – pipe / open channel. • Pit – pit chamber, pit lid, inlet structure • Pumping stations – pump well, pump, control system, penstock • Gross pollutant traps – chamber, pit lid, net • Stormwater harvesting systems – inlet structure, pump, storage tanks, control unit. <p>Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.</p> <p>Following are some high-risk projects identified in asset management plan</p> <ol style="list-style-type: none"> 1. Dynon Road canal 1.2km – heavily contaminated sediments, expensive and hazardous to manage. 2. Hobsons and Kensington Road raising low-lying area subjected to frequent flooding. 3. Moonee Ponds Bridge crossings -lower than 1 in 100-year flood level. 	<p>The Drainage Surveillance Inspections are undertaken by council's in-house surveillance officers using Field Services Lighting as the mobility app to capture all inspection requirements.</p> <p>Inspections shall be carried out at these frequencies</p> <table border="1"> <thead> <tr> <th>Category</th> <th>frequency</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>monthly</td> </tr> <tr> <td>B</td> <td>3 monthly</td> </tr> <tr> <td>C</td> <td>6 monthly</td> </tr> <tr> <td>D</td> <td>Yearly</td> </tr> </tbody> </table> <p>There are few pipes outside of the road networks. These assets are inspected during the regular inspections under the CIS Contract for nearby streets.</p> <p>Litter traps and gross pollutant traps inspections are in accordance with Council's Litter Trap Inspection and Cleaning Procedure document and with manufacturer's manuals.</p> <p>Pump Stations Inspections are in accordance with manufacturer's manuals.</p>	Category	frequency	A	monthly	B	3 monthly	C	6 monthly	D	Yearly	<p>Depreciation is based on the condition rating and straight-line method. Unique degradation curves developed by Moloney Asset Management Systems.</p>
Category	frequency											
A	monthly											
B	3 monthly											
C	6 monthly											
D	Yearly											

7.4.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our drainage assets include

Service Manager		Asset Manager				Exceptions		
Director Infrastructure and Assets		Director Infrastructure and Assets Responsible for Council owned bridges and bridges managed under Committee of Management Agreements.				Storm water pits / pipes in the parks and Storm water harvesting systems managed by Parks and City Greening		
Service Planning	Service Operations	Asset Planning	Asset Design	Asset Construction	Asset Maintenance	Asset Disposal	Asset Data	Asset Financials
Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets Team Leader Infrastructure Design Infrastructure and Assets	Principal Engineer Infrastructure and Assets Team Leader Infrastructure Design Infrastructure and Assets	Principal Engineer Infrastructure and Assets Team Leader Civil Infrastructure City Projects	Principal Engineer Infrastructure and Assets	Principal Engineer Transport and Parking Infrastructure and Assets Team Leader Asset Management Infrastructure and Assets	Financial Controller Finance and Investment Asset Accountant Finance and Investment
Collaborators								
Team Leader Transport Strategy Planning and Climate	Team Leader Transport Strategy Planning and Climate	Team Leader Transport Strategy Planning and Climate	Director City Design Studio Department of Transport		Director Procurement and Contract Management	Financial Controller Finance and Investment		
Contractors and consultants								
	Citywide Civil	Pitt and Sherry			Citywide Civil			

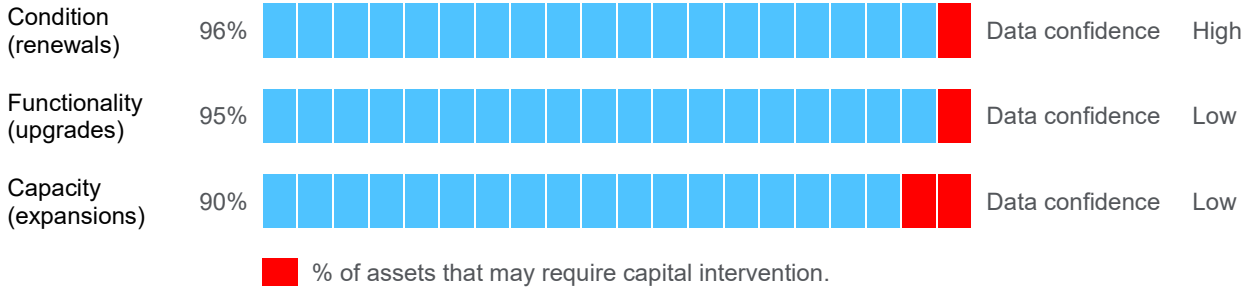
7.4.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our drainage assets:



Criteria for levels of service				
Condition Ability to meet service technical requirements	Functionality Ability to meet service technical requirements			Capacity Ability to meet service technical requirements
	Social and cultural	Economic	Environmental	
Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood	Blockage Sediment deposit Tree root or other service intrusion Back water effect from Melbourne water main drains, sea, rivers Unable to meet minimum slopes (low lying areas)	Timeliness	Waste generation Stormwater pollution Stormwater reuse Stormwater treatment	Utilisation Pipe conveyance capacity against recurrent interval Load bearing capacity

Overall performance rating				
Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.				
City of Melbourne-assessed drainage network condition for 40% of the pits and pipes by October 2020.	The performance and future demand profiles indicate that there is a need to continue to allocate funding towards improving the drainage assets to achieve high flood protection level and to have proper maintenance in place.	Due to the variety in age and pipe sizes under our ownership, there is significant consideration of structural and conveyance capacities of the assets in this plan. The performance and future demand profiles indicate that there is a need to allocate funding towards improving aged assets and capacity to meet flood mitigation.	Removal of collected waste in pits/pipes under maintenance program. No polluted water discharge reported.	City of Melbourne-assessed drainage network condition for 40% of the pits and pipes by October 2020.
Condition assessment for the rest of the pits and pipes will be completed within the next two years.			Stormwater harvesting systems and water-sensitive urban design structures greatly help to meet sustainability targets.	Condition assessment for the rest of the pits and pipes will be completed within the next two years.

Financial performance

Expenditure	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
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Scheduled and reactive maintenance	350,000	350,000	350,000	366,100	382,941
Depreciation	1,166,030	1,262,441	1,324,065	1,402,663	1,430,716
Maintenance works	1,675,000	1,675,000	55,000	1,752,909	1,833,543
Operating expenditure	3,191,030	14,657,441	1,729,065	3,521,672	3,647,716
Renewal works	4,488,000	4,856,000	4,257,444	4,000,000	3,870,000
Upgrade works	3,000	147,000	0	0	0
Expansion works	0	0	0	0	0
New works	758,000	3,501,000	191,329	2,310,000	310,000
Capital expenditure	5,249,000	8,504,000	4,448,773	5,310,000	4,180,000
Totals	8,440,030	23,161,441	6,177,838	9,831,672	7,827,200
Renewal and upgrade as a % of depreciation	385%	396%	322%	285%	270%

Income	2016–17	2017–18	2018–19	2019–20	2020–21
	Actual	Actual	Actual	Actual	Actual
Fees and charges	0	0	0	0	0
Operating grants	0	0	0	0	0
Operating income	0	0	0	0	0
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Capital income	0	0	0	0	0
Totals	0	0	0	0	0
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%

7.4.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <ul style="list-style-type: none"> All people who work in, live or visit the city can do so, and feel safe, at any time of the day or night. 	<p>The increase in infrastructure needs to support a growing population has been a major consideration in the development of the 10-year Financial Plan. Over the next decade the plan identifies the need to invest \$1.4 billion in infrastructure to ensure Melbourne remains a global liveable city.</p>	<p>The Council Plan preserves and progresses the city in six strategic objectives</p> <ol style="list-style-type: none"> Economy of the future Building a strong and adaptive city economy and a sustainable future city. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life. Access and affordability Reducing inequality by ensuring access to housing, core services and information. Climate and biodiversity emergency 	<ul style="list-style-type: none"> Asset Management Strategy Transport Strategy 2030 Climate Change Adaptation Strategy Municipal Integrated Water Management Plan Total Watermark – City As A catchment Melbourne Flood Management Plan Water Sensitive Urban Design Guidelines – an Initiative of the Inner Melbourne Action Plan Climate Change Adaptation Strategy – Risk Assessment and Action Plan Climate Change Mitigation Strategy to 2050 Climate Change Adaptation Strategy Refresh (2017)
<p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <ul style="list-style-type: none"> The city is made up of safe and accessible places and services where everyone can come together. 	<p>The plan identifies a step change investment in three key areas to support the growing population, maintain liveability and renew the Queen Victoria Market for future generations. In addition to this, it is equally important to ensure existing assets and infrastructure is maintained at appropriate levels to service the community's needs.</p>	<p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <ul style="list-style-type: none"> The city continues to strengthen its dense 	

network of green streets and spaces so that plants and animals can thrive, and communities can come together.

Implement an asset management strategy to optimise spend on renewal of existing assets. Prioritise any new identified capital investment within available resources. Access borrowings to fund infrastructure that will generate an appropriate return or prevents rapidly increasing costs.

Acting immediately to reduce our emissions and waste and adapt to climate change. 6. Aboriginal Melbourne Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.

- Southbank Stormwater Infrastructure Assessment Final Report
- Community Infrastructure Plans
- Arden Macaulay Structure Plan 2012
- Bicycle Plan 2016
- City Road Master Plan 2016
- City North Structure Plan 2012

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations	<p>The performance and future demand profiles indicate that we will need to continue to allocate funding towards improving the standard, safety and accessibility of our marine structures to improve functionality and capacity to meet growing water traffic demands, pedestrian numbers and in some locations, cyclists.</p> <p>Detailed underdeck and underwater inspections need to be undertaken by 2022.</p> <p>Results of underdeck and underwater condition survey will scope the next 10-year renewal and upgrade demand which will be allocated in long-term financial plan.</p>	<p>Without adequate capital investment it is likely that the drainage infrastructure will deteriorate causing a drop in community satisfaction, and affecting to safety, amenity, liveability and productivity of the community. There is a risk that it may increase the rate of deterioration causing major damage which requires higher repair cost in future years and more frequent flooding.</p>
<input checked="" type="checkbox"/> Climate and biodiversity emergency		
A changing economy and workforce		
Disruptive technology and digital innovation		
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.4.5 Future investments

Future Investments	Bud get 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	400,556	418,981	438,255	458,414	479,501	501,558	524,630	548,763	574,006	575,172
Depreciation	1,459,330	1,488,517	1,518,287	1,548,653	1,579,626	1,611,218	1,643,443	1,676,312	1,709,838	1,744,035
Maintenance works	1,917,886	2,006,108	2,098,389	2,194,915	2,295,881	2,401,492	2,511,960	2,627,511	2,748,369	2,753,916
Operating expenditure	3,777,772	3,913,606	4,054,931	4,201,982	4,355,008	4,514,268	4,680,033	4,852,586	5,032,213	5,073,123
Renewal works	4,900,000	4,900,000	4,900,000	5,125,400	5,361,168	5,607,782	5,865,740	6,135,564	6,417,800	6,430,787
Upgrade works	2,500,000	3,000,000	2,000,000	3,000,000	1,000,000	2,000,000	0	0	0	0

Expansion works	0	0	0	0	0	0	0	0	0	0
New works	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	310,000	310,000	310,000	310,000	310,000
Capital expenditure	9,900,000	10,400,000	9,400,000	10,625,400	8,861,168	7,917,782	6,175,740	6,445,564	6,727,800	6,740,787
Totals	13,677,772	14,313,606	13,454,931	14,827,382	13,216,176	12,432,050	10,855,773	11,298,150	11,760,013	11,813,910
Renewal and upgrade as a % of depreciation	507%	531%	454%	525%	403%	472%	357%	366%	375%	369%

Future returns	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Fees and charges	0	0	0	0	0	0	0	0	0	0
Operating grants	0	0	0	0	0	0	0	0	0	0
Total operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	0	0	0	0	0	0	0	0	0	0
Total capital income	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0	0	0
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Major investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Leicester Street from 100 Leicester Street to Queensberry Street	Flood mitigation renewal	Renewal	200,000	2021–22
Anderson Street – construction of drain	New drainage	New	400,000	
Kensington Road drainage works	New drainage	New	400,000	
Adderley Street / Dudley Street	Drainage upgrade	Upgrade	250,000	
New Pump Station Installation at Whiteman Street / Clarendon Street	New flood mitigation	New	250,000	2022–23
High-capacity inlet pits Arden Macaulay	Drainage upgrade	Upgrade	20,000	
Gravity pipes upgrade Arden Macaulay	Drainage upgrade	Upgrade	440,000	2023–24
Therry Street from Elizabeth to Victoria streets Melbourne CBD (Elizabeth Street Integrated Water Catchment Management Plan)	New drainage	New	700,000	
Lonsdale Street from Swanston Street to Exhibition Street Melbourne CBD (Elizabeth Street Integrated Water Catchment Management Plan)	Drainage upgrade	Upgrade	700,000	

Pressure pipes Arden Macaulay	Drainage upgrade	Upgrade	770,000	2024–25
Pump stations upgrade Arden Macaulay -Stubbs Street	Drainage upgrade	Upgrade	400,000	
Primary School 2	Drainage renewal	Renewal	400,000	
Collins St (south side) from Swanston Street to Elizabeth Street	Drainage upgrade	Upgrade	350,000	
Pump stations upgrade Arden Macaulay – Arden Primary School 1				
Pump stations upgrade Arden Macaulay – Bent Street Primary School	Drainage upgrade	Upgrade	300,000	2026–27
Pipe upgrades Fishermans Bend	Stormwater management	Upgrade	7,000,000	
Pipe upgrades Fishermans Bend	Stormwater management	Upgrade	7,000,000	2027–28
New pump stations Fishermans Bend	New	New	2,000,000	
Pipe upgrades Fishermans Bend	Stormwater management	Upgrade	7,000,000	2028–29
New pump stations Fishermans Bend	New	New	2,000,000	
Pipe upgrades Fishermans Bend	Stormwater management	Upgrade	7,000,000	2029–30
Flood levees along Lorimer Street and West Gate Freeway Fishermans Bend	Drainage upgrade	Upgrade	3,100,000	
New pump stations Fishermans Bend	New	New	3,800,000	
New pump stations Fishermans Bend	New	New	3,000,000	2030–31

7.5 Marine structures

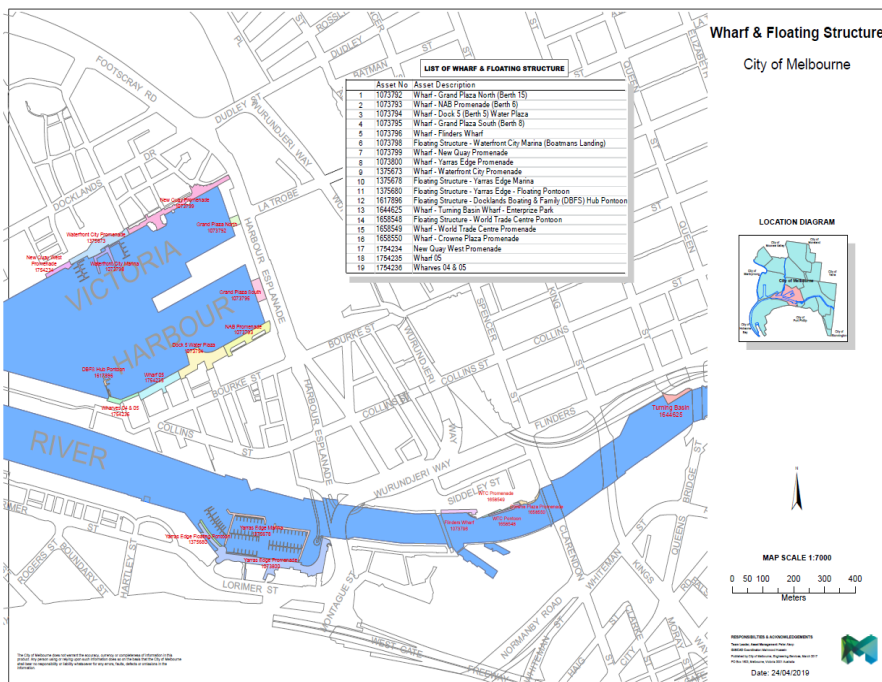
This section of the asset plan details our marine assets. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

It is important that our asset plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year Financial Plan and determined in the annual Budget.

7.5.1 Profile

Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (Years)	Written down value (\$'000)	Replacement value (\$'000)
Transport and recreation	Marine structures are a key component of the infrastructure network in the Docklands area and along Yarra River. They provide access and amenity for	Community Hospitality and tourism industry Maritime users (private and commercial)	Wharves	14	50–100	\$104,536	\$165,408

	<p>private and commercial vessels, bicycle and pedestrian traffic as well as providing open spaces for public use and events. All the structures are owned by the Victorian Government and the City of Melbourne is responsible for maintaining these structures under committee of management agreements.</p>	<p>Floating structures</p>	<p>5</p>	<p>50–100</p>	<p>\$4,539</p>	<p>\$6,892</p>
<p>Totals</p>			<p>19</p>	<p>50–100</p>	<p>\$109,075</p>	<p>\$172,300</p>
<p>Asset locations</p>						



<p>Components, attributes, risks and criticality</p>	<p>Inspection and maintenance requirements</p>	<p>Depreciation and degradation curves</p>
<p>There are four components</p> <ul style="list-style-type: none"> • promenades • floating pontoons • wharves • access gangways. <p>Critical assets are defined as those which have a high consequence of</p>	<p>Level 1 and Level 2 inspections annually (alternative years).</p> <p>Level 3 inspections on as required basis (identified in Level 2 inspections).</p>	<p>Every structure is different in size, material, method of construction, design life and it is not possible to have a single depreciation / degradation curve to represent all structures.</p>

failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.

There are no wharf or marine structure assets identified as at high risk in the July 2019 Marine structure Asset Management Plan.

Routine and minor maintenance as required based on Level 1, 2 or 3 inspections.

Routine operations and maintenance cover all works in relation to the wharf and marine structures that are required to be undertaken on a regular basis, to continue the ongoing operation of the structure.

Works include

- Routine inspections
- Engineering inspections and assessments
- Timber decking maintenance
- Tightening of cleats and walers on pontoons
- Spot repairs of paintwork
- Graffiti removal
- Clearing debris and vegetation.

7.5.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our marine assets include

Service Manager		Asset Manager					Exceptions	
Director Infrastructure and Assets		Director Infrastructure and Assets					Responsibility for Enterprize Wharf remains with the Victorian Government. City of Melbourne is responsible for conduct of level 1 condition inspections and the reporting of noted defects.	
Director Recreation and Waterways		Responsible for wharves and marine structures managed under Committee of Management Agreements.						
Service Planning	Service Operations	Asset Planning	Asset Design	Asset Construction	Asset Maintenance	Asset Disposal	Asset Data	Asset Financials
Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Financial Controller Finance and Investment
	Waterways Program Manager Recreation and waterways		Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Infrastructure Design Infrastructure and Assets			Team Leader Asset Management Infrastructure and Assets	Asset Accountant Finance and Investment
Collaborators								
Team Leader Transport Strategy Planning	Team Leader Transport Strategy Planning	Team Leader Transport Strategy Planning	Director City Design Studio		Director Procurement and Contract Management	Financial Controller Finance and Investment		

and Climate Department of Transport
 and Climate Department of Transport
 and Climate Department of Transport
 Department of Transport

Contractors and Consultants

Citywide Civil
 Pitt and Sherry

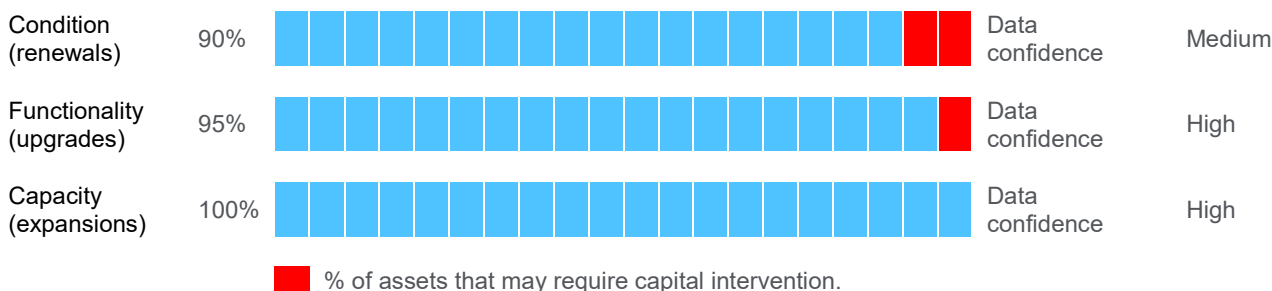
7.5.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our marine assets



Criteria for levels of service

Condition	Functionality			Capacity
Ability to meet service technical requirements.	Ability to meet service delivery needs.			Ability to meet service demand.
	Social and cultural	Economic	Environmental	
Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood.	Quality and amenity Safety and reliability Timeliness Accessibility		Waste generation Pollution (emissions generation)	Utilisation Traffic volumes Traffic flow Load capacity

Overall performance rating
 Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.

We carry out condition assessment annually for all wharves and
 The performance and future demand profiles indicate that we will
 Other than the embedded energy in the construction
 Due to the variety in age and type of structures under our

marine structures in accordance with the VicRoads Roads Structures Inspection Manual 2018.

Detailed underdeck and underwater inspections need to be undertaken by 2022 of the marine structures to determine accurate condition ratings.

need to continue to allocate funding towards improving the standard, safety and accessibility of our marine structures to meet growing water traffic demands, pedestrian numbers and in some locations, cyclists.

materials, wharves and marine structures do not directly generate any waste or pollution or require any material energy.

management, there is significant variation between the structural capacities of the assets in this plan. The performance and future demand profiles indicate that we will need to allocate funding towards improving volume and load capacity to meet growing demands of greater cycling and pedestrian numbers.

Financial performance

Expenditure	2016–17	2017–18	2018–19	2019–20	2020–21
	Actual	Actual	Actual	Actual	Actual
Scheduled and reactive maintenance	95,000	145,000	150,875	146,870	0
Depreciation	1,032,708	1,052,330	1,072,324	1,099,132	0
Other operating maintenance works	150,000	130,000	150,000	204,000	0
Operating expenditure	245,000	1,327,330	1,373,199	1,450,002	0
Renewal works	0	0	0	0	0
Upgrade works	0	0	0	0	0
Expansion works	0	0	0	0	0
New works	0	0	0	0	0
Capital expenditure	0	0	0	0	0
Totals	1,277,708	1,327,330	1,373,199	1,450,002	0
Renewal and upgrade as a % of depreciation	0%	0%	0%	0%	0%

Income	2016–17	2017–18	2018–19	2019–20	2020–21
	Actual	Actual	Actual	Actual	Actual
Fees and charges	310,000	310,000	310,000	310,000	310,000
Operating grants	0	0	0	0	0
Operating income	310,000	310,000	310,000	310,000	310,000
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Capital income	0	0	0	0	0
Totals	310,000	310,000	310,000	310,000	310,000
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%

7.5.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
1. Economy of the future Building a strong and adaptive city economy and a sustainable future city.	The increase in infrastructure needs to support a growing population has been a major consideration in the	The Council Plan preserves and progresses the city in six strategic objectives	<ul style="list-style-type: none"> Asset Management Strategy Climate Change Adaptation Strategy

- An efficient and affordable transport network is a basic element of an accessible city and a strong economy.
- 4. Access and affordability**
Reducing inequality by ensuring access to housing, core services and information.
- The city is made up of safe and accessible places and services where everyone can come together.
- 5. Climate and biodiversity emergency**
Acting immediately to reduce our emissions and waste and adapt to climate change.
- The city continues to strengthen its dense network of green streets and spaces so that plants and animals can thrive, and communities can come together.
- development of the 10-year Financial Plan. Over the next decade the plan identifies the need to invest \$1.4 billion in infrastructure to ensure Melbourne remains a global liveable city.
- The plan identifies a step change investment in three key areas to support the growing population, maintain liveability and renew the Queen Victoria Market for future generations. In addition, it is equally important to ensure existing assets and infrastructure is maintained at appropriate levels to service the community's needs.
- Implement an asset management strategy to optimise spend on renewal of existing assets.
 - Prioritise any new identified capital investment within available resources.
 - Access borrowings to fund infrastructure that will generate an appropriate return or prevents rapidly increasing costs.
1. Economy of the future
Building a strong and adaptive city economy and a sustainable future city.
 2. Melbourne's unique identity and place
Celebrating the places, people and cultures that make this a vibrant and creative city.
 3. Safety and wellbeing
Ensuring everyone feels safe and included as they participate in community life.
 4. Access and affordability
Reducing inequality by ensuring access to housing, core services and information.
 5. Climate and biodiversity emergency
Acting immediately to reduce our emissions and waste and adapt to climate change.
 6. Aboriginal Melbourne
Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.
- Community Infrastructure Plans
 - Dockland Waterways Strategic Plan 2009–18

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations		If funding is not made available and delay these renewal works, there is a risk that it may increase the rate of deterioration causing major damage which requires higher repair cost in future years and more frequent flooding.
Climate and biodiversity emergency		
A changing economy and workforce		
Disruptive technology and digital innovation		
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.5.5 Future investments

Future investments	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	162,000	162,000	162,000	162,000	162,000	162,000	162,000	162,000	162,000	162,000
Depreciation	1,143,537	1,166,408	1,189,736	1,213,531	1,237,801	1,262,557	1,287,808	1,313,565	1,339,836	1,366,633
Other operating Maintenance works	90,000	65,000	15,000	15,000	15,000	15,000	15,000	15,000	140,000	140,000
Operating expenditure	1,395,537	1,393,408	1,366,736	1,390,531	1,414,801	1,439,557	1,464,808	1,490,565	1,641,836	1,668,633
Renewal works	0	0	0	0	0	0	0	0	0	0
Upgrade works	1,880,000	0	0	0	0	0	0	0	0	0
Expansion works	0	0	0	0	0	0	0	0	0	0
New works	0	0	0	0	0	0	0	0	0	0
Capital expenditure	1,880,000	0	0	0	0	0	0	0	0	0
Totals	2,275,408	1,393,408	1,366,736	1,390,531	1,414,801	1,439,557	1,464,808	1,490,565	1,641,836	1,668,633
Renewal and upgrade as a % of depreciation	507%	531%	454%	525%	403%	472%	357%	366%	375%	369%

Future returns	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Fees and charges	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
Operating grants	0	0	0	0	0	0	0	0	0	0
Operating income	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	0	0	0	0	0	0	0	0	0	0
Capital income	0	0	0	0	0	0	0	0	0	0
Totals	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Note - Planned level 3 inspection will trigger renewal requirement of structures that need to be attended to within the next 10 years.

Major investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
All structures	Level 1 inspections	Maintenance	15,000	2021– 22
New Quay Promenade	Level 3 inspections	Maintenance	75,000	
All structures	Minor maintenance works	Maintenance	162,000	
TBC	TBC	Upgrade	1,880,000	
All structures	Level 2 inspections	Maintenance	15,000	2022– 23
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 1 inspections	Maintenance	15,000	2023– 24
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 2 inspections	Maintenance	15,000	2024– 25
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 1 inspections	Maintenance	15,000	2025– 26
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 2 inspections	Maintenance	15,000	2026– 27
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 1 inspections	Maintenance	15,000	2027– 28
All structures	Minor maintenance works	Maintenance	162,000	
All structures	Level 2 inspections	Maintenance	15,000	2028– 29
All structures	Minor maintenance works	Maintenance	162,000	
TBC	TBC	Maintenance	140,000	2029– 30
All structures	Minor maintenance works	Maintenance	162,000	
TBC	TBC			2030– 31

7.6 Parks and outdoor recreation

This section of the asset plan details our parks and outdoor recreation assets. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the last five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

It is important that our Asset Plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year Financial Plan and determined in the annual Budget.

7.6.1 Profile

Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (Years)	Written down value (\$'000)	Replacement value (\$'000)
Community	Parks and Outdoor Recreation assets facilitate a range of benefits as identified in the City of Melbourne Open Space Strategy, Urban Forest Strategy, Nature in the City Strategy and Docklands Waterways Strategic Plan	Community Visitors	Paths	>470,000m ²	15-40	48,000	63,000
			Irrigation	>270Ha	15	24,516	31,762
			Playgrounds	291	15	4091	4572
		Workers	Outdoor furniture	>7000	5-15	23,586	36,432
			Trees	81,820		Not Financially registered	47,740
			Turf	>388Ha	25	Not Financially registered	58,200
			Shrub beds	>60Ha	15	Not Financially registered	9000
Totals			N/A	5-40	\$101,933	\$250,706	
Asset locations							



Parks



Trees



Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves
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Parks and outdoor recreation are made up of a range of assets. Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical failure modes are those which have the highest consequence. Two critical assets have been identified and their typical failure mode and the impact on service delivery irrigation systems and trees.

- Irrigation systems**
- routine maintenance
 - random quality assurance inspections
 - performance monitoring
 - asset condition inspection.
- Trees**
- annual inspections and maintenance
 - biennial inspections and maintenance
 - high risk assessments
 - random quality assurance inspections
 - performance monitoring.

Irrigation uses a straight-line degradation curve that is adjusted according to 4-year condition assessment and revaluation. Not applicable. Trees are valued and replacement cost plus two years establishment maintenance cost but are not reportable under accounting standards.

Heritage listings many of the parks are heritage listed. While irrigation systems are not heritage listed, they perform an important function in maintaining our open space in a healthy and vibrant condition. There are trees affected by heritage listing in both parks and streetscapes.

7.6.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our park and outdoor recreation assets include

Service Manager		Asset Manager				Exceptions		
Director Parks and City Greening Director Recreation and Waterways		Director Parks and City Greening Responsible for Council owned assets and assets managed under Committee of Management Agreements.						
Service planning	Service operations	Asset planning	Asset design	Asset construction	Asset maintenance	Asset disposal	Asset data	Asset financials
Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Director Parks and City Greening	Financial Controller Finance and Investment
Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Director Recreation and Waterways	Asset Accountant Finance and Investment
Collaborators								
Director City Strategy		Director City Strategy	Director City Design	Director City Projects	Director Infrastructure and Assets	Financial Controller Finance and Investment		
Director Infrastructure and Assets		Director Infrastructure and Assets						
Contractors and consultants								
Serco CityWide CTS				Serco CityWide CTS				

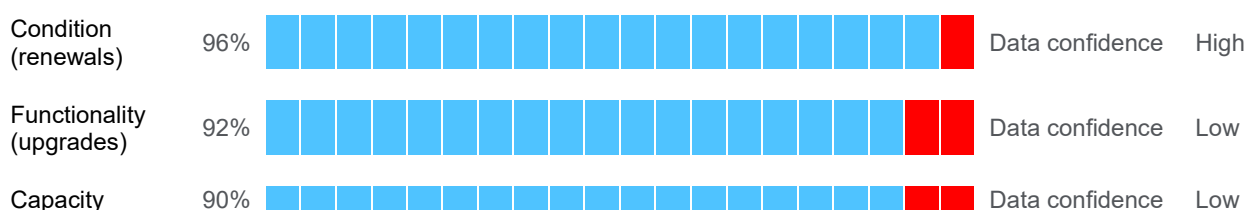
7.6.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our parks and outdoor recreation assets



(expansions)



 % of assets that may require capital intervention.

Criteria for levels of service				
Condition	Functionality			Capacity
	Ability to meet service delivery needs			Ability to meet service demand
Ability to meet service technical requirements	Social and cultural	Economic	Environmental	
Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood.	Quality and amenity Safety and reliability Accessibility	Timeliness	Energy consumption Waste generation Pollution (emissions generation)	Utilisation Traffic volumes Traffic flow Load capacity

Overall performance rating

Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.

Condition assessment of assets is carried out on a cyclical basis over a four-year period. Annual assessments are undertaken where required by relevant standards such as playgrounds. A combination of internal and external assessments is used depending on asset class and technical requirements.	Open space provides a range of functions and supports a diversity of needs. There are seven park categories which deliver different functions with various applicable levels of service. Each category and level of service has a matrix of asset provision.	Minimisation of water consumption, increase in biodiversity, reduction in power consumption are all major considerations in any projects. Urban Forest Strategy and Nature in the City Strategy inform our actions.	The Open Space Strategy provides guidance to future service needs. This is supported by relevant master plans for individual parks. The Docklands Waterways Strategic Plan and Development Victoria inform the marina services.
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Financial performance

Expenditure	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
Scheduled and reactive maintenance	16,287,735	17,230,932	18,378,946	20,769,750	20,706,386
Depreciation	7,524,092	7,131,981	6,561,614	7,780,261	8,403,532
Maintenance works	1,023,938	1,033,040	1,160,617	75,000	1,058,523
Operating expenditure	24,835,765	25,395,953	26,101,177	28,625,011	30,168,441
Renewal works	9,244,730	9,695,694	10,151,596	8,532,455	10,341,216
Upgrade works	657,721	1,007,680	1,488,410	1,869,456	1,207,919
Expansion works	2,585,493	7,409,727	21,116,999	5,823,174	8,867,692
New works	1,959,935	12,250,623	11,764,986	9,119,143	2,832,250
Capital expenditure	14,447,879	30,363,724	44,521,991	17,925,074	23,249,077
Totals	39,283,644	55,759,677	70,623,168	46,550,085	53,417,518
Renewal and upgrade as a % of depreciation	132%	150%	177%	134%	137%

Income	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
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Fees and charges	628,187	926,433	684,090	521,825	809,812
Operating grants	1,671,214	1,025,629	1,344,842	1,629,549	4,643,814
Operating income	1,671,214	1,952,062	2,028,932	2,151,374	5,453,626
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Capital income	0	0	0	0	0
Totals	1,671,214	1,952,062	2,028,932	2,151,374	5,453,626
Income as a % of expenditure (cost recovery)	0%	0%	0%	0%	0%

7.6.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>2. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city.</p> <ul style="list-style-type: none"> Melbourne's unique streetscapes, open and green spaces, built environment and neighbourhood character are protected and enhanced as the city grows and evolves. <p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <ul style="list-style-type: none"> The city's places and spaces bring people together and create spaces where they feel supported and can foster a sense of belonging. All people who work in, live or visit the city can do so, and feel safe, at any time of the day or night. <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <ul style="list-style-type: none"> The city is made up of safe and accessible places and services where everyone can come together. <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <ul style="list-style-type: none"> The City of Melbourne commits to renewable energy and circular economies to ensure Melbourne remains liveable for future generations. 	<p>The Financial Plan references likely projects arising from the Open Space Strategy and other city development activities. The asset management plan also mirrors the Financial Plan.</p>	<p>1. Economy of the future Building a strong and adaptive city economy and a sustainable future city.</p> <p>2. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city.</p> <p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <p>6. Aboriginal Melbourne Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.</p>	<ul style="list-style-type: none"> Asset Management Strategy 10-year Financial Plan Open Space Strategy Urban Forest Strategy Nature in the City Strategy Docklands Waterways Strategic Plan

- The city continues to strengthen its dense network of green streets and spaces so that plants and animals can thrive, and communities can come together.

6. Aboriginal Melbourne
Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.

- Traditional knowledge is implemented practically and can be experienced by the whole community, so that Melbourne is seen, experienced and thought of as an Aboriginal city.

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations	Open Space Strategy Urban Forest Strategy Nature in the City Strategy Docklands Waterways Strategic Plan	Poorly positioned for climate change impacts Ratio of open space falls below desired levels Open Space fails to meet community expectations
<input checked="" type="checkbox"/> Climate and biodiversity emergency		Reduction in biodiversity
A changing economy and workforce		
Disruptive technology and digital innovation		
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.6.5 Future investments

Future investments	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	22,705,045	23,172,751	23,710,145	24,256,616	24,812,402	25,377,744	25,952,891	26,483,497	27,024,424	
Depreciation	9,074,056	9,694,467	10,375,261	11,069,991	11,779,019	12,502,717	13,241,466	13,953,658	14,681,694	
Maintenance works	0	0	0	0	0	0	0	0	0	
Operating expenditure	31,779,101	32,867,218	34,085,406	35,326,607	36,591,421	37,880,461	39,194,357	40,437,155	41,706,118	

Renewal works	13,031,876	13,370,705	13,718,344	14,075,021	14,440,971	14,816,436	15,201,664	15,596,907	16,002,427
Upgrade works	5,950,800	6,105,521	6,264,264	6,427,135	6,594,241	6,765,691	6,941,599	7,122,081	7,307,255
Expansion works	7,137,882	7,323,467	7,513,877	7,709,238	7,909,678	8,115,330	8,326,328	8,542,813	8,764,926
New works	4,900,000	7,240,000	7,240,000	7,240,000	7,240,000	7,240,000	5,140,000	5,140,000	5,140,000
Capital expenditure	31,020,558	34,039,693	21,018,141	35,451,394	36,184,890	36,937,457	35,609,591	36,401,801	37,214,608
Totals	62,799,660	66,906,911	68,821,891	70,778,001	72,766,311	74,817,918	74,803,947	76,838,955	78,920,725
Renewal and upgrade as a % of depreciation	209%	201%	193%	185%	179%	173%	167%	163%	159%

Future returns	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Fees and charges	0	0	0	0	0	0	0	0	0	0
Operating grants	0	0	0	0	0	0	0	0	0	0
Operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	1,794,275	1,840,926	1,888,790	1,937,898	1,988,284	2,039,979	2,093,019	2,147,437	2,203,270	0
Capital income	1,794,275	1,840,926	1,888,790	1,937,898	1,988,284	2,039,979	2,093,019	2,147,437	2,203,270	0
Totals	1,794,275	1,840,926	1,888,790	1,937,898	1,988,284	2,039,979	2,093,019	2,147,437	2,203,270	0
Income as a % of expenditure (cost recovery)	%	%	%	%	%	%	%	%	%	%

Major investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Open Space – Land	Acquisition of new open space	New	20,000,000	2021-22
Various park assets	Replacement of assets at end of life	Renewal	6,500,000	2022-23
Various park assets	Replacement of assets at end of life	Renewal	6,500,000	2023-24
Various park assets	Replacement of assets at end of life	Renewal	6,500,000	2024-25
Various park assets	Replacement of assets at end of life	Renewal	8,000,000	2025-26
Various park assets	Replacement of assets at end of life	Renewal	8,300,000	2026-27

Various park assets	Replacement of assets at end of life	Renewal	8,700,000	2027–28
Various park assets	Replacement of assets at end of life	Renewal	8,900,000	2028–29
Various park assets	Replacement of assets at end of life	Renewal	9,200,000	2029–30
Various park assets	Replacement of assets at end of life	Renewal	9,500,000	2030–31

7.7 Public metered lighting

This section of the asset plan details our **public lighting assets**. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the last five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

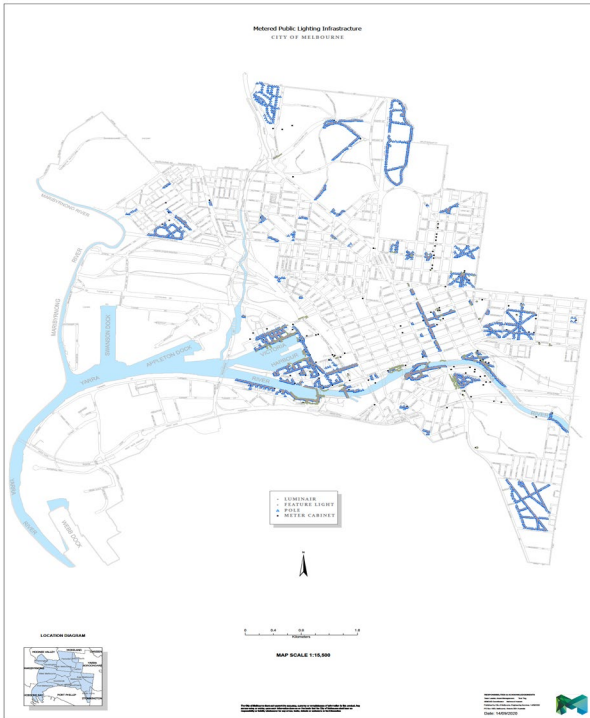
It is important that our asset plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year financial plan and determined in the annual budget.

7.7.1 Profile

Infrastructure	Service and benefits	Primary users	Asset sub-groups	Indicative quantities	Indicative useful life (Years)	Written down value (\$'000)	Replacement value (\$'000)
Community	Primary function of street lighting is to enhance people's experience of the city after dark. This includes way-finding and visual comfort, as well as road safety and personal security.	Pedestrians, cyclists and motorists	Light poles	2429	25	6564	10,052
		Residents, workers and shop owners	Electrical pillars and cabinets	310	20	1149	1814
		Public transport providers Victoria Police	Public lighting	2947	15	5485	7438
Totals				N/A	15–25	19,683	16,690

Expansion rate - The expansion rate or quantity of metered public lighting has been increasing over the last five years. It is anticipated that this will continue over the next ten years.

Asset locations



Street Lighting China Town



Swanston Street Light

Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves
<p>Managed by two departments Infrastructure and Assets for lighting in the road reserve, and Parks and City Greening for lighting within parks and reserves.</p> <p>The key components of metered public lighting infrastructure are luminaires, poles, feature lights and meter cabinets.</p> <p>Across the city, 2947 luminaires enhance people's experience of the city after dark as well as providing road safety and personal security.</p> <p>Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.</p>	<p>All Council-owned street lighting assets are inspected monthly by the Public and Feature Metered Lighting Maintenance Service provider under the Contract 100231.</p> <p>The routine maintenance is provided by the Public and Feature Metered Lighting Maintenance Service Contract 100231 for Infrastructure and Assets, and Parks and City Greening departments managed assets with the objective to maintain the serviceability, safety, structural integrity and appearance of the City of Melbourne lighting assets.</p>	<p>A straight-line depreciation and degradation curve has been used for the metered public lighting assets.</p>

7.7.2 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our public lighting assets include

Service Manager	Asset Manager	Exceptions
Director Infrastructure and Assets	Director Infrastructure and Assets	Note - Total number of luminaries managed by the Infrastructure and Assets branch (1603) for lighting in the road reserve, and the Parks and City Greening branch (1344) for lighting within parks and reserves across the city.

Service Planning	Service Operations	Asset Planning	Asset Design	Asset Construction	Asset Maintenance	Asset Disposal	Asset Data	Asset Financials
Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Principal Engineer Infrastructure Infrastructure and Assets	Financial Controller Finance and Investment
			Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Civil Infrastructure City Projects	Team Leader Asset Management Infrastructure and Assets Team Leader Asset Management Parks and City Greening	Team Leader Asset Management Infrastructure and Assets	Asset Accountant Finance and Investment Team Leader Asset Management Infrastructure and Assets Team Leader Asset Management Parks and City Greening

Collaborators								
Director City Strategy	Director Infrastructure and Assets	Director City Strategy	Director City Design	Director City Projects	Director Infrastructure and Assets Director Procurement and Contract Management	Director Infrastructure and Assets Financial Controller Finance and Investment	Director Infrastructure and Assets	Director Infrastructure and Assets

Contractors and consultants								
Specialist consultants and	Specialist consultants and	Specialist consultants and	Specialist consultants and	Specialist consultants and	High Access and	Specialist consultants and	High Access Specialist	

contractor s contractor s contractor s contractor s contractor s specialist contractor s contractor s

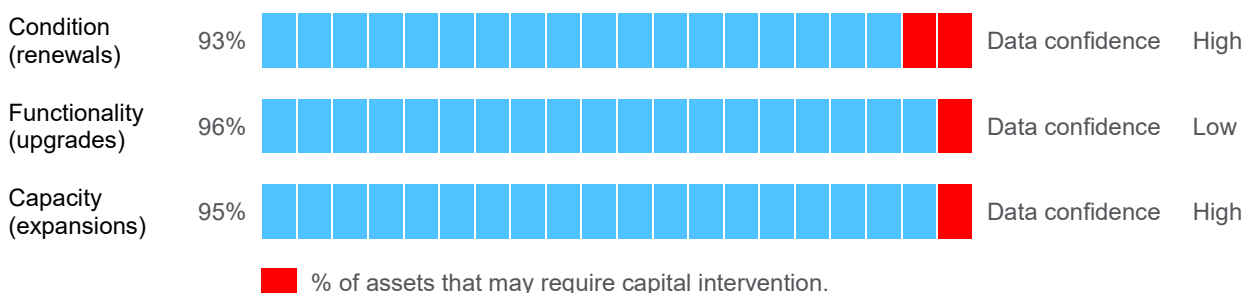
7.7.3 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our public lighting assets



Criteria for levels of service				
Condition	Functionality			Capacity
Ability to meet service technical requirements.	Ability to meet service delivery needs.			Ability to meet service demand.
	Social and cultural	Economic	Environmental	
Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood.	Blockage Sediment deposit Tree root / other service intrusion Back water effect from Melbourne water main drains, sea, rivers Unable to meet minimum slopes – low lying areas	Timeliness	Waste generation Stormwater pollution Stormwater reuse Stormwater treatment	Utilisation Pipe conveyance capacity against recurrent interval Load-bearing capacity
Overall performance rating Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.				

Financial performance

Expenditure	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
Scheduled and reactive maintenance	0	313,615	322,374	342,331	397,029
Depreciation	579,718	601,871	640,292	692,354	703,247
Operating other	0	400,396	388,186	498,569	653,072
Maintenance works	0	0	0	0	0
Operating expenditure	579,718	1,315,882	1,350,852	1,533,254	1,753,348

Renewal works	0	0	0	0	50,000
Upgrade works	0	501,381	569,882	465,550	314,834
Expansion works	0	0	50,000	0	50,000
New works	0	0	50,000	0	286,400
Capital expenditure	0	501,381	669,882	465,550	701,234
Totals	579,718	1,817,263	2,020,734	1,998,804	2,454,582
Renewal and upgrade as a % of depreciation	%	83%	89%	68%	52%

Income	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
Fees and charges	0	0	0	0	0
Operating grants	0	0	0	0	0
Operating income	0	0	0	0	0
Capital grants	0	0	0	0	0
Capital contributions	0	0	0	0	0
Capital income	0	0	0	0	0
Totals	0	0	0	0	0
Income as a % of expenditure (cost recovery)	%	%	%	%	%

7.7.4 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>3. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life.</p> <ul style="list-style-type: none"> All people who work in, live or visit the city can do so, and feel safe, at any time of the day or night. <p>4. Access and affordability Reducing inequality by ensuring access to housing, core services and information.</p> <ul style="list-style-type: none"> The city is made up of safe and accessible places and services where everyone can come together. <p>5. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change.</p> <ul style="list-style-type: none"> The City of Melbourne commits to renewable energy and circular economies to ensure Melbourne remains liveable for future generations. 	<p>The Financial Plan includes</p> <ul style="list-style-type: none"> supports to diverse services in six headings future opportunities and challenges such as growth, changing demographic, climate change, technology and economic uncertainty. <p>The increase in infrastructure needs to support a growing population has been a major consideration in the development of the 10-year Financial Plan. Over the next decade the plan identifies the need to invest \$1.4 billion in infrastructure to ensure Melbourne remains a global liveable city.</p> <p>The plan identifies a step change investment in three key areas to support the growing population, maintain liveability and renew the Queen Victoria Market for future generations. In addition to this, it is equally important to ensure existing assets and infrastructure is maintained at appropriate levels to service the community's needs. Implement an asset management strategy to</p>	<p>The Council Plan preserves and progresses the city in six strategic objectives</p> <ol style="list-style-type: none"> Economy of the future Building a strong and adaptive city economy and a sustainable future city. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life. Access and affordability Reducing inequality by ensuring access to housing, core services and information. Climate and biodiversity emergency Acting immediately to reduce our emissions and waste and adapt to climate change. Aboriginal Melbourne Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development. 	<ul style="list-style-type: none"> Public Lighting Strategy 2013 Lighting Guidelines Asset Management Strategy Transport Strategy 2030 Climate Change Adaptation Strategy Community Infrastructure Plans Infrastructure Plan – A city planning for growth

optimise spend on renewal of existing assets.
 Prioritise any new identified capital investment within available resources.
 Access borrowings to fund infrastructure that will generate an appropriate return or prevents rapidly increasing costs.

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations	Priority 1.3 – Emit zero greenhouse gases Melbourne will become a zero-net emitter of greenhouse gases by reducing its emissions and sourcing all energy from renewable sources.	If funding is not made available and these renewal works are delayed, there is a risk that it may increase the rate of deterioration causing major damage, which requires higher repair cost in future years and more frequent flooding.
<input checked="" type="checkbox"/> Climate and biodiversity emergency	The Strategic Resource Plan (SRP) identifies the financial and non-financial resources required to ensure adequate resources are available to maintain services at levels established by the Council and to implement the Council Plan priorities.	Without adequate capital investment it is likely that the metered public lighting network infrastructure will deteriorate causing a drop in community satisfaction, and affecting to safety, amenity, liveability and productivity of the community.
A changing economy and workforce		
Disruptive technology and digital innovation		
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.7.5 Future investments

Future Investments	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Scheduled and reactive maintenance	397,029	404,176	411,451	418,857	426,397	434,072	441,885	449,839	457,936	466,179
Depreciation	703,247	717,312	731,658	746,291	761,217	776,441	791,970	807,810	823,966	840,445
Other operating works	653,072	594,585	605,287	693,183	627,274	638,565	737,059	661,760	673,672	782,789
Maintenance works	0	0	0	0	0	0	0	0	0	0
Operating expenditure	1,753,348	1,716,073	1,748,396	1,858,331	1,814,888	1,849,078	1,970,914	1,919,409	1,955,574	2,089,413
Renewal works	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Upgrade works	314,834	211,000	211,000	211,000	350,000	350,000	350,000	350,000	350,000	350,000
Expansion works	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
New works	286,400	597,800	285,800	461,000	50,000	50,000	50,000	50,000	50,000	50,000

Capital expenditure	701,234	908,800	596,800	772,000	500,000	500,000	500,000	500,000	500,000	500,000
Totals	2,454,582	2,624,873	2,345,196	2,630,331	2,314,888	2,349,078	2,470,914	2,419,409	2,455,574	2,589,413
Renewal and upgrade as a % of depreciation										

Future returns	Budget 2021–22	Plan 2022–23	Plan 2023–24	Plan 2024–25	Plan 2025–26	Plan 2026–27	Plan 2027–28	Plan 2028–29	Plan 2029–30	Plan 2030–31
Fees and charges	0	0	0	0	0	0	0	0	0	0
Operating grants	0	0	0	0	0	0	0	0	0	0
Operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	0	0	0	0	0	0	0	0	0	0
Capital income	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0	0	0
Income as a % of expenditure (cost recovery)	%	%	%	%	%	%	%	%	%	%

Major investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Queensbridge Square	Upgrade 46 catenary lights to LED	Upgrade	\$103,834	2021–22
St Kilda Road western separator median	Installation of new lighting to illuminate trees	Expansion	\$286,400	2021–22
Little Streets	Upgrade to Little Street lights	Upgrade	\$111,000	2021–22
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2021–22
St Kilda Road western footpath	Installation of new lighting to illuminate trees	New	\$597,000	2022–23
Little Streets	Upgrade to Little Street lights	Upgrade	\$110,000	2022–23
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2022–23
St Kilda Road eastern separator median	Installation of new lighting to illuminate trees	New	\$286,000	2023–24
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2023–24
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2023–24
St Kilda Road eastern footpath	Installation of new lighting to illuminate trees	New	\$461,000	2024–25
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2024–25
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2024–25
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2025–26
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2026–27
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2027–28

Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2027-28
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2028-29
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2028-29
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2029-30
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2029-30
Little Streets	Upgrade to small King Street lights	Upgrade	\$110,000	2030-31
Other unspecified upgrade works	Allow for other minor upgrades such as installation of shields etc. and general lighting improvements	Upgrade	\$100,000	2030-31

7.8 Roads and footpaths

This section of the asset plan details our road and footpath assets. It includes a profile of the services they support and the attributes determining how we manage them. We will also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

It is important that our asset plan outlines a full picture of the future demand on our assets so we can make informed decisions around prioritisation. However, actual funding is guided by the capital investment plan of the 10-year Financial Plan and determined in the annual Budget.

7.8.1 Profile

Infrastructure	Service and benefits	Primary users	Assets sub-groups	Indicative quantities	Indicative useful life (years)	Written-down value (\$'000)	Replacement value (\$'000)
Transport and recreation	Primary functions of roads are to facilitating movement of vehicles, pedestrians and bicycles into, around and out of the municipality. Our road infrastructure plays a critical role in maintaining the safety, amenity, liveability and productivity while facilitating the movement of people, goods and services of the city.	Community in general Commercial and industry producers Transportation, goods and services providers Public transport providers Government agencies and public utility authorities	Road carriageway base structure	2,415,134 m ²	50–90	505,707	621,213
			Road carriageway wearing surface	2,367,910 m ²	10–17	45,028	61,205
			Road carriageway full depth	139,018 m ²	50	36,505	60,510
			Road carriageway unsealed	1,015 m ²	10	7	18
			Kerb and channel	929,064 m ²	50	216,971	321,385
			Road footway	1,344,855 m ²	10–15	165,807	266,482
			Street furniture	15,154	5–100	19,415	30,670

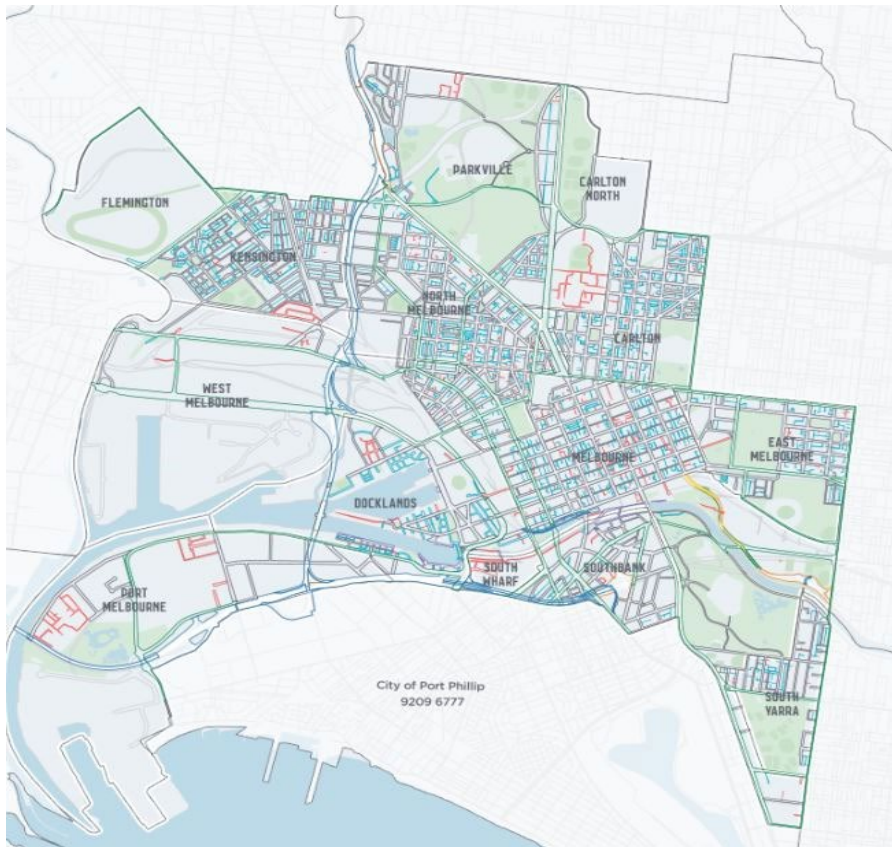
			Signs	49,813	10	8,057	15,368
			Parking devices	1,098	10	6,216	8,621
			Other street structures	19,727	10-50	4,805	9,678

Totals

N/A	5-100	1,008,512	1,395,153
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Expansion rates - Over the past five years the city has seen growth in our street furniture (4.6%), signage (0.99%), footpaths (0.61%), and kerb and channel (0.05%) but it has also seen reductions in parking signs (-4.74%) and roads (-0.03%).

Asset locations



Wurundjeri Way



Swanston Street footpath

Components, attributes, risks and criticality	Inspection and maintenance requirements	Depreciation and degradation curves
<p>There are four key components</p> <ul style="list-style-type: none"> • road carriageway and base structure • kerb and channel • footpath • street furniture. 	<p>The periodic condition assessment regime for the different roads assets are as follows</p> <ul style="list-style-type: none"> • roads, footpaths and kerb and channel – every four years • street furniture – annually • street signage – annually <p>AssetMaster and SMEC-PMS</p>	<p>Every asset sub-group has different degradation patterns depending on the size, material, location and method of construction. Those degradation curves are built in to Moloney model and SMEC-PMS. These systems are used to forecast the future renewal requirement of those assets.</p>

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.

have been updated with latest condition data.

General safety inspection carried out by council surveillance officers. A mobility application (Field Service Lightning) has been deployed for the in-house surveillance function since May 2019.

No critical road network assets are identified as at high risk in the July 2019 Road Asset Management Plan.

7.8.2

7.8.3 Roles and responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our road and footpath assets include

Service Manager		Asset Manager				Exceptions		
Director Infrastructure and Assets		Director Infrastructure and Assets						
Service Planning	Service Operations	Asset Planning	Asset Design	Asset Construction	Asset Maintenance	Asset Disposal	Asset Data	Asset Financials
Principal Engineer Transport and Parking Infrastructure and Assets	Principal Engineer Transport and Parking Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Principal Engineer Infrastructure and Assets	Financial Controller Finance and Investment
			Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Civil Infrastructure Contracts Infrastructure and Assets	Team Leader Infrastructure Design Infrastructure and Assets	Team Leader Asset Management Infrastructure and Assets	Asset Accountant Finance and Investment
Collaborators								
Team Leader Transport Strategy Planning and Climate	Team Leader Transport Strategy Planning and Climate	Team Leader Transport Strategy Planning and Climate	Director City Design		Director Procurement and Contract Management	Financial Controller Finance and Investment		
Department of Transport	Department of Transport	Department of Transport	Department of Transport					
Contractors and consultants								
	Citywide Civil				Citywide Civil			

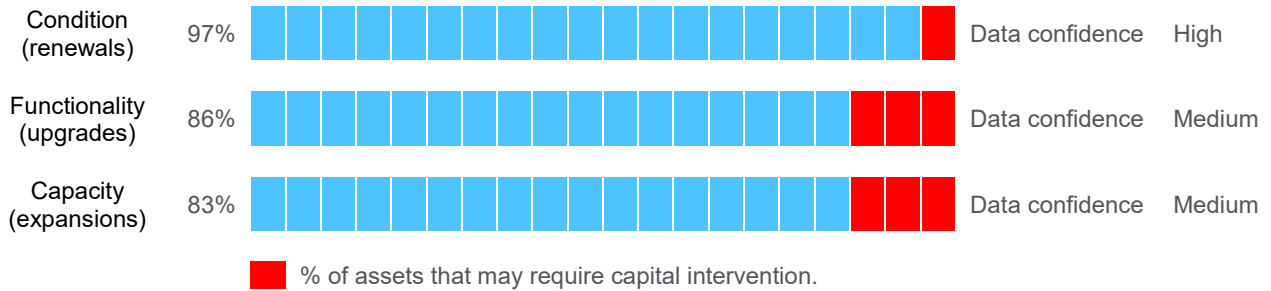
7.8.4 Performance

We monitor the performance of our assets by

- Condition – the actual physical and technical state of the asset.
- Functionality – the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity – the ability of the physical infrastructure to meet demand.

By undertaking regular assessments we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

Recent assessments indicate the following capital interventions may be required for our road and footpath assets



Criteria for levels of service

Condition	Functionality			Capacity
Ability to meet service technical requirements.	Ability to meet service delivery needs.			Ability to meet service demand.
	Social and cultural	Economic	Environmental	
Deterioration Damage Distress Unusual behaviour due to environmental impact, fire or flood.	Quality and amenity Safety and reliability Timeliness accessibility		Energy consumption Waste generation Pollution (emissions generation)	Utilisation Traffic volumes Traffic flow Load capacity

Overall performance rating

Assessment ratings result in a score of 0 to 5. A score of 2 indicates a capital intervention may be required.

Routine operations and maintenance cover all works in relation to the road structures that are required to be undertaken on a regular basis, to continue the ongoing operation of the network.	The performance and future demand profiles indicate that we will need to continue to allocate funding towards improving the standard, connectivity, safety and accessibility of our city to improve functionality and capacity to meet growing traffic demands, cyclists and pedestrian numbers.	Other than the embedded energy in the construction materials, road infrastructures do not directly generate any waste or pollution or require any material energy.	The performance and future demand profiles indicate that we will need to continue to allocate funding towards improving volume and capacity to meet growing demands of increasing vehicle, cycling and pedestrian numbers.
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Financial performance

Expenditure	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
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Scheduled and reactive maintenance	3,655,000	3,669,000	3,664,000	4,554,000	4,554,000
Other operating costs	600,000	600,000	600,000	627,000	656,000
Depreciation	26,560,000	27,188,000	28,772,000	30,255,000	30,860,000
Maintenance works	0	0	0	0	0
Operating expenditure	30,815,000	31,457,000	33,036,000	35,436,000	36,070,000
Renewal works	13,893,000	13,927,000	12,190,000	14,116,000	10,082,000
Upgrade works	1,282,000	1,189,000	2,061,000	1,161,000	1,470,000
Expansion works	0	0	0	0	0
New works	5,428,000	8,036,000	2,784,000	1,447,000	19,350,000
Capital expenditure	20,603,000	23,152,000	17,035,000	16,724,000	30,902,000
Totals	51,418,000	54,609,000	50,071,000	52,160,000	66,972,000
Renewal and upgrade as a % of depreciation	57%	56%	50%	50%	37%

Income	2016–17 Actual	2017–18 Actual	2018–19 Actual	2019–20 Actual	2020–21 Actual
Fees and charges	0	0	0	0	0
Operating grants	0	0	0	0	0
Operating income	0	0	0	0	0
Capital grants	1,748,000	1,327,000	1,368,000	1,200,000	1,142,000
Capital contributions	0	0	0	0	0
Capital income	1,748,000	1,327,000	1,368,000	1,200,000	1,142,000
Totals	1,748,000	1,368,000	1,368,000	1,200,000	1,142,000
Income as a % of expenditure (cost recovery)	%	%	%	%	%

7.8.5 Strategic priorities

Community Vision	10-year Financial Plan	Council Plan	Related strategies
<p>1. Economy of the future Building a strong and adaptive city economy and a sustainable future city.</p> <ul style="list-style-type: none"> An efficient and affordable transport network is a basic element of an accessible city and a strong economy. <p>2. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city.</p> <ul style="list-style-type: none"> Melbourne's unique streetscapes, open and green spaces, built environment and 	<p>The increase in infrastructure needs to support a growing population has been a major consideration in the development of the 10-year Financial Plan. Over the next decade the plan identifies the need to invest \$1.4 billion in infrastructure to ensure Melbourne remains a global liveable city.</p> <p>The plan identifies a step change investment in three key areas to support the growing population, maintain liveability and renew the Queen Victoria Market for future generations. In addition to this, it is equally important to ensure existing assets and</p>	<p>The Council Plan preserves and progresses the city in six strategic objectives</p> <ol style="list-style-type: none"> Economy of the future Building a strong and adaptive city economy and a sustainable future city. Melbourne's unique identity and place Celebrating the places, people and cultures that make this a vibrant and creative city. Safety and wellbeing Ensuring everyone feels safe and included as they participate in community life. Access and affordability Reducing inequality by ensuring access to housing, 	<ul style="list-style-type: none"> Asset Management Strategy Transport Strategy 2030 Climate Change Adaptation Strategy Community Infrastructure Plans Arden Macaulay Structure Plan 2012 Bicycle Plan 2016 City Road Master Plan 2016 City North Structure Plan 2012

neighbourhood character are protected and enhanced as the city grows and evolves.

3. Safety and wellbeing

Ensuring everyone feels safe and included as they participate in community life.

- All people who work in, live or visit the city can do so, and feel safe, at any time of the day or night.

4. Access and affordability

Reducing inequality by ensuring access to housing, core services and information.

- The city is made up of safe and accessible places and services where everyone can come together.

5. Climate and biodiversity emergency

Acting immediately to reduce our emissions and waste and adapt to climate change.

- The city continues to strengthen its dense network of green streets and spaces so that plants and animals can thrive, and communities can come together.

infrastructure is maintained at appropriate levels to service the community's needs.

Implement an asset management strategy to optimise spend on renewal of existing assets.

Prioritise any new identified capital investment within available resources.

Access borrowings to fund infrastructure that will generate an appropriate return or prevents rapidly increasing costs.

core services and information.

5. Climate and biodiversity emergency

Acting immediately to reduce our emissions and waste and adapt to climate change.

6. Aboriginal Melbourne
Ensuring that First Peoples' culture, lore, knowledge, and heritage enrich the city's growth and development.

Future challenges	Strategic response	Consequences of not funding
<input checked="" type="checkbox"/> Population growth, urban density, changing demographics and customer expectations	Increase our existing efforts and implement new actions to work towards our vision of a city that is adapting well to climate change	Without adequate capital investment it is likely that the road network infrastructure will deteriorate causing a drop in community satisfaction, and affecting to safety, amenity, liveability and productivity of the community.
Climate and biodiversity emergency	Provide more space for people on footpaths and around major transport hubs. Reduce congestion for cars coming to the city and reduce injuries to pedestrians and cyclists by adapting our streets, footpaths, public spaces and transport hubs to manage the impact of population growth.	
A changing economy and workforce	Improve streetscapes, create more public spaces and provide better local amenities for residents, workers and visitors to meet their expectation and service demand.	
Disruptive technology and digital innovation		
<input checked="" type="checkbox"/> Financial constraints and long-term sustainability		

7.8.6 Future investments

Future investments	Bud get	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan
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	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Scheduled and reactive maintenance	686,000	718,000	715,000	785,000	822,000	860,000	899,000	944,000	985,000	
Depreciation	32,107,000	32,749,000	33,404,000	34,072,000	34,753,000	35,449,000	36,158,000	36,881,000	37,618,000	
Other operating	718,000	751,000	785,000	822,000	860,000	899,000	944,000	985,000	985,000	
Maintenance works	4,682,000	4,813,000	4,950,000	5,089,000	5,234,000	5,383,000	5,536,000	5,695,000	5,800,000	
Operating expenditure	38,193,000	39,031,000	39,854,000	40,768,000	41,669,000	42,591,000	43,537,000	44,505,000	45,388,000	
Renewal works	19,065,000	24,222,000	24,385,000	23,465,000	22,116,000	17,345,000	24,104,000	22,572,000		3,125,000
Upgrade works	16,344,000	19,303,000	33,629,000	30,019,000	12,407,000	18,228,000	16,660,000	16,575,000		0
Expansion works	0	0	0	0	0	0	0	0		0
New works	9,767,000	9,767,000	31,052,000	31,052,000	30,052,000	30,052,000	30,052,000	30,052,000		0
Capital expenditure	45,176,000	53,292,000	89,066,000	84,536,000	64,575,000	65,625,000	70,816,000	69,199,000	69,214,000	
Totals	83,369,000	92,323,000	128,920,000	125,304,000	106,244,000	108,216,000	114,353,000	113,704,000	114,602,000	
Renewal and upgrade as a % of depreciation	110%	133%	174%	157%	99%	100%	113%	106%	104%	0%
Future returns	Budget 2021-22	Plan 2022-23	Plan 2023-24	Plan 2024-25	Plan 2025-26	Plan 2026-27	Plan 2027-28	Plan 2028-29	Plan 2029-30	Plan 2030-31
Fees and charges	0	0	0	0	0	0	0	0	0	0
Operating grants	0	0	0	0	0	0	0	0	0	0
Operating income	0	0	0	0	0	0	0	0	0	0
Capital grants	0	0	0	0	0	0	0	0	0	0
Capital contributions	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	0
Capital income	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	0

Totals	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	0
Income as a % of expenditure (cost recovery)	%	%	%	%	%	%	%	%	%	%

Major investments through our Council works program include

10-year outlook				
Asset / asset sub-group	Works description	Works type	Cost estimate	Year
Roadway		Renewal	5,503,023	2021–22
Footpath		Renewal	15,013,759	
Kerb and channel		Renewal	3,305,130	
Street furniture		Renewal	400,000	
Roadway		Renewal	6,743,818	2022–23
Footpath		Renewal	12,623,696	
Kerb and channel		Renewal	4,617,068	
Street furniture		Renewal	400,000	
Roadway		Renewal	6,719,588	2023–24
Footpath		Renewal	10,847,667	
Kerb and channel		Renewal	5,497,997	
Street furniture		Renewal	400,000	
Roadway		Renewal	6,121,974	2024–25
Footpath		Renewal	9,521,393	
Kerb and channel		Renewal	6,072,546	
Street furniture		Renewal	400,000	
Roadway		Renewal		2025–26
Footpath		Renewal		
Kerb and channel		Renewal		
Street furniture		Renewal		
Roadway		Renewal	7,736,372	2026–27
Footpath		Renewal	8,564,305	
Kerb and channel		Renewal	644,633	
Street furniture		Renewal	400,000	
Roadway		Renewal	9,121,647	2027–28
Footpath		Renewal	7,891,676	
Kerb and channel		Renewal	6,690,348	
Street furniture		Renewal	400,000	
Roadway		Renewal	7,739,907	2028–29
Footpath		Renewal	7,575,915	
Kerb and channel		Renewal	6,855,675	
Street furniture		Renewal	400,000	
Roadway		Renewal	7,452,473	2029–30
Footpath		Renewal	7,701,216	
Kerb and channel		Renewal	6,971,802	
Street furniture		Renewal	400,000	
				2030–31

8 Four-year Implementation Plan

The key priorities and commitments of the plan will be implemented through a four-year implementation plan. This will be monitored by accountable officers nominated to form the Asset Management Committee.

The committee will ensure the Asset Plan is kept in force, with half-yearly progress and performance reports provided to the Executive Leadership Team and Council. Annual results will be reported to the community in our Annual Report.

Progress and performance reports will take the form of annual State of the Assets reports and include updates on the

- Progress of the four-year improvement plan.
- Performance against key measures and targets including our National Asset Management Assessment Framework maturity rating.
- Value of capital works completed as a percentage of budget.
- Value of renewal and upgrade works as a percentage of depreciation.
- Performance of our key infrastructure assets in responding to the municipality's challenges and Council's strategic objectives and in maintaining agreed levels of service.

In accordance with section 92(4) of the *Local Government Act 2020*, this Asset Plan will be reviewed following the next general Council election, with any updates to be adopted by the new Council by 31 October of the year following that general Council election.

The asset management plans for each of the key asset classes identified in this Asset Plan – and which underpin the 10-year investment forecast – will be updated annually with key changes published in our annual Budget.

All annual updates will be used to inform the final review in the fourth year. Included within this review will be

- an evaluation of its effectiveness
- any required updates to the plan
- a new four-year improvement plan.

Objective 1 Integrated long-term planning							
	Action	National Asset Management Assessment Framework (NAMAF)	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
1.1	Refresh Asset Management policy to align with good practice and Core and Advanced NAMAF requirements. The Asset Management policy will be adopted by Council as part of the 10-year Asset Plan.	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$		
1.2	Document Asset Management Plans for the following asset types, including outputs and financial impacts, from service plans Artwork – outdoor collection 170 individual assets IT equipment including criteria for short lifespan assets and value – mobile phones Indoor furniture and equipment	Asset data, process and practice	Directors Infrastructure and Assets, Creative City, Technology and Digital Innovation, Property	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$		
1.3	Develop service plans to document present levels of service based on existing Council plans and strategies. Integrate service plan preparation and revise with business-as-usual processes. A review process will form part of service plans. This will define, quantify and document current community levels of service and technical levels of service, and costs of providing the current levels of service. Specific service plans are those delivered using following asset types bridges, buildings, marine structures, parks and outdoor recreation, public metered lighting, roads and footpaths, safe city cameras and equipment, Indoor furniture and equipment Artwork – outdoor collection of 170 individual assets IT equipment excluding mobile phones	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$

Objective 2 Financial sustainability							
	Action	Program	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
2.1	Review processes associated with long-term Financial Plan to reflect an integrated planning approach that includes asset and service financial forecasts.	Asset data, process and practice	Director Finance and Investment	Delivery Nil In Progress Complete Cost (\$'000) \$			

2.2	Include State of the Assets Report within Council's Annual Report to summarise asset condition, asset performance, financial sustainability options and consequences.	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$	
2.3	Establish and implement policies for capital works formulation to create an end-to-end process for integration and correlation between asset renewal planning and service strategies for optimal investment in capital works. This will cover handover processes and checklists for deliverables, project capitalisation guidelines, enforced gating process, capture as built data in consistent formats providing for financial recognition of assets and stakeholder engagement on initial project scoping.	Asset data, process and practice	Director City Projects	Delivery Nil In Progress Complete Cost (\$'000): \$			
2.4	Develop policy position for financially registering and valuing land under roads outside the Docklands precinct, for roads constructed 2008.	Asset data, process and practice	Director Finance and Investment	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$		
2.5	Develop and agree on process for the recognition and capture of airspace as an asset in the asset register where a permit would apply.	Asset data, process and practice	Director Property		Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$	
2.6	Review the Fixed Asset Policy and related processes for assessment of depreciation methods, asset life and remaining useful life for applicable asset classes – the latter two by a combination of accounting and tax information and by qualified valuers during the valuation process.	Asset data, process and practice	Director Property	Delivery Nil In Progress Complete Cost (\$'000): \$			

Objective 3 Risk evidence-based decision making							
	Action	Program	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
3.1	Documented and follow asset data, maintenance and governance processes for all asset types in place and adhered to, including clarifying roles and responsibilities with respect to data custodianship: Bridges, buildings, drainage, marine structures, parks and outdoor recreation Public metered lighting, roads and footpaths, safe city camera network	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$		

	Events including Christmas decorations, Moomba floats, artwork – outdoor works, IT excluding mobile phones Indoor furniture and equipment.						
3.2	Formalise and embed the Capital Works and Major Projects evaluation process which is driven by Council Plan priorities and the Financial Plan. This should include consideration of asset life cycle costs. Appropriate governance structures should be established to provide oversight to process application.	Asset data, process and practice	Director Property	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$		

Objective 4 Community focused levels of service							
	Action	Program	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
4.1	Plan and conduct community deliberative engagement and collaboration workshops on the 10-year Asset Management and Financial Plan to inform planning for assets and levels of service (including Neighbourhood Plans).	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$			Delivery Nil In Progress Complete Cost (\$'000): \$
4.2	Establish an agreed baseline of current design standards and service levels, set targets and report on asset performance. Identify gaps / over-design on specific assets such as bespoke.	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery: Nil In Progress Complete Cost (\$'000) \$		
4.3	Document a defined service planning process and approach that assesses asset capacity and functionality.	Asset data, process and practice	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000) \$			
4.4	Confirm levels of service through community consultation process.	Asset data, process and practice	Director Community Development	Delivery Nil In Progress Complete Cost (\$'000) \$			

Objective 5 Continuous systems improvement							
	Action	Program	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
5.1	Continue asset management information systems development to capture life cycle cost information, maintenance, and operational activities associated with assets.	Asset information systems	Director Technology and Digital Innovation	Delivery Nil In Progress	Delivery Nil In Progress Complete	Delivery Nil In Progress Complete	Delivery Nil In Progress

				Complete Cost (\$'000) \$	Cost (\$'000) \$	Cost (\$'000) \$	Complete Cost (\$'000) \$
5.2	Continue to improve asset management information system integrations and interfaces to enable capture of full asset life cycle costs.	Asset information systems	Director Technology and Digital Innovation	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$
5.3	Develop the business case for a next generation Enterprise Asset Management application at City of Melbourne. If Asset Master is retained there needs to be an option for a business case for a separate predictive modelling tool option.	Asset information systems	Director Technology and Digital Innovation	Delivery Nil In Progress Complete Cost (\$'000) \$			
5.4	Document attributes and performance requirements for inclusion in the selection criteria for the next Enterprise Asset Management system.	Asset information systems	Director Climate Change and City Resilience	Delivery Nil In Progress Complete Cost (\$'000) \$			
5.5	Implementation of the annual program of system upgrades and additions for improved asset data capability, capacity and systems usability.	Asset information systems	Director Technology and Digital Innovation	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$
5.6	Ensure that the Project Management Framework integrates the processes for asset management data collection from the inception until completion of capital works investment in the corporate Asset Management and GIS systems.	Asset information systems	Director City Projects	Delivery Nil In Progress Complete Cost (\$'000) \$			
5.7	Undertake preparatory work in asset system to capitalise individual assets where it is currently collectively valued and assign condition levels at the point of creation and conduct a full audit of financial data held in Asset Master and the Asset Register (financial) to reconcile and harmonise data where possible.	Asset data, process and practice	Director Finance and Investment	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	Delivery Nil In Progress Complete Cost (\$'000) \$	
5.8	The project management system linkages are established to core asset management systems.	Asset information systems	Director Technology and Digital Innovation	Delivery Nil In Progress	Delivery: Nil In Progress		

				Complete	Complete		
				Cost (\$'000):	Cost (\$'000):		
				\$	\$		

Objective 6 Constructive and accountable culture							
	Action	Program	Responsible executive	Year 1 2021–22	Year 2 2022–23	Year 3 2023–24	Year 4 2024–25
6.1	Prepare an internal communication framework which outlines asset management reporting and organisational engagement requirements.	Cultural change	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)		Delivery Nil In Progress Complete Cost (\$'000): \$		
6.2	Prepare and implement an internal communication strategy to raise organisational awareness of the fundamentals and importance of good asset management.	Cultural change	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)		Delivery Nil In Progress Complete Cost (\$'000): \$		
6.3	Review and update the current Asset Roles and Responsibilities Matrix and the accountability frameworks to suit the current business environment and confirm organisational accountabilities, including service managers.	Cultural change	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$			
6.4	Develop skills matrix following evaluation of Council's capability and confirmation of roles and responsibilities.	Cultural change	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$		
6.5	Develop and formalise a budgeted corporate asset training and awareness program and implement subject to annual funding availability.	Cultural change	Director Infrastructure and Assets (Chair of Asset Management Steering Committee)	Delivery Nil In Progress Complete Cost (\$'000): \$	Delivery Nil In Progress Complete Cost (\$'000): \$		

9 Appendices

Appendix A: Glossary

Asset

A physical item that has value, enables the provision of a service and has an economic life greater than 12 months.

Asset expansion

To extend the capacity of an existing asset to provide benefits to new users at the same standard as is provided to existing beneficiaries.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets to provide the required level of service – optimally and sustainably – through the cost-effective life cycle management of assets.

Asset Management Framework

Outlines the structure and relationships between the various asset management system elements, such as the Asset Management Policy, Asset Management Strategy, Asset Management Plans, Asset Management Information System and asset management roles and responsibilities.

Asset Management Information System

A combination of processes, data, software, and hardware applied to provide the essential outputs for effective asset management.

Asset Management Plans

Long-term plans – 10 years or more – that outline the asset activities and programs for each service area and resources applied to provide a defined level of service in the most cost-effective manner.

Asset Management Strategy

A short- to medium-term strategy for the implementation and documentation of improved asset management practices, plans, processes, and procedures within an organisation.

Asset renewal

Replacement or other works on an existing asset that returns the asset to its original service capability.

Asset upgrade

To enhance an existing asset to provide a higher level of service or increase the life of the asset beyond its original life.

Level of service

The defined service objective or outputs for a particular activity or service area against which performance may be measured. Service levels can relate to quality, quantity, reliability, responsiveness, environmental acceptability, and costs of providing the service.

Life cycle

The time interval that commences with the identification of the need for an asset and terminates with the decommissioning of the asset or any liabilities thereafter.

New acquisition asset

A new asset that provides a service that does not currently exist.

Appendix B: Council strategies and plans

Strategies, frameworks and action plans

- A Great Place to Age Strategic Plan
- Affordable Housing Strategy 2030
- Arts Infrastructure Framework
- Climate Change Adaptation Strategy
- Climate Change Mitigation Strategy to 2050
- Community Infrastructure Development Framework
- COVID-19 Reactivation and Recovery Plan
- Melbourne's Thriving Economic Future: Economic Development Strategy 2031

City of the future

- Creative Strategy
- Disability Access and Inclusion Plan
- Elizabeth Street Strategic Opportunities Plan
- Food City: City of Melbourne Food Policy
- Green our City Strategic Action Plan
- Heritage Strategy
- Municipal Integrated Water Management Plan
- Music Plan
- Nature in the City
- Open Space Strategy
- Reconciliation Action Plan
- Resilient Melbourne
- Skate Plan
- Start-up Action Plan
- Transport Strategy 2030
- Urban Forest Strategy
- Waste and Resource Recovery Plan

Place-based structure plans and master plans

- Arden-Macaulay Structure Plan
- City North Structure Plan
- Docklands Community and Place Plan
- Docklands Public Realm Plan
- Docklands Waterways Strategic Plan
- Maribyrnong Waterfront – A Way Forward
- Melbourne Innovation Districts Opportunities Plan
- Moonee Ponds Creek Strategic Opportunities Plan
- Queen Victoria Market Precinct Renewal Master Plan
- Southbank Structure Plan
- West Melbourne Structure Plan
- Yarra River – Birrarung Strategy

Public space master plans

- Carlton Gardens Master Plan
- Domain Parklands Master Plan
- Fawkner Park Master Plan
- Fitzroy Gardens Master Plan
- Flagstaff Gardens Master Plan
- Lincoln Square Concept Plan
- Princes Park Master Plan
- Royal Park Master Plan
- University Square Master Plan

Urban forest precinct plans

- Carlton Urban Forest Precinct Plan
- Central City Urban Forest Precinct Plan
- Docklands Urban Forest Precinct Plan
- East Melbourne Urban Forest Precinct Plan
- Fishermans Bend Urban Forest Precinct Plan
- Kensington Urban Forest Precinct Plan
- North and West Melbourne Urban Forest Precinct Plan
- Parkville Urban Forest Precinct Plan
- South Yarra Urban Forest Precinct Plan
- Southbank Urban Forest Precinct Plan

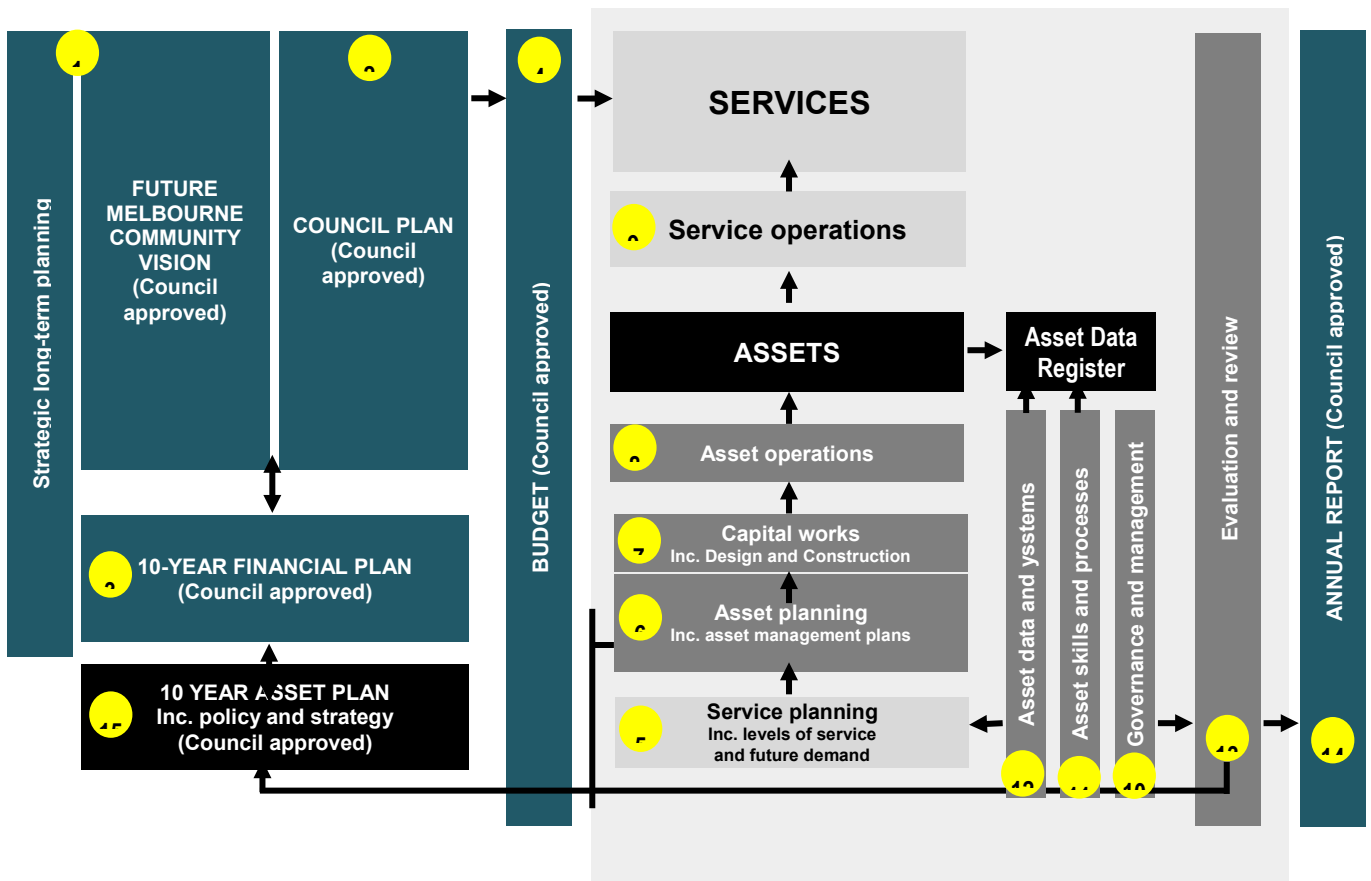
Major streetscape master plans

- City Road Master Plan
- Elizabeth Street Strategic Opportunities Plan
- Southbank Boulevard and Dodds Street Concept Plan

Appendix C: Asset Management Accountability Framework

Our asset management accountability framework depicts the primary documents, systems and processes that address our organisation’s critical asset management activities and responsibilities. It is a set of the interrelated and interacting elements.

The framework includes the establishment and oversight of Council’s asset management policy and strategic objectives which aim to realise the mission and goals of City of Melbourne’s community vision and Council Plan. It outlines the key processes, systems and accountabilities required to achieve these objectives.



1. Future Melbourne Community Vision and an Integrated Planning Framework

Executive Leadership: Chief Executive Officer
 General Manager Governance and Organisational Development
 General Manager Strategy, Planning and Climate Change

Accountable Officers: Director City Strategy (Community Vision)
 Director City Lab (Community Vision)
 Director Governance (Integrated Planning Framework)

Accountable Officers are to work with our community to develop a community vision that outlines the community’s aspirational view of Melbourne over the next 10 years. The Community Vision should incorporate a vision, mission, values and long-term service outcomes that reflect community needs identified through deliberative community engagement including any role identified for our infrastructure assets. Accountable Officers will also develop an integrated planning framework that uses the Community Vision as the primary point of reference to align all other strategic documents

2. Council Plan

Executive Leadership: Chief Executive Officer
 General Manager Governance and Organisational Development
 Accountable Officer: Director Governance (Council Plan)
 Director Health and Wellbeing (Municipal Health and Wellbeing Plan)

Accountable Officers should work with the councillors to develop the Council’s four-year vision and commitment to progressing the community vision; what the Council will seek to achieve in this period, how it proposes to achieve this, the resources required, and how it will measure success. Accountable officers will implement the Council Plan (incorporating the Municipal Public Health and Wellbeing Plan) through the Budget, including the allocation of funding for the management of assets and capital works. Council’s performance in implementing the Council Plan should be recorded by accountable officers in the Annual Report.

3. Financial Plan

Executive Leadership: Chief Executive Officer
 General Manager Executive Services
 Accountable Officers: Director Finance and Investments

Accountable Officers should develop a Financial Plan that aims to provide a 10-year view of Council’s resources and sources of funding and how those resources will be applied across services, operations and capital investments and assets. To achieve sustainable and sound financial management it is critical to have a financial view beyond 12 months.

The 10-year Financial Plan allows significant strategic decisions about resource allocation and financing decisions without compromising sound financial management. A long-term view is required on key financial components including borrowing and other financing source. Some key long-term components (but not limited) are new infrastructure, maintenance and renewal gap, long-term impact on investment, borrowings and liquidity ratios and changes in our revenue streams.

4. Budget

Executive Leadership: Chief Executive Officer
 General Manager Executive Services
 General Manager Governance and Organisational Development
 Accountable Officers: Director Governance
 Director Finance and Investment

Accountable Officers should develop an annual Budget that aims to present an annualised view of what the City of Melbourne will deliver over the next four years and the resources required for this. Accountable Officers should develop monthly and / or quarterly reports to allow the management team and Council to closely monitor the organisation’s progress toward achieving its goals.

5. Service planning

Executive Leadership: Chief Executive Officer
 General Manager Governance and Organisational Development
 General Manager of Community and City Services
 General Manager Strategy Planning and Climate Change
 General Manager Executive Services
 Accountable Officers: Director Governance (Service Planning Framework)
 Director City Strategy (Capital City, City Spatial and Strategy and Master Plans)
 Director Economic Development (Strategy and Master Plans)
 Director Community Development (Neighbourhood Community Plans)
 Director Climate Change and City Resilience (Strategy and Master Plans)
 Director Technology and Digital Innovation (City Analytics)
 Nominated ‘Service Managers’ as per ‘Asset Roles and Responsibility Matrix’

(Service and Operational Plans)

Accountable Officers should collaboratively identify the city's service delivery needs, aspirations and future demands over time including the consideration of the asset resources required. Short (annual), medium (four year) and long (ten years+) term strategic planning should be shared with asset managers. Service needs and aspirations should be documented in the organisation's key integrated planning framework documents, including Capital City Plan, Neighbourhood Community Plans, Strategy and Master Plans and Service and Operational Plans. Any relevant capital project proposals or business cases should also be submitted into the annual capital works planning process.

In preparing any proposal, the Accountable Officers should:

- identify options and prioritise investment and divestment need
- develop business cases as appropriate
- undertake cost benefit and real options analyses
- consider non-asset alternatives
- implement the appropriate accounting treatment and requirements for individual assets
- identify funding options.

Good service delivery requires the planning and acquisition of the most appropriate assets to meet current and future service delivery demands. This requires informed decisions about which assets are needed, where and in what numbers. However, future service delivery demands may be subject to significant uncertainty, and an asset's performance may not be able to meet those demands.

For example:

- Future service delivery demand may depend on demographic, environmental or technological outcomes, which are uncertain at the time of making decisions on asset planning.
- The performance of an asset may change due to the availability and price of inputs or due to unforeseen changes in the condition of the asset.

Effective asset management includes identifying and assessing uncertainties to enable Accountable Officers to respond when uncertain outcomes are realised. Adopting 'real options' or identifying alternative options (which can be pursued if uncertainties materialise) provide organisations with flexibility to adapt when these uncertain outcomes are realised. Where significant uncertainty affects an organisation's ability to achieve its service delivery objectives, Accountable Officers should consider the value of acquiring or preserving real options that could be exercised to adapt to changing circumstances. In these circumstances, Accountable Officers should incorporate planning for uncertainty and real options in their organisation's long-term service planning, asset management strategies and risk management and contingency planning.

6. Asset planning

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design
Accountable Officers:	Director Infrastructure and Assets (Asset Management Framework) Nominated 'Asset Managers' as per 'Asset Roles and Responsibility Matrix' (Asset Management Plans)

Accountable Officers should systematically identify their Council's service delivery and asset needs over time, to plan for how to manage their entire asset base, as well as individual assets throughout their full life cycle. This should be based on current service planning, as well as long-term service planning to meet future service needs and demand. Developing an asset management plan that identifies changing asset needs will assist Accountable Officers to:

- identify options and prioritise investment and divestment need
- develop business cases as appropriate
- undertake cost benefit and real options analysis
- consider non-asset alternatives
- implement the appropriate accounting treatment and requirements for individual assets
- identify funding options.

Accountable Officers should identify and assess risks associated with managing assets to enable well-informed decisions about risk management and treatment plans. As part of their asset management objectives, Accountable Officers must incorporate asset risk management planning, which describes the risk

management strategies and actions (e.g. treatment plans) to be implemented for assets under their control. Accountable Officers must continue to monitor and evaluate the effectiveness of their risk management measures on a regular basis and, if necessary, redefine them. When developing asset risk management plans, consideration should be given to examining risks across the whole asset life cycle. Asset risk management plans should consider inclusion of the following risks:

- physical failure
- operational
- financial
- occupational health and safety
- third party
- stakeholders.

As part of Council's business continuity plans, Accountable Officers should develop procedures for identifying and responding to incidents and emergency situations and maintaining the operational continuity of critical assets for service delivery.

7. Capital works and design

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design
Accountable Officers:	Director Capital Works (Project Management Framework) Director City Design (Design Excellence Framework)

Accountable Officers should establish and implement a Project Management Framework that guides investment decisions and capital project delivery. This should exist within an integrated planning framework that considers service delivery needs, corporate objectives, financial and budgetary constraints, full life cycle implications for assets and the Council's overall resource allocation objectives.

During the acquisition phases, Accountable Officers must consider, on behalf of Council:

- solutions to support service delivery that do not involve asset acquisitions
- risks in acquiring assets or delivering services
- the appropriate procurement method
- the appropriate approval mechanism prior to acquisition.

As part of the acquisition process, Accountable Officers must consider the:

- organisation's asset plan
- nature of the organisation's assets to be acquired or created
- market conditions and the implications for the organisation's asset cost
- industry capacity – the number of potential contractors or suppliers capable of supplying the assets
- industry standards – how the assets are normally procured in the relevant industries
- suitability of contractors or suppliers
- available resources to manage procurement of the organisation's asset
- relevant internal and external approval processes – Council approval processes as part of the Finance Plan and Budget.

To ensure a cost-effective approach, non-asset solutions to service delivery should be considered before deciding to purchase fixed assets. Additionally, private sector engagement options should also be considered, such as the involvement of the private sector in the acquisition process or delivery of services. Where capital project activities are devolved or outsourced, Accountable Officers should ensure that appropriate mechanisms are in place to confirm that the contracted service providers are acquiring or building Council's assets to an established acceptable standard. This must be balanced against any appropriate service delivery trade-offs. Choosing an appropriate acquisition method is fundamental to the feasibility, development and ultimate success of the procurement. Accountable Officers are responsible for choosing the most appropriate method and for identifying, assessing and allocating potential risks, and optimising investment return. The acquisition or build should be undertaken based on the capital project framework and any procurement specification that the Accountable Officer has undertaken as part of Council's service delivery planning.

The method used to acquire or building assets should enable:

- appropriate allocation of risks and obligations to relevant parties

- the definition of respective roles of those involved
- the required outcomes of the acquisition process.

The choice of procurement method should be made by considering costs, financial benefits, risks, delivery times and the period for which the asset is needed. The appropriate approval processes for acquiring an asset should also be followed.

Accountable Officers should, in accordance with the Project Management Framework and in consultation with asset managers and service managers, establish and implement an asset handover plan at the commencement of the project. This will guide the final handover of any acquired or built assets to the asset and service managers on completion of the project. Ensure:

- Assets are constructed to a satisfactory standard in accordance with the contract requirements and handed over to City of Melbourne.
- Handover requirements are documented in the Planning Permit Conditions, Request for Quote or Invitation to Tender, to ensure that the required asset information is provided by the contractor at practical completion.
- Asset data is given to the Asset Manager in a timely way and in the appropriate form.

Accountable Officers should – in consultation with asset managers, service managers, strategic planners, key stakeholders and the community – establish and implement a Design Excellence Framework to guide the design standards for Council assets. They should establish the governance and procedural framework for any customer design of critical assets to support cost-effective, high-quality design and the consistent improvement of built environment outcomes. The Design Excellence Framework should also provide guidance to assets identified in planning and public domain strategies and policies.

8. Asset operations

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design General Manager Executive Services
Accountable Officers:	Director Infrastructure and Assets Nominated 'Asset Managers' as per 'Asset Roles and Responsibility Matrix' (asset maintenance or management of outsourced services) Director Procurement and Contract Management (Procurement and Contract Management Method) Director Finance and Investment (Asset Accounting Policy)

An appropriate maintenance program can sustain or extend an asset's useful life. The benefits of effective asset maintenance include:

- a long-term reduction in life cycle costs
- better asset performance and service
- the optimisation of asset life
- improved public perception of the asset's service and safety standards.

Planning for asset maintenance enables targeted action to be undertaken in a timely and cost-effective manner. This helps the organisation's asset portfolio to remain productive for the lowest possible long-term cost.

Accountable Officers must establish systems and processes in a Policy Operating Statement, for undertaking all Council's asset maintenance activities, including both scheduled and reactive maintenance. Accountable Officers should ensure asset maintenance tasks are focused on high priority assets. High-priority assets might include those that affect health and safety or are operationally critical, while low priority assets might include those that have little value or have a relatively short expected life. There may also be assets that require little or no maintenance, for example furniture. Consideration will therefore need to be given to the resources Accountable Officers allocate to maintenance tasks.

The maintenance program must be regularly reviewed by the Accountable Officer to determine whether the maintenance effort is being allocated to the appropriate assets and is providing the desired outcomes. As part of this review, the available resources for maintenance must be examined to ensure that assets are maintained to the standard established by the Accountable Officer with consideration for the impacts on service delivery. Where asset management activities are devolved or outsourced, Accountable Officers

should ensure that appropriate mechanisms are in place to confirm that the contracted service providers are maintaining Council assets to an established acceptable standard, balanced against appropriate service delivery trade-offs over time.

Choosing an appropriate procurement method for outsourcing asset maintenance activities is fundamental to the feasibility, development and ultimate success of the procurement. Accountable Officers are responsible for choosing the most appropriate method, and for identifying, assessing and allocating potential risks and optimising investment return. The outsourcing should be undertaken based on the Asset Plan and a strategic services review that the Accountable Officer has undertaken as part of Council's service delivery planning.

The method used to acquire outsourced services should enable:

- appropriate allocation of risks and obligations to relevant parties
- the definition of respective roles of those involved
- the required outcomes of the acquisition process.

The choice of procurement method should be made by considering costs, financial benefits, risks, delivery times and the period for which the asset is needed. The appropriate approval processes for acquiring an asset should also be followed.

Accountable Officers must establish systems and processes in a Policy Operating Statement, for undertaking all Council's asset performance monitoring activities, including the frequency and method of monitoring of the assets.

- Condition: the actual physical and technical state of the asset.
- Functionality: the ability of the physical infrastructure to meet service needs including social, environmental and economic performance.
- Capacity: the ability of the physical infrastructure to meet demand.

Accountable Officers should establish processes to audit the condition and performance of Council assets. While each asset class will have unique attributes and assessment criteria, accountable officers should base all assessments on a common numeric rating score between 1 and 5.

Score	Condition rating	Description	% Life remaining (Approx.)
5	Excellent	Asset is as new, near perfect condition.	95%
4	Good	Asset is functional and displays superficial defects only.	75%
3	Fair	Asset is functional but shows signs of moderate wear and tear.	50%
2	Poor	Asset functionality is reduced. Asset has significant defects affecting the fabric of the asset.	25%
1	Failed	Asset is not functional, severely deteriorated.	5%

Accountable Officers must also establish processes to identify, monitor and record the condition of Council's assets. Accountable Officers must also proactively identify potential asset performance failures and identify options for preventive action. This should also include processes for handling and investigating failures, incidents and non-conformities with asset management strategies and procedures. If a critical asset service failure incident occurs, Accountable Officers must take action to control and address it and make any necessary changes to organisational asset management practices to minimise the possibility of the incident reoccurring.

Accountable Officers must also review and assess the effectiveness of any corrective actions they implement and make further adjustments as required. Accountable Officers must also establish policies and procedures that securely protect Council's assets against fraudulent activity, theft or improper use.

Accountable Officers must establish systems and processes in a Policy Operating Statement, for maintaining the financial records of Council assets including the disposal or decommissioning of Council's asset. As part of asset valuation, Accountable Officers must document policies and procedures for the revaluation of assets in accordance with the relevant Australian Accounting Standards Board (AASB) accounting standards. The decision to dispose of an asset requires thorough examination and economic appraisal. Like acquisition decisions, they should be taken within an integrated planning framework that takes account of service delivery needs, corporate objectives, financial and budgetary constraints and the Council's overall resource allocation objectives.

Planning for disposal should start well before the economic life of the asset has ended or the need for the service has finished, and should incorporate consideration of unplanned disposals or destruction of assets. Accountable Officers must comply with relevant approval processes and, where possible, select a disposal method including retirement, replacement, renewal or redeployment, that maximises the financial benefits associated with the disposal. Accountable Officers should also consider their organisation's alignment with the processes and principles outlined in the international standard ISO 55000 Asset Management Series, as appropriate.

9. Service operations

Executive Leadership:	Chief Executive Officer General Manager Executive Services
Accountable Officers:	Nominated 'Service Managers' as per 'Asset Roles and Responsibility Matrix' (Service Delivery or Management of Out Sourced Services) Director Procurement and Contract Management (Procurement and Contract Management Method)

Accountable Officers must establish systems and processes in a Service Plan, for undertaking all Council's asset service delivery activities. Accountable Officers should ensure service delivery tasks are focused on high priority services. High priority services might include those that affect health and safety or are operationally critical. Low priority services might include those that have little value or have a relatively short expected life. Consideration will therefore need to be given to the resources Accountable Officers allocate to service delivery.

The service delivery program must be regularly reviewed by the Accountable Officer to determine whether the service effort is being allocated to the appropriate services and is providing the desired outcomes. As part of this review, the available resources for service delivery must be examined to ensure that services are delivered to the standard established by the Accountable Officer with consideration for the impacts on Council's strategic objectives. Where service delivery activities are devolved or outsourced, Accountable Officers should ensure that appropriate mechanisms are in place to confirm that the contracted service providers are delivering Council's services to an established acceptable standard, balanced against appropriate strategic objective trade-offs over time.

Choosing an appropriate procurement method for outsourcing service delivery activities is fundamental to the feasibility, development and ultimate success of the procurement. Accountable Officers are responsible for choosing the most appropriate method, and for identifying, assessing and allocating potential risks, and optimising investment return. Outsourcing should be undertaken based on the service plan and a strategic services review that the Accountable Officer has undertaken as part of Council's service delivery planning.

The method used to acquire outsourced services should enable:

- appropriate allocation of risks and obligations to relevant parties
- the definition of respective roles of those involved
- the required outcomes of the acquisition process.

The choice of procurement method should be made by considering costs, financial benefits, risks, delivery times and the period for which the asset is needed. The appropriate approval processes for acquiring an asset should also be followed.

10. Asset Governance and Management

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design
Accountable Officers:	Director Infrastructure and Assets Members of the Asset Management Steering Committee

Accountable Officers must establish an appropriate governance framework to support the management of assets in Council's direct control, as well as being considerate of the governance frameworks that other organisations within the organisation must support management of assets in their control.

Responsibility, authority and accountability for all stages of the asset life cycle must be clearly defined and allocated within an Accountable Officer's operating frameworks. This includes allocating, documenting and

clearly communicating relevant asset management responsibilities and accountabilities for staff. Conversely, all asset management activities must only be carried out with proper authorisation, including appropriate financial and other delegations.

As part of this, Accountable Officers must document:

- responsibility for monitoring compliance with the Asset Management Framework and ensuring systems and processes to support the framework
- responsibility for decision-making for each stage of an asset's life cycle.

Ultimate accountability for asset management within the organisation resides with the Responsible Body, which is consistent with the attestation requirements for various functions of the Standing Directions of the Minister for Finance. The allocation of asset management responsibilities and accountabilities should be incorporated into relevant staff performance plans. Appropriate resources should be allocated to support staff with these responsibilities / accountabilities. Where asset management functions are devolved or outsourced – including to entities excluded from the Standing Directions – Accountable Officers must have appropriate internal management processes established. They must ensure that they – and their outsourced providers or entities excluded from the Standing Directions – are maintaining and managing assets to the required standard(s) for regular performance reporting.

Asset management leadership and accountability is a key part of the framework and applies to all stages of the asset life cycle. Effective asset management is supported by organisational leaders who promote the principles and policies of asset management.

In promoting/communicating the framework and the organisation's asset management strategy, an Accountable Officer should require staff to be informed of:

- the role of asset management within the organisation
- their contribution, role and responsibilities for asset management.

Management should drive implementation and adherence to the framework, the organisation's asset management system and any supporting policies. Management should also drive a culture of continuous improvement in asset management.

Management should also proactively promote the implementation of the framework and asset management more broadly within the organisation. This will ensure that asset management adds value and is not just a compliance process. It should also support the Victorian public sector to deliver high quality and efficient services to the community.

Without leadership and accountability at all levels in an organisation, but particularly from management and Accountable Officers, an organisation's asset management strategy and service delivery objectives may be ineffective.

Asset Management Steering Committee

The Council, under advice from the Executive Leadership Team, define the responsibilities, accountabilities and asset management objectives and strategies. City of Melbourne's Executive Leadership Team (ELT) is responsible for establishing and implementing the asset management system and its accountability framework and is It creates the vision and values that guide policy, strategy and practice; actively promoting these values inside and outside the organisation. City of Melbourne's Executive Leadership Team has nominated the General Manager Infrastructure and Design to take the lead role and responsibility for the Asset Management Framework on its behalf. The General Manager Infrastructure and Design chairs an ELT sub-committee to assist the organisation to deliver on its commitments, fulfil its reporting responsibilities and to provide governance over the Council Works Program and key capital projects.

The General Manager Infrastructure and Design chairs an asset management steering committee to oversee the establishment and implementation of the asset management framework. The terms of reference have been established to guide the governance and management of the activity of this committee.

11. Asset skills and processes

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design General Manager Governance
Accountable Officers:	Director Infrastructure and Assets Nominated 'Asset Managers' as per 'Asset Roles and Responsibility Matrix'

Director People Culture and Leadership (position description templates and recruitment)

Accountable Officers must establish and document systems and processes in a Policy Operating Statement, for undertaking all Council's asset management activities. Accountable Officers must ensure that asset management roles and functions are established and that they are appropriately resourced with qualified and skilled asset management staff. Accountable Officers should determine the resources required – such as staff, equipment and systems – and the skills and education needed by their asset management staff for each stage of the asset life cycle.

The skills, education and training required will vary depending on existing capability within the organisation. Where asset management activities are devolved or outsourced, Accountable Officers must ensure that contracted service providers have arrangements in place to ensure their staff are appropriately skilled and trained. Ongoing training and education is required to maintain the appropriate standards of asset management. This can include encouraging staff to attend relevant training or seminars, subscribing to relevant publications, on-the-job training and coaching, and engagement with industry experts.

12. Asset data and systems

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design General Manager Executive Services
Accountable Officers:	Director Infrastructure and Assets Director Capital Works Director Technology and Digital Innovation Nominated 'Asset Managers' as per 'Asset Roles and Responsibility Matrix'

Comprehensive, accurate and up-to-date information on assets is vital to effective asset management. Access to information is important to ensure Accountable Officers can make informed decisions about the physical and financial performance of assets they manage. Accountable officers should establish accurate recording, identification, valuation and reporting procedures so that informed decisions to maintain, modify, rehabilitate, find an alternative use for, or dispose of an asset can be made. An Accountable Officer or asset manager cannot make these decisions effectively if they do not have ready access to the necessary information. As such, Accountable Officers must establish a central register of assets as an Enterprise Asset Management System (EAMS).

The EAMS must maintain up-to-date asset information as well as an historical record of both financial and non-financial information over each asset's life cycle for the purpose of:

- asset planning
- asset performance monitoring and reporting
- accountability.

Accountable officers should set the functional requirements of an EAMS based on the size and nature of Council's operations and its asset portfolio and should be configured to be fit for purpose. The EAMS must be regularly reviewed by the Accountable Officers to determine whether the system remains fit for purpose and if there are appropriate resources made available for maintaining the system. Accountable officers must ensure information in the EAMS is readily accessible to individuals who are accountable for the control and management of a nominated asset or group of assets and fully supports the effective decision making about asset management, including that it is:

- comprehensive, and include all assets under the control of Council
- structured in a way that allows different classifications of assets to be distinguished, and treated appropriately
- captures details of all transactions affecting the assets
- has associated procedures, controls and audit trails to maintain the integrity of the information
- includes financial information.

Having the above information stored in an EAMS will enable an Accountable Officer to undertake more informed decision making, by being able to assess or identify:

- the current condition of Council's assets
- when assets need to be replaced

- information required to meet financial and regulatory requirements
- asset locations
- the level and frequency of asset maintenance programs
- life cycle costs by asset or program
- the individual or organisational unit accountable for the asset and the location of the asset.

Comprehensive information about assets can generate large amounts of data. Accountable Officers must define their minimum information requirements, based on what is outlined above. They must also implement effective processes to generate the required information and establish necessary controls appropriate to Council's operation.

The information in the EAMS must be regularly reviewed to ensure that all asset-related information is up to date. As part of the EAMS, Accountable Officers must establish appropriate record keeping processes, to meet operational needs and to satisfy relevant accounting standards and disclosure requirements, including for their organisation's contingent and intangible assets. Effective record keeping will support the successful operation of the asset management system and associated processes. It will also support the Accountable Officer in undertaking any internal or external audit or review that may be conducted of their organisation's asset management practices.

13. Evaluation and review

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design General Manager Governance and Organisational Development
Accountable Officers:	Director Infrastructure and Assets Director Governance

Accountable Officers must establish systems and processes for monitoring the performance of both Council's assets and Council's asset management systems to ensure that they continue to meet service needs, strategic objectives and best practice targets.

Accountable Officers will evaluate the performance of asset systems and processes by using the National Asset Management Assessment Framework as a means of continuing to work towards maturity and best practice. This monitoring should also ensure that the overall asset management system is updated as knowledge improves, and circumstances change. At least every four years, Accountable Officers must conduct a self-assessment of the level of asset management maturity within Council, and report on the assessment outcomes of the Asset Plan. As part of this self-assessment, Accountable Officers must evaluate:

- the maturity of Council's asset management systems and practices
- the maturity of Council's systems and practices against their aspirational target
- Council's path towards achieving this aspirational target.

It is important that asset performance is appropriately and continuously reviewed and evaluated to verify that required outcomes, including service delivery objectives, are being achieved and that agencies 'learn by doing', which supports continuous improvement.

To assess whether objectives are being achieved, Accountable Officers should:

- identify Council's service needs and standards
- plan Council's services
- consider all means of service delivery available; then identify Council's asset needs
- establish and set asset standards or benchmarks required to achieve these service objectives
- plan, monitor and manage Council's assets, including asset-related risks to effectively deliver services in line with standards or benchmarks
- evaluate performance, the effectiveness of standards and benchmarks and, where appropriate, implement changes to support continuous improvement.

Accountable Officers must establish performance standards and targets for their assets, considerate of available resources that form part of their broader service planning goals. Accountable Officers must also establish and maintain management processes to regularly record, monitor and assess performance, and use those results to improve performance. Performance should be monitored by Accountable Officers against their own asset standards, targets or benchmarks to establish whether assets are being managed effectively, underperforming or costly to own and operate.

Several factors should be considered when setting targets for an asset's performance, including:

- condition
- capacity
- functionality
- financial performance.

When comparing performance outcomes against asset standards or benchmarks, the criteria should where possible consider relevant data from other comparable organisations or assets. The performance and use of assets must be reviewed periodically. Asset performance monitoring and continuous improvement strategies.

To ascertain the performance of an organisation's assets, key performance indicators should be established. Indicators could be based around:

- operational performance of the asset in meeting its service delivery objectives
- quality of the service delivered by using the asset
- user satisfaction
- asset use – capacity use, survivability, functionality, Occupational Health and Safety
- standards, environmental impact, legislative, regulatory or statutory compliance, condition
- reports
- operating costs – cleaning and energy costs, maintenance expenditure.

These indicators can be financial or non-financial, qualitative or quantitative, leading or lagging. Indicators and targets for assets should be driven by government policy objectives, established service standards, and available resources. Accountable Officers sometimes need to make an informed decision balancing the service, asset standards and performance they would like to achieve with costs, while considering competing priorities and available resources.

Establishing indicators and targets that incorporate benchmarks against other like assets provides a useful comparison of asset performance alongside other organisational objectives.

14. Annual Report

Executive Leadership:	Chief Executive Officer General Manager Governance and Organisational Development General Manager Executive Services
Accountable Officers:	Director Governance Director Finance and Investment

Accountable Officers should work with the councillors to develop the Council's annual report. The Annual Report, including audited financial statements, is our report to the community on our performance during the year.

Accountable officers will report on the delivery of our annual capital works program, including highlighting the key asset outcomes and their contributions to service delivery and strategic objectives. Accountable officers will also include in the audited financial statements relevant information on the financial performance of our assets.

15. Asset Plan

Executive Leadership:	Chief Executive Officer General Manager Infrastructure and Design General Manager Executive Services
Accountable Officers:	Director Infrastructure and Assets Director Capital Works Director Finance and Investment

A requirement of the Asset Management Framework is for Accountable Officers to develop an asset Plan for Council's entire asset base over the whole asset life cycle on a portfolio basis. The Asset Plan must be integrated into Council's overall planning framework, guided by the efficient and effective delivery of quality services.

Incorporating Council’s asset management policy and strategic plans within our overall planning processes will enable Accountable Officers to make the most appropriate decisions about Council’s asset profile.

The Asset Plan should respond to:

- new or changing service delivery requirements
- alternative methods of service delivery
- impact of alternative resource combinations on service outcomes
- resourcing changes
- evolving technology.

The Asset Plan should consider various options to achieve the organisation’s desired service delivery results, and include an evaluation of the costs, benefits and risks associated with each option. The plan must outline how the Accountable Officer will use the organisation’s assets to support its service delivery objectives. It will also incorporate planning for assets (including proposed upgrades, acquisitions and disposals) over different periods of time: short term (12 months), medium term (4 years) and long term (10 or more years). Accountable Officers should consider Council’s existing asset base in terms of condition, capacity and functionality. They should also consider available resources, funding constraints and competing service and asset priorities.


Accountable Officers should also consider:

- the policy, legal and accountability operating environment
- Council’s service delivery goals and objectives
- Council’s corporate management and planning framework
- external or market factors – commercial, technological, environmental, or industry implications
- and risks to those factors
- the asset life cycle, and how assets will be managed throughout the cycle, including the ability
- to scale-up, delay acquisition or dispose of assets
- life cycle costs of the assets
- resource availability
- private sector delivery options
- customer and stakeholder need
- performance monitoring, risk management processes and skills
- the Accountable Officer’s asset management systems and process
- non-asset alternatives to service delivery
- the need to rationalise operations to improve service delivery or enhance cost effectiveness
- continuous improvement of asset management and adaptive learning
- current and forecast demand for service delivery.

While addressing these issues, the asset plan should be at an appropriate level, commensurate with the size and functions of Council and ensuring it remains suitable and effective.

Appendix D: Prioritisation and resource allocation framework

Prioritisation and Resource Allocation Framework					
Run the business Non-discretionary	↓	50-70%	Mandatory	25-30%*	Investment to assets to meet legislative and regulatory and safety obligations.
			Critical Assets	25-30%*	Existing assets or services which if not continued or maintained in its current state could result in disruption to customers, unacceptable business continuity risk, significant maintenance costs above current levels and or increased operational risks, including

					safety. Aligned to asset categories of renewal and expansion.
			Urgent	0-5%*	Assets or services that must be delivered, otherwise the City of Melbourne will face serious reputation risk and damage. Need to invest usually arises in the short term, within the current financial year, as a one-off or emergency response to something. Can only occur if directed by CEO (cannot be at management discretion).
Grow / change the business Discretionary		30-50%	Transformation	20-25%*	Major projects that have the most significant impact on 1 or more Council goals or services. Outcomes may introduce a stable, material new revenue stream (e.g. that contributes 10% or more of current revenue). A major capital program / project shall be defined as being greater than 4 times the multiple of 1 per cent of Council rates.
			Performance	6-10%*	Assets or services that directly contribute to a higher service standard or goal outcome. Includes revenue generation; excludes operating budget. Aligned to asset category of new and upgrade.
			Productivity	6-10%*	Assets or services that directly improve efficiency in City of Melbourne's ways of working. Covers resources with no direct accountability for revenue or external services such as HR and Finance. Aligned to the asset category of new and upgrade.
			Innovation	3-5%*	Drive both internal transformations to streamline and automate for efficiency and growth, and external to meet emerging citizen and business requirements and opportunities.
<p>*Guideline allocation splits: these guidelines targets represent a starting point for comparison to City of Melbourne's Investment Allocation Strategy. If the organisation invests too heavily in the 'grow / change' category, it risks diminishing its service levels as it runs the business. If the organisation invests too heavily in running the business, it is more difficult to grow or change.</p> <p>Note: All funding allocated should be nett of the co-contributions, funding for external sources, e.g. Victorian Government. Funding received from sources that require a particular investment to be made, such as for parking, it must be used for those investment activities only. All items are inclusive of carry forward. Range represents long-term average pf 10 years. Council-announced commitments may relate to any category, however when prioritising them, they will be considered non-discretionary.</p>					

Appendix E: Assessing critical assets

Identifying critical assets

If a critical asset fails, the consequences can be high. Conversely, critical assets offer many opportunities. A fundamental role of asset management at the City of Melbourne is to understand its critical assets. It is important to target and refine investigations of critical assets, prepare maintenance plans, levels of service and capital investment plans for these areas of our services.

The criticality of our assets is assessed against the key categories identified in our risk management framework:

1. Service delivery (max score 40)
2. Safety (max score 5)
3. Environment (Max max score 5)
4. Financial and Economics (max score 5)
5. Reputation (max score 5)
6. Political (max score 5)
7. Liability (max score 5)

The assessment involves assessing individual or major classes of assets, and applying a criticality rating score against each of these seven criticality assessment categories. The service delivery category is prioritised by applying a weighting factor. The higher the score, the more critical the asset. The maximum potential maximum criticality score is 70 [(10x4) +5+5+5+5+5+5 = 70]

Service delivery		
Consequence rating	Consequence rating description	Score
Catastrophic	The continuing failure of City of Melbourne or major service providers to deliver essential services or Council Plan goals. The loss of key revenue streams. Long-term organisation-wide lack of staff and key skills. Long-term loss of a large facility, such as Melbourne Town Hall or Council House 2, including total damage to assets such as IT infrastructure, systems and data.	10
Major	Widespread failure of work area/s to deliver several essential services or Council Plan goals. Long-term failure of a major service provider, causing service interruption over a week. Long-term lack of staff and key skills in many work areas. Short to mid-term loss of a large facility, such as Melbourne Town Hall, Council House 2, or the total loss of a smaller facility. Significant damage to or loss of major City of Melbourne assets including IT systems and data.	8
Moderate	Failure of a work area/s to deliver minor services or Council Plan goals. Temporary and recoverable failure of contractor causing intermittent service interruption for a week. Mid-term reduction of staff availability and key skills in many work areas. Damage to one part of a major facility or many parts or a small facility. Moderate damage to or loss of major City of Melbourne assets including IT systems and data.	6
Minor	Temporary and recoverable failure of a work area or contractor, causing intermittent service interruption for several days. Short-term reduction of staff availability and skills. Damage to internal assets, systems etc. Isolated to a part of a facility or specific IT equipment and data.	4
Negligible	Negligible failure of business processes causing brief service interruption for several hours to a day. Temporary unavailability of various staff and skills. Negligible property damage, such as storm, criminal, accidental damage. Temporary loss of data and information.	2
Not applicable	Unavailability of this asset function produces no service delivery impacts.	0
Weighting factor	Weighting factor description	Factor
Low	No redundancy available. There is no Business Continuity Plan reducing any of the impact.	4
Medium	Redundancy shared with another process or service. A Business Continuity Plan reduces some of the impact.	2
High	Dedicated redundancy available. An effective Business Continuity Plan minimises any impact.	1

Safety		
Consequence rating	Consequence rating description	Score
Catastrophic	Multiple fatalities (more than five persons) and significant irreversible disabilities.	5
Major	Single or multiple fatalities and multiple irreversible disabilities or mental health impacts.	4
Moderate	Single or multiple critical long-term injuries, mental health impacts or irreversible disabilities.	3
Minor	Single or multiple injuries, mental health impacts or disabilities requiring short to mid-term hospitalisation and medical aid.	2
Negligible	Injuries requiring minimal temporary first aid or low-level stress.	1
Not applicable	Unavailability of this asset function produces no OHS impacts.	0

Environmental

Consequence rating	Consequence rating description	Score
Catastrophic	Catastrophic and irreversible environmental damage attributed by the courts to the negligent or incompetent actions of City of Melbourne.	5
Major	Long-term and widespread environmental damage taking greater than 5 years to recover and requiring significant restorative work	4
Moderate	Moderate environmental damage taking several years to recover from and requiring moderate restoration work.	3
Minor	Minor environmental damage such as remote temporary pollution.	2
Negligible	Brief, non-hazardous, transient pollution or damage.	1
Not applicable	Unavailability of this asset function produces no environmental impacts.	0

Financial and economic		
Consequence rating	Consequence rating description	Score
Catastrophic	Above \$20 million (calculated as approximately 10% of City of Melbourne's annual revenue)	5
Major	\$2 million to \$20 million	4
Moderate	\$200,000 to \$2 million	3
Minor	\$20,000 to \$200,000	2
Negligible	Up to \$20,000	1
Not applicable	Unavailability of this asset function produces no financial or economic impacts.	0

Reputation		
Consequence rating	Consequence rating description	Score
Catastrophic	Loss of support of Victorian Government with scathing criticism and Council removal. Community uproar and severe media exposure.	5
Major	Major ongoing media concern, adverse exposure and mid- to long-term loss of support from residents.	4
Moderate	Moderate media concern, adverse exposure and loss of support from residents.	3
Minor	Minor local community concern, manageable through good public relations.	2
Negligible	Transient matter that is resolved in day-to-day management – customer complaint.	1
Not applicable	Unavailability of this asset function produces no reputational impacts.	0

Political		
Consequence rating	Consequence rating description	Score
Catastrophic	Loss of power and influence, restricting decision-making and capabilities. Dismissal of Council by Victorian Government.	5
Major	Major adverse impact and intervention by Australian and Victorian governments.	4
Moderate	Moderate adverse impact and intervention by Victorian Government	3
Minor	Minor adverse impact and intervention by Local Government Authorities and Municipal Association Victoria.	2
Negligible	Negligible impact from one Local Government Authority.	1
Not applicable	Unavailability of this asset function produces no political impacts.	0

Liability		
Consequence rating	Consequence rating description	Score
Catastrophic	Regulatory or contract breaches causing very serious litigation, including major class action. Significant fines / prosecution for City of Melbourne and individuals.	5
Major	Major regulatory or contract breaches and litigation. Liability fine and implications for Directors and Managers.	4
Moderate	Regulatory or contract breaches causing investigation / report to authority and moderate fines and prosecution.	3
Minor	Minor regulatory or contract breaches causing minor fines and likely prosecution.	2
Negligible	Negligible regulatory breaches that are detected early and rectified. Insignificant legal issues and non-compliance.	1
Not applicable	Unavailability of this asset function produces no liability impacts.	0

Appendix F: Asset vulnerability to climate change first pass assessment findings

Asset Type	Priority for Suburbs for further evaluation based on the assessment findings												
	Carlton	Docklands	East Melbourne	Kensington	Melbourne CBD	Melbourne Remainder	North Melbourne	Parkville	Port Melbourne	Southbank	South Yarra	W. Melbourne Industrial	W. Melbourne Residential
Buildings		XO			O		X		X	O	X		X
Roads	XO	O		O	O		O		X	O			
Bridges		O				O	X	O		O	X	X	
Marine Structures		O			X				O	O			
Parks		O		XO				O		XO		X	X
Trees		O		O			O	O	X	XO			X
Drainage		O		X	O			X		O			

Note:
X – indicates priority based on vulnerability assessment; O - indicates priority based on inundation assessment

Where:
X – has been assigned based on the extreme case (RCP8.5) carbon emissions scenario vulnerability rating either in the short term (by 2030) or change in the rating in the intermediate term (between 2030 and 2050). The priorities relate directly to the detailed vulnerability process scores presented in Section 9 for each asset type.
O – has been assigned basis on the portion of total assets impacted that occur within the suburb, based on the inundation assessment (for both sea level rise and for a 1 in 100 rainfall event). The priorities relate directly to number of assets impacted as presented in the relevant asset tables contained in Appendix 5.

Appendix G: Legislation and references

Relevant legislation and regulations

- *Local Government Act 2020*
- *Local Government (Planning and Reporting) Regulations 2014*
- *Road Safety Act 1986*
- *Road Management Act 2004*
- *Building Act 1993 (Vic)*
- *Wrongs Act 1958 (Vic)* and Public Liability Insurance Reform updates.
- *Occupational Health and Safety Act 2004*
- *Disability Discrimination Act 1992*
- *Victorian Charter of Human Rights and Responsibilities Act 2006*

Related City of Melbourne policies and procedures

- Non-current Assets Policy
- Risk Management Framework
- Risk Management Strategy
- Councillor Code of Conduct
- Employee Code of Conduct
- Asset Management Roles and Responsibility Matrix

How to contact us

Online:

melbourne.vic.gov.au

In person:

Melbourne Town Hall - Administration Building
120 Swanston Street, Melbourne
Business hours, Monday to Friday
(Public holidays excluded)

Telephone:

03 9658 9658

Business hours, Monday to Friday
(Public holidays excluded)

Fax:

03 9654 4854

In writing:

City of Melbourne
GPO Box 1603
Melbourne VIC 3001
Australia



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