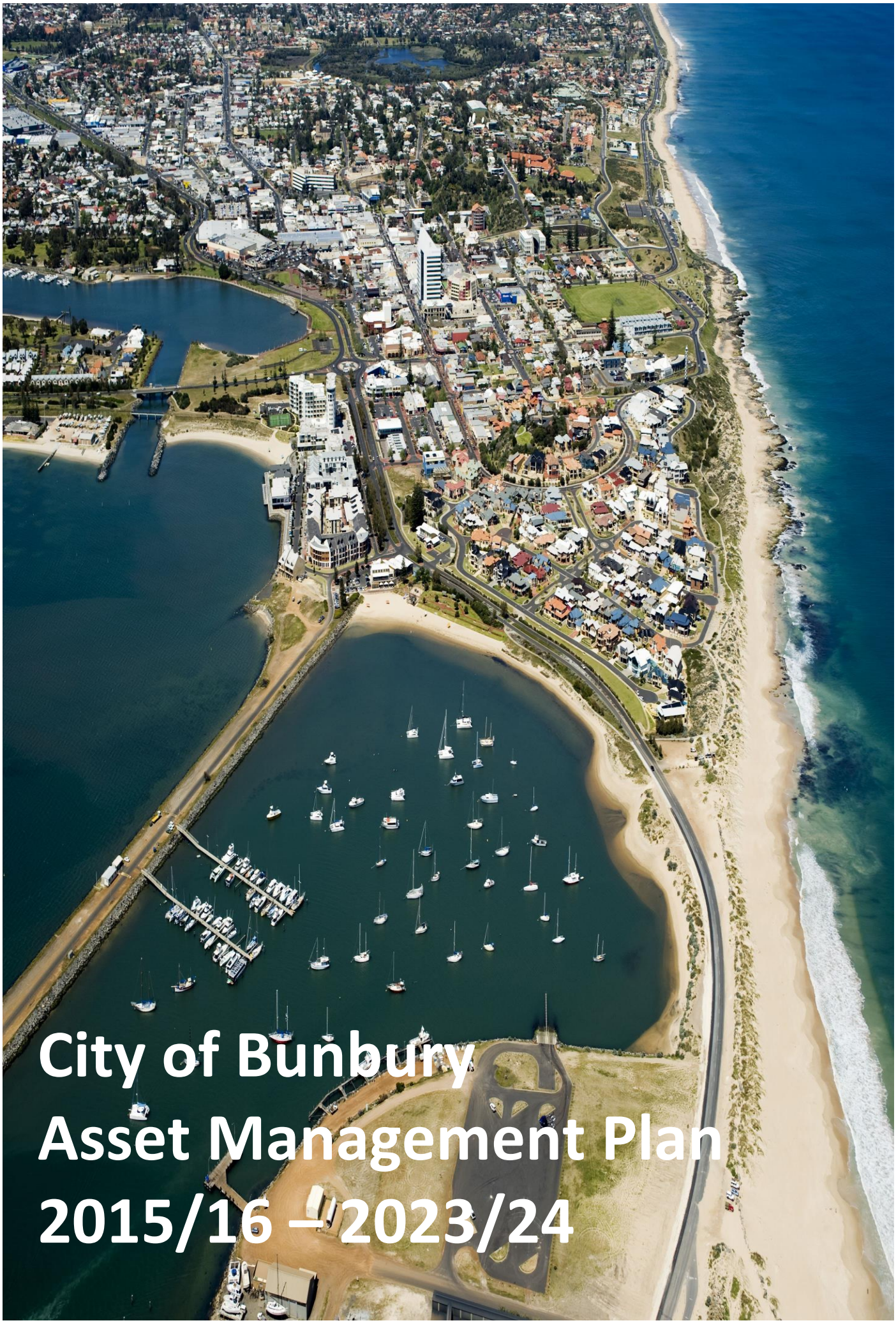

City of Bunbury Asset Management Plan 2015/16 – 2023/24

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*this plan is a revision and amalgamation of all current City of Bunbury Asset Management Plans

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GOVERNMENT OF WESTERN AUSTRALIA

Department of **Local Government**

Department of **Regional Development and Lands**

ROYALTIES FOR REGIONS

DEFINITIONS

Asset
A physical component of a facility, which has value, enables services to be provided and has an economic life of greater than twelve months

Asset Category
A sub-group of assets within a class hierarchy for management and financial reporting purposes

Asset Class
A group of assets having a similar function in the operations of an entity

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

Asset Management Plan (AMP)
A plan developed for the management of assets associated with the delivery of a service that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost-effective manner to provide a specified level of service

Asset Management Strategy (AMS)
A strategy for asset management covering the development and implementation of plans and programmes for asset creation, operation, maintenance, rehabilitation/replacement, disposal and performance monitoring to ensure that the desired levels of service and other operational objectives are achieved at optimum cost. The strategy includes Council's methodology for achieving these outcomes

Average Annual Asset Consumption (AAAC)
The dollar amount of the replacement cost consumed per year of the life of the asset

Current Replacement Cost (CRC)
The cost of replacing the service potential of an existing asset by reference to some measure of capacity, with an appropriate modern equivalent asset

Depreciation
The wearing out, consumption or other loss of value to an asset, whether arising from use, passing of time or obsolescence through technological and market changes It is accounted for by the allocation of the cost (or re-valued amount) of the asset less its residual value over its useful life

Economic Life
The period from the acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular level of service

Fair Value
The price that would be received to sell an asset or paid to transfer a liability, in an orderly transaction between market participants at the measurement date (AASB 13)

Level of Service
The defined service quality for a particular activity or service against which service performance may be measured Service levels to quality, quantity, reliability, responsiveness, environmental acceptability and cost.

Lifecycle Cost
The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs

NPV
Net Present Value

Remaining Useful Life
The time remaining until an asset ceases to provide the required level of service or economic usefulness. Age plus remaining useful life is useful life

Replacement
To complete replacement of an asset that has reached the end of its life, so as to provide a similar, or agreed alternate, level of service

Replacement Cost
The cost of replacing an existing asset with a substantially identical new asset

Residual Value
The estimated amount an entity would currently obtain from disposal of the asset, after deducting the estimated cost of disposal, if the asset were already at the age and in the condition expected at the end of the useful life

Risk Management
A formal process to apply a range of possible values relating to key factors associated with a risk in order to determine the resulting range of outcomes and their probability of occurrence

Service Standard
The service delivered by a particular asset as expected by the community. This service delivery standard is expressed in the form of a number representing asset condition (i.e. 1-5)

Sustainability
The degree to which Council has the ability to fund the replacement of existing assets at the end of their useful lives

Useful Life
A measure of the anticipated life of an asset or component; such as time, number of cycles, distance intervals etc.

1. EXECUTIVE SUMMARY

Goals and Objectives

The City exists to provide key services to our community. Many of these services are facilitated by City owned and maintained assets. The City has acquired assets over time through purchase, construction by City staff and by donation of assets constructed by developers and others to meet increased levels of service. At the time of the issue of this plan and based on current and verified data the City's assets have a replacement value of **$786.58m**.

The City's goal in managing its assets is to meet the required level of service in the most cost effective manner for present and future consumers in accordance with the goals and objectives of the City's Strategic Community Plan.

This Asset Management Plan is aligned to the City's Strategic Community Plan which identifies the following Key Priority Areas that are directly influenced by the City's asset management strategy, planning and practices:

1. Community and Culture: Enhancing community well-being and the quality of life for the people who live and work in Bunbury.
2. Transport and Infrastructure: Plan and facilitate effective and efficient infrastructure and transport networks to meet the current and future needs of our community.
3. Corporate: Planning and delivering on our vision is a shared responsibility that will be achieved through the development of relationships and partnerships with all stakeholders.

To deliver asset management in line with these Key Priority Areas the key elements of asset management are:

- ✓ Adopting a whole life cycle approach.
- ✓ Developing cost-effective management strategies for the long term.
- ✓ Providing a defined level of service and monitoring performance.
- ✓ Understanding and meeting the demands of growth through demand management and investment.
- ✓ Managing risks associated with asset failures.
- ✓ Sustainable use of physical resources.
- ✓ Continuous improvement in asset management practices.

Asset Management Plans are long-term plans that outline the asset activities for each service. The International Infrastructure Management Manual (IIMM) defines an Asset Management Plan (AMP) as *"a written representation of the intended asset management programs for one or more infrastructure networks based on the controlling organisation's understanding of customer requirements, existing and projected networks, and asset conditions and performance".*

Council may choose to have a single plan that encompasses all the assets under its control, or it may have a series of plans for each asset class or asset group (e.g. roads, buildings or infrastructure). The City of Bunbury previously had separate plans for each asset class which proved cumbersome. As part of the 2015 review of Council's overarching Asset Management Strategy (AMS) it was decided to incorporate all plans into one document to streamline asset management understanding, planning and resourcing.

The City's AMP outlines actions and resources to provide a defined level of service in the most cost-effective way; the Plan includes:

- the best available information and condition/performance sampling.
- a risk assessment to identify critical assets and strategies to manage those risks.
- a description of existing levels of service.
- long-term cash flow predictions for asset operation, maintenance and renewals based on local knowledge of assets and options for meeting current or improved levels of service and for serving the projected population.
- financial and critical service performance measures against which trends and Asset Management Plan implementation and improvement can be monitored.

Whilst the City is faced with a funding gap of $58.8m over the plan period this gap requires management and reduction over a period of time; it will never stay the same nor should the City aim to achieve a funding gap of zero as this is unrealistic and unnecessary. Instead the City should consider what represents a reasonable funding gap based on affordability and levels of service acceptable to the community and seek to implement funding strategies to manage the gap to meet these strategic requirements through its asset management goals and planning process.

The City's asset management goals are to:

1. Document the services and associated levels of service to be provided and the costs of providing the service.
2. Plan to fund ongoing asset maintenance and renewal to ensure that levels of service to the community meet expectations through innovative demand management techniques and alternative service delivery options where appropriate.
3. Communicate the consequences for levels of service and risk, where desired funding is not available.
4. Provide information to assist decision makers in trading off levels of service, costs and risks to provide services in a financially sustainable manner.

The City will also seek to implement comprehensive strategies and plans for infrastructure assets (roads, stormwater, pathways, bridges and marine), recreation facilities, community buildings, structures and open space. These plans draw on the extensive investigation and research into the condition of assets, as well as the timing and level of input required to renew them. The plans will be developed with community consultation, it is expected that the community feedback will demonstrate a high expectation that the City's assets be adequately maintained.

Like many local governments in Australia the City is currently faced with a significant asset funding gap. This is due to a number of historical factors that result primarily from long term historical provision of insufficient funding for maintenance and renewal. Instead many local governments have historically adopted the strategy of allowing assets and levels of service to deteriorate to a point at which renewal is required and then funding renewal. The current and future economic climate is such that this strategy is no longer viable and local governments are seeking to adopt more prudent and innovative approaches to asset management.

The City's asset management planning into the future will require consideration of the following options:

1. Increase allocations to capital renewal funding over the period and commit to ongoing increased renewal funding towards the 30-50 year horizon to address the funding gap.
2. Financial optimisation to provide better allocation of resources to meet the needs and demands of the community, this may involve changes to levels of service and the associated funding requirements both in terms of maintenance and renewal.
3. Asset rationalisation which will have a positive effect on asset lifecycle maintenance and renewal costs.
4. Options to introduce private sector involvement in asset ownership and maintenance of public assets and / or other ways of delivering services to the community.

In all cases The City should ensure that any strategic asset management decisions are not made in relation to single asset classes. It is important that all asset classes are considered within any review and consultation to ensure that feedback and subsequent decisions are based on Council and community expectations in relation to all asset classes jointly.

ASSET MANAGEMENT & LOCAL GOVERNMENT FINANCIAL SUSTAINABILITY

Since 1998 Australia has recognised the challenges facing local governments in relation to financial sustainability and the management of public infrastructure assets. The ALGA commissioned PwC report, The National Financial Sustainability Report (2006) identified a number of key issues and weaknesses affecting financial sustainability in local governments across Australia; the main issues being:

- Minimal revenue growth opportunities within the sector
- Cost growth exceeding revenue due to increasing costs associated with wage and material cost increases and service expansion into non-core services.
- A need to defer infrastructure (in particular community infrastructure) renewal due to a tendency by some councils to operate deficits, often repeated year on year resulting in a growing renewal backlog.
- Limited access to strong financial and asset management skills required to identify sustainability issues, optimising renewal expenditure planning and improving revenue streams.
- Low rate increases often due to council desires to improve voter appeal.

These findings were reinforced by the 2006 WALGA report, In Your Hands, which looked specifically at the West Australian local government sector. Key findings from this report outlined the following issues facing the sector as a whole in WA:

- On average WA Councils registered operating deficits in 2004/05 amounting to 4.5% of own source revenue (primarily rates)
- Over 50% of W Councils required a greater than 10% increase in own source revenue to eliminate underlying operating deficits.
- At the end of the 2004/05 financial year the sector had an infrastructure backlog of approximately $1.75bn, this represented 14% of the total value of Council non-financial assets.
- A large and ongoing intergenerational transfer of equity (and therefore risk) was occurring in asset management which meant that the renewal cost burden was being passed on to future generations with insufficient or no funding being allocated for future asset renewal requirements.

Whilst these reports both date back to 2006 many of the issues identified at the time remain as challenges for the WA local government sector.

The Integrated Planning Framework requirements establish the systemic processes that Councils need to adopt to seek ways to better manage many of these sustainability related challenges; however there remains a requirement for Councils to make a number of difficult decisions in the present to ensure their future financial sustainability with a strong dependency on good asset management a key to this process.

THE CITY'S ASSET PORTFOLIO

The City of Bunbury has a significant portfolio of community assets under its care and control. These assets form an integral part of providing services to the community of Bunbury and the wider region. A significant proportion of the City's assets have been in existence for many years. These assets originated from a combination of City construction and development activity. A significant proportion of these assets are nearing the end of their useful life and the cost of their renewal is a financial challenge for Council.

Asset Class	Dimension / Number	Replacement Value ($)	WDV ($)	Accumulated Dep'n ($)
Pathways		**$56.13m**	**$46.92m**	**$9.21m**
Pedestrian only pathways	**35km**	$6.47m		
Dual Use pathways	**173km**	$48.9m		
Pram/Access Ramps	**1,680 no**	$0.76m		
Roads (using MRWA Road Hierarchy Type)		**$231.48**	**$128.38m**	**$103.1m**
District Distributor 'A' Roads	**17.1km**			
District Distributor 'B' Roads	**9.2km**	$207.04m		
Local Distributer Roads	**30.2km**			
Access Roads	**268.9km**			
Kerb	**585.3km**	$24.24m		
Car Parks	**37no**	$5.63m	$2.82m	$2.81m
Bridges		**$7.43m**	**$6.5m**	**$$0.93m**
Road Bridges	**1 no**	$6.5m		
Foot Bridges	**12 no**	$0.93m		
Stormwater Drainage Infrastructure		**$92.77m**	**$53.94m**	**$38.83m**
Stormwater Pipes	**237km**	$66.92m		
Stormwater Pits & Sumps	**9655no**	$23.20m		
Open Channel Drains	**30.9km**	Valued in Land		
Stormwater Pump Stations	**12 no**	$2.22m		
Drainage Basins	**123 no**	Valued in Land		
Culverts & Headwalls	**542 no**	$0.43m		
Marine Infrastructure		**$13.37m**	**$6.92m**	**$6.45m**
Jetties & Pontoons	**7 no**	$0.68m		
Boat Ramps	**4 no**	$0.55m		
Sea Walls	**2,882m**	$10.13m		
Erosion Protection (Back Beach)	**572m**	$1.99m		
Swimming Pontoon	**1 no**	$0.023m		
Open Space		**$18.79m**	**$15.55m**	**$3.24m**
Playground Equipment (incl outdoor gym equipment)	**244 no**	*$2.18m*		
Sporting Infrastructure (surfaces & equipment)	**116 no**	$14.34m		
Irrigation Systems*	**Not Verified**	*Not Valued*		
Bores & Pumps*	**43 no**	*Not Valued*		
Filtration Systems	**6 no**	$0.63m		
BBQs	**38 no**	$0.27m		
Drink Fountains	**50 no**	$0.16m		
Benches / Bench Seats	**608 no**	$0.65m		
Bike racks	**113 no**	$0.086m		
Bollards	**741 no**	$0.037m		
Picnic Settings	**93 no**	$0.35m		
Beach Showers	**23 no**	$0.067m		
Planter Boxes	**14 no**	$0.021m		

* Requires verification and is not included in Open Space Valuation

Structures		**$23.22m**	**$8.68m**	**$14.54m**
Crash Barriers	**24 no**	$0.071m		
Hand/Guardrails	**3.78km**	$0.64m		
Shelters	**54 no**	$0.62m		
Shade Sails	**55 no**	*$0.74m*		
Boardwalks & Lookouts	**2.28km**	$2.4m		
Stairways / Steps**	**39 no**	*Not Valued*		
Fences & Gates (incl Wildlife Park enclosures)	**81km**	$8.66m		
Flag Poles	**18 no**	*$0.086m*		
Walls	**0.79km**	$0.14m		
Retaining Walls	**6.4km**	$4.75m		
Entry Statements**	**29 no**	*Not Valued*		
Sports Structures (dugouts, ticket boxes, scoreboards)	**23 no**	$0.04m		
Public Art	**72 no**	$5.07m		
Buildings		**$202.1m**		
Commercial	**15**	$28m		
Corporate	**24**	$29.43m		
Community	**42**	$54.34m		
Recreation	**50**	$84.6m		
Regulation	**3**	$0.82m		
Public Toilet Blocks	**29**	$4.9m		
Other Infrastructure		**$11.22m**	**$7.09m**	**$4.13m**
Public Lighting (including sportsground lighting)	**1280 no**	$6.5m		
Bus Shelters (incl seats at bus stops)	**151 no**	$1.41m		
Street Name Signs	**2,625 no**	*$0.42m*		
Other Signs (advisory, information, parking, tourist)	**2,991 no**	*$0.44m*		
Bins & Bin Enclosures	**49,399 no**	$2.45m		
Land		**$104.08m**		
Commercial	**52.37ha**	$34.69m		
Community	**946ha**	$49.36m		
Corporate	**102.57ha**	$20.03m		
Crown Land under Management Order	**(926.13ha)**	-		
Plant & Vehicles		**$8.9m**		
Major Plant	**15**	$1.778m		
Minor Plant	**25**	$1.5m		
Heavy Vehicles	**17**	$2.9m		
Light Vehicles	**78**	$2.73m		
Furniture & Fittings		**$0.59m**		
Office Equipment	**805 no**	$0.59m		
Equipment		**$13.77m**		
Parking Meters	**140 no**	$1.02m		
IT Equipment (incl CCTV Cameras)	**1149 no**	$4.32m		
Administration Equipment (TVs, Refridgerators etc)	**507 no**	$0.41m		
South West Sports Centre Equipment (gym, aquatic)	**348 no**	$3.75m		
Commercial Kitchen Equipment	**50 no**	$0.1m		
Survey Equipment	**15 no**	$0.09m		
Visual & Performing Arts Equipment	**268 no**	$0.76m		
Arts and Culture		**$2.73m**		
Christmas Decorations	**21 no**	$0.23m		
Artwork	**909 no**	$2.39m		
Musical Instruments	**99 no**	$0.11m		
TOTALS		**$786.58m**		

** Requires verification and is not included in Structures Valuation

Notes

Building Assets Classes consist of the following buildings:

Commercial:	Leased buildings (incl. Bunbury Yacht Club, Morrissey Homestead, Ronald McDonald House)
Corporate:	City of Bunbury administrative buildings, Visitor Centre, Operations Depots
Community:	Libraries, Bunbury Regional Entertainment Centre, Bunbury Regional Art Gallery,. Stirling St Arts Centre, King Cottage, Senior Citizens Centre, Graham Bricknell Shell & Bunbury Wildlife Park
Recreation:	All recreation facilities including the South West Sports Centre
Regulation:	Dog Pound & SES buildings

Reserves and Land in Stormwater and Open Space is included within Land

Land Assets consist of the following sub classes:

Commercial Land:	includes land owned or managed by the City zoned for commercial or industrial use.
Community Land:	includes land owned or managed by the City and zoned for recreation, car parking, library and museum.
Corporate Land:	includes land owned or managed by the City and zoned for administrative, transport, drainage and waste functions.
Crown Land under Management Order:	includes land managed on behalf of the Crown within all of the above categories.

Sporting Infrastructure: (Open Space)	includes sportsground turf maintained to sporting standards (such as Hands Oval, Payne Park, Hay Park) and the Bunbury Regional Athletics Track.

Public Lighting:	Only includes lighting owned and maintained by the City of Bunbury

CITY OF BUNBURY PLANNING FRAMEWORK

The Strategic Community Plan: Bunbury 2030 is the City's highest level policy document containing the direction for Council and the outcomes it seeks to achieve for and with the community to 2030.

A Snapshot of Bunbury

The City of Bunbury is located in the South West of Western Australia about 180 kilometres south of Perth. It is one of the fastest growing regional cities in Australia and has been dubbed as the second capital city of Western Australia by Premier Colin Barnett. Bunbury's population is estimated at over 33,000 (2012 ABS Statistics), this continues to grow steadily at an annual rate of approximately 2%. The Greater Bunbury region includes the City of Bunbury and Shires of Harvey, Dardanup and Capel and has a population of approximately 80,000 residents. While the South Western region, to which Bunbury acts as a hub, has a total population of 130,000.

Whilst the influx of population into the South West region presents new opportunities for development, it also creates an increasingly competitive land market within which community expectations are raised and further demands placed on infrastructure and service provision.

The prevailing climate of change makes it increasingly important for the City to reassess and reaffirm the position of the City as the regional capital of the South West. The situation requires the City to proactively pursue outward looking strategies that strengthen its role and identity as a regional capital and enhance its image and linkages within national and international arenas.

As urban areas grow and the City becomes more interrelated with surrounding areas, it is vital that strategies address cross boundary linkages to ensure coherent and coordinated planning that protects values, maximises efficiencies and achieves common goals.

The quality of life in Bunbury is by far one of its biggest attractions, offering residents a variety of facilities, schools, shops, pubs and beaches which are all within easy reach.

The City of Bunbury will continue to develop, grow and improve thanks to these qualities and the massive potential for investment and growth in our region. However growth and development continue to put pressure on the City's community and infrastructure assets. Managing this increasing community demand and expectation will require sound short, medium and long term management planning to ensure that the City can continue to provide and renew assets at an acceptable level of service to the City and the wider South West community.

	Bunbury	Greater Bunbury
Resident Population	31,348	81,628
Proportion of residents aged under 14	17.6%	21.7%
Proportion of residents aged over 65	15.3%	12.3%
Average median age	39	36.25
Unemployment rate	5.6%	2.4%
Number of people in the labour force	15,573	40,582
People attending primary school	26.4%	11.1%
People attending secondary school	16.8%	5.9%
People attending tertiary or technical institution	15%	3.8%
Median household weekly income	$1,139	$1,433

NOTE: 2011 estimates based in Information from 2006 Census

THE ASSET MANAGEMENT FRAMEWORK

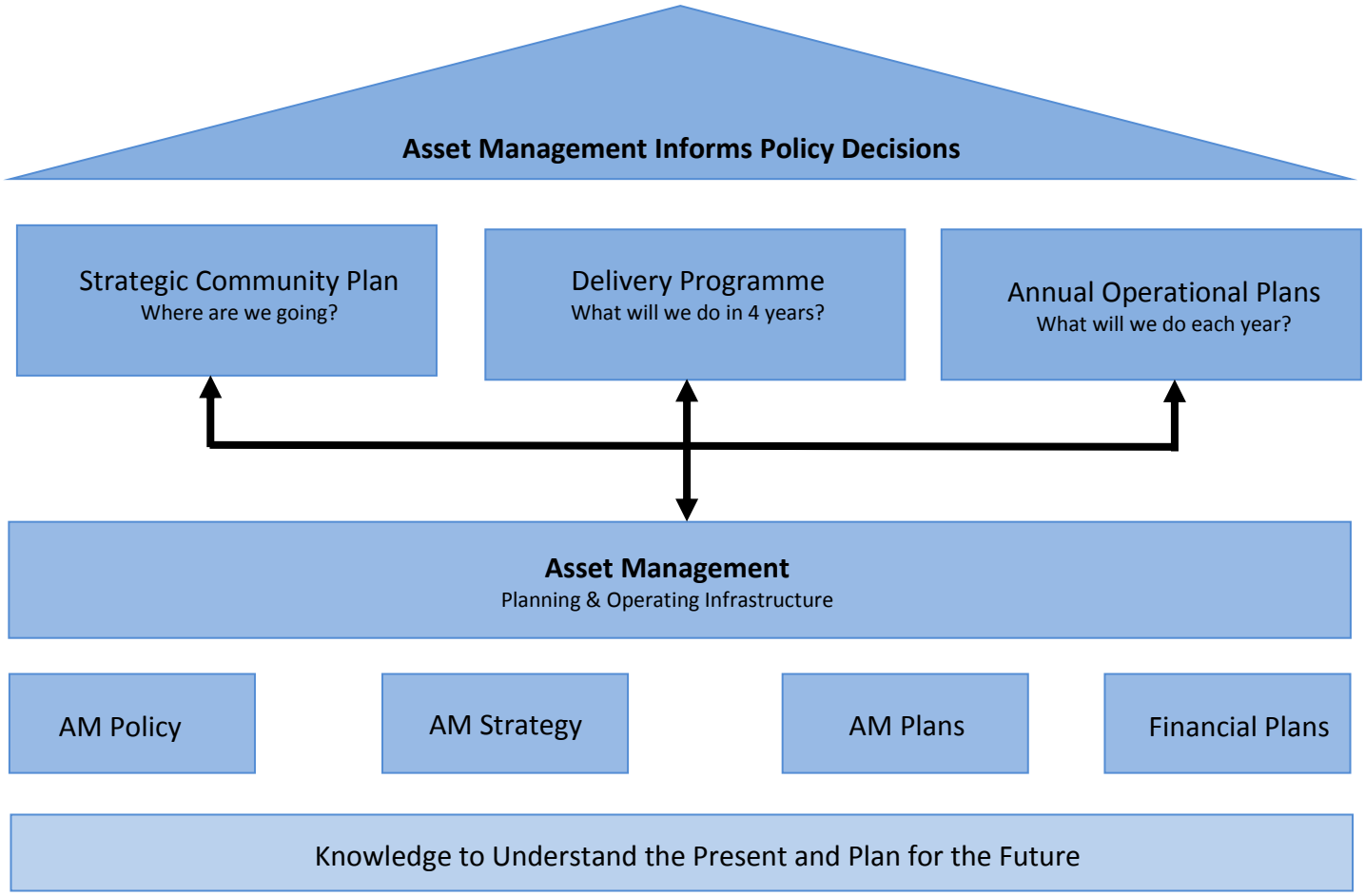
Asset management is a fundamental requirement of local government to ensure it meets its strategic objectives within an integrated planning framework. Asset management policies, strategies and plans are informed by community expectations and in turn inform the community's expectations and service level requirements within the strategic community plan and the organisation's financial and corporate business plans to ensure robust long term financial management of local government assets.

Asset Management Policy
Council's asset management policy establishes the organisational commitment to managing Council assets.

Asset Management Strategy
The asset management strategy supports the policy and identifies how Council's assets will deliver service expectations to the community both now and into the future.

Asset Management Plan
The asset management plan details how Council's strategic asset goals will be delivered.

The Asset Management Planning Framework



The Need for Asset Management Planning

The City of Bunbury is responsible for the effective accounting and management of City owned assets and planning for their long term sustainability. Assets have been acquired by construction, purchase, contract or donation by others (private developers and state, federal or other agencies) to meet increasing requirements and expectations for improvements to levels of service over time.

Asset Management Plans provide a long term assessment of asset activities and activities required to provide continuous service for different asset classes. Asset management plans are designed to outline specific actions and resources required to provide a defined level of service to the community in the most cost effective manner.

The development of asset management plans is a staged and continuously evolving process. The City has current Asset Management Plans for pathways, roads, open space, marine infrastructure and land. These plans have been consolidated into this single Asset Management Plan for the City of Bunbury to provide Council and the community with a single point of truth for asset planning in accordance with the requirements of the WA Department for Local Government's Integrated Planning Framework. This plan supports Council's adopted Asset Management Policy and Asset Management Strategy 2015-2020.

The City's Asset Management Plan and asset valuations will be reviewed and updated in accordance with the requirements of the integrated planning framework. The critical components of the plan include:

1. The physical assets under Council's control;
2. Identified asset service levels;
3. Assets critical to Council's operations and outline risk management strategies for these assets that include specific actions required to improve Council's asset management capabilities;
4. All outputs as determined by the Integrated Planning Framework;
5. Long term predictions of asset maintenance, renewal and replacement costs.

The City's goals and objectives when managing assets are to meet the required service levels in the most cost effective manner for both present and future customers. The key elements of this approach are:

1. Taking a lifecycle approach;
2. Developing cost effective management strategies for the long term;
3. Providing a defined level of service and monitoring performance;
4. Understanding and planning for future demands
5. Managing risks associated with asset failures;
6. Sustainable use of physical resources;
7. Implementing continuous improvement processes and monitoring performance.

Integrated Planning and Reporting

The 2012-13 financial year saw a shift in the way that local governments undertake business planning into the future. The Integrated Planning and Reporting (IPR) framework has been legislated, amending the way local governments are required to plan for the future.

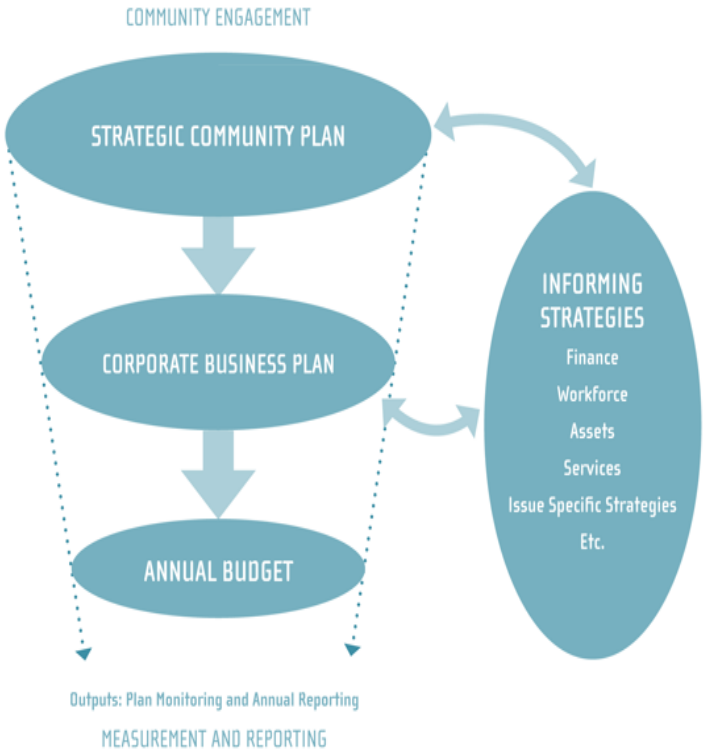
The Strategic Community Plan: Bunbury 2030 is the City's highest level policy document. It provides direction for Council and outlines the outcomes it seeks to achieve for and with the community through until the year 2030. In doing this, the planning process considers the issues and pressures that may affect the community and the level of resources that will realistically be available to achieve its aspirations.

The Strategic Community Plan is an overarching document that delivers accountable and measurable linkages between community desires and priorities, financial capabilities and the capacity to provide an expected level of

service. The Strategic Community Plan, through regular reviews, can be expanded upon and improved over time as the community comes to accept, understand and own their role in the process of planning for the future direction of Bunbury. This Plan is due to be reviewed by Council during 2015.

The IPR framework requires Council to have in place:

- A 10+ year Strategic Community Plan
- A 4 year Corporate Business Plan
- A Long-Term Financial Plan
- Asset Management Plans
- Annual Operational Plans



What plans does the City already have?

Much of Bunbury's prosperity is built on a foundation of sound planning investment in an extensive works programme to ensure infrastructure and services are aligned with the projected growth of the City.

For the last few years the focus has been on the delivery of outcomes against the strategies and actions initially outlined in City Vision, the Council's Strategic Plan 2007-2011 and subsequently through the outcomes of the Strategic Community Plan – Bunbury 2030. Planning is also undertaken annually through the development of an annual operating plan and budget. In 2012 Council adopted its first Long Term Financial Plan, Corporate Business Plan and Asset Management Strategy.

These plans are all reviewed annually with input from the community for inclusion into the plans for subsequent years. While this approach has served the City in terms of the delivery of infrastructure and services, in order for Bunbury to continue to prosper into the future there is a need to plan in a more sustainable way. It is acknowledged by Council that this planning has not been well understood or embraced by the community in the past and that there is a real need for the community to be more involved and engaged in planning for the future of its Local Government Area.

Council is the key driver of Bunbury 2030 although the implementation of the plan is a shared responsibility of all community stakeholders. Through the City's Long Term Financial Plan, Corporate Business Planning process and Asset Management Strategy and Plan, Council outlines how the objectives of Bunbury 2030 will be achieved through the delivery of projects and services.

Within the Strategic Community Plan the following key priorities relating to the City's asset management practices will underpin the City's approach to managing and maintaining its assets:

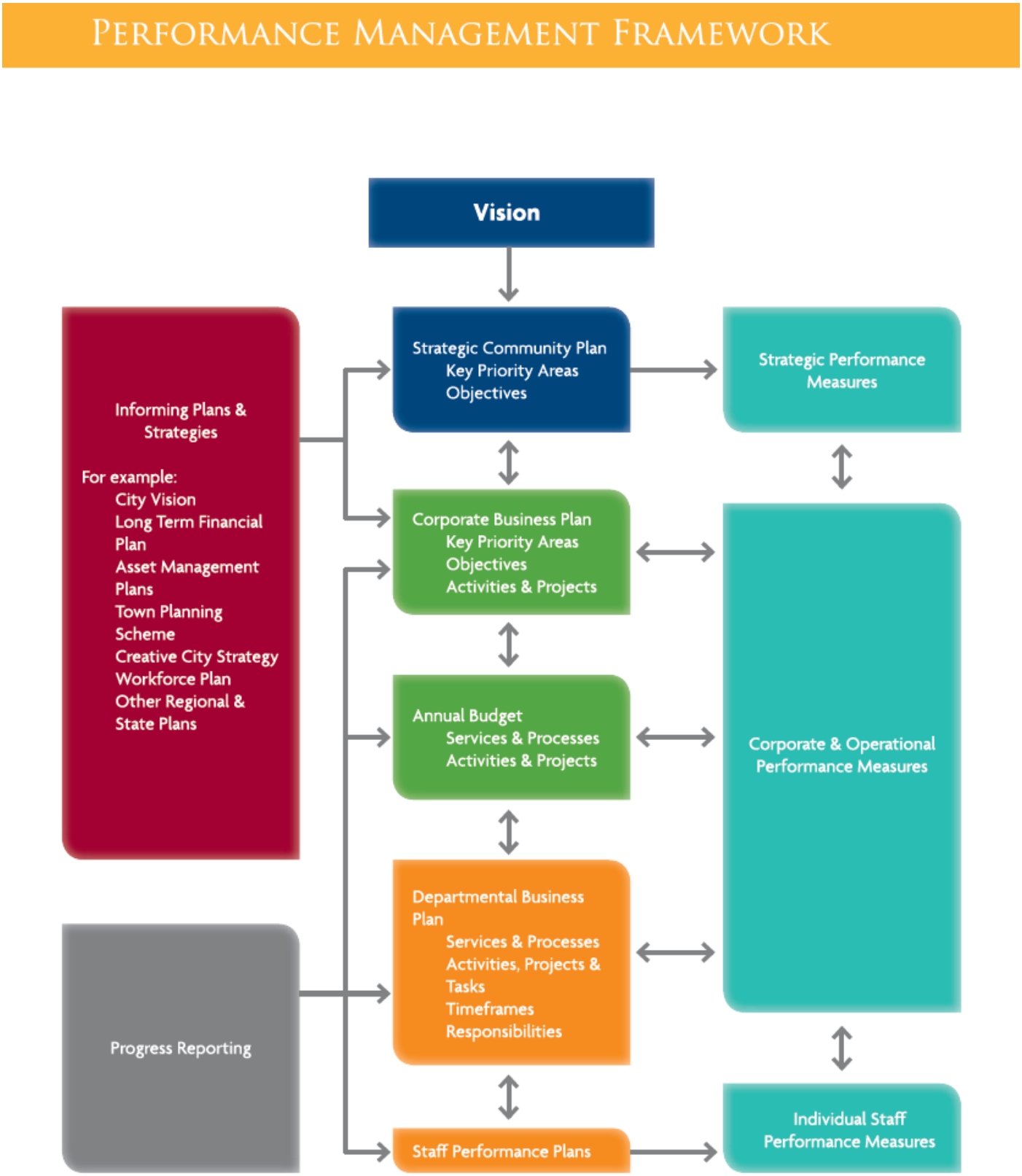
Key Priority Area 2: *Transport and Infrastructure*
Plan and facilitate effective and efficient infrastructure and transport networks to meet the current and future needs of our community; including the following key objectives:

- Maintain transport infrastructure at levels consistent with community expectations
- Maintain a high standard of recreational open space and facilities
- Maintain a high standard of community infrastructure

Key Priority Area 5: *Corporate*
Planning and delivering on our Vision is a shared responsibility that will be achieved through the development of relationships and partnerships with all stakeholders; incorporating the following key objectives:

- Ensure financial sustainability.
- Apply best-practice asset management principles to optimise the City's infrastructure whilst minimising lifecycle costs.
- Deliver services in a manner commensurate with community expectations.

City of Bunbury Performance Management Framework



LEVELS OF SERVICE

An objective of asset management planning is to match the level of service provided by assets with the expectations of stakeholders using them.

This plan will enable the relationship between the level of service and the cost of the service to be determined. This relationship can then be evaluated in consultation with stakeholders to determine the optimum level of service that stakeholders are prepared to pay for.

Service levels can be defined in a number of ways, including:

- time taken to respond to a particular problem or defect
- percentage of assets below a pre-defined condition
- percentage of customers unsatisfied with a particular service

Council has characterised services levels as:

- Strategic Levels of Service
- Operational Levels of Service

Strategic levels of service relate to how stakeholders receive or derive benefit from the service in terms of quality, safety, quantity, accessibility, reliability and responsiveness. It answers the following questions

- How good is the asset's service potential?
- Does it meet stakeholder needs?
- Is the asset's service potential over or under used?

Operational levels of service support strategic levels of service and generally relate to cost/efficiency and legislative compliance.

Future revisions of this asset management plan will include linking required maintenance expenditures with required service levels.

This plan outlines a number of strategic levels of services recommendations to Council with regard to specific asset classes that provide potential options to adjust levels of service and manage asset risks for Council more effectively.

Asset Quantity, Quality & Safety

The City's current objectives in relation to quantity, quality and safety are:

- Assets will be fit for purpose and meet stakeholder activity requirements.
- Assets will be clean inviting and maintained in an acceptable condition.
- Council will inspect all assets on a regular basis and prioritise and repair defects to ensure risks are minimised.

Asset Accessibility Reliability and Responsiveness

Assets will be maintained in partnership with stakeholders to deliver the services required. Assets will be accessible for users of all abilities and will not pose undue risk for specific users and activities.

Levels of Service Planning

The City of Bunbury is using the latest standards and templates adopted nationally through the National Asset Management Strategy (NAMS). These standards use a Sustainability Ratio which is useful in describing the cost of the Levels of Service provided by assets into the future. The Sustainability Ratio is the ratio of the proposed (or actual) expenditure divided by required expenditure.

The following performance measures (KPI's) are requirements set by both the "Integrated Planning and Reporting Framework" and the "Local Government (Financial Management) Regulations 1996."

Asset Sustainability Ratio **=** $\frac{\textit{Capital renewal and replacement expenditure}}{\textit{Depreciation expense}}$

This measures the extent to which assets are being replaced as they reach the end of their useful lives.

Standard is not met	Basic Standard	Advanced Standard
<90%	**90% or Greater**	90% to 110%

Asset Consumption **Ratio =** $\frac{\textit{Depreciated replacement cost of assets}}{\textit{Current replacement cost of depreciable assets}}$

This shows the written down value of depreciable assets relative to their 'as new' value. This ratio highlights the aged condition of assets and reflects an asset's loss in value as a result of deterioration through use and service provision.

Standard is not met	Basic Standard	Advanced Standard
<50%	>50%	60% to 75%

Asset Renewal Funding Ratio **=** $\frac{\textit{NPV of } \textbf{Planned} \textit{ capital renewals over 10 years}}{\textit{NPV of } \textbf{Required} \textit{ capital expenditure over 10 years}}$

This indicates if Council has the financial capacity to fund asset renewal as required, and can continue to provide existing levels of services in future, without:

- additional operating income
- reductions in operating expenditure or an increase in net financial liabilities above that currently projected.

Standard is not met	Basic Standard	Advanced Standard
<75%	75% to 95%	>95%

The City's Asset Sustainability ratio can be improved in one of two ways; either increasing funding for the renewal of assets or to allow Council's assets to deteriorate further and delay the renewal of assets. This represents a change in level of service to the community as a result of increasing the life of assets resulting in a lower average asset condition before intervention is carried out.

Condition inspections have been undertaken for all asset classes with a rolling programme of inspection implemented moving forward. Conditioning has been completed using a 1-5 rating system as per the International Infrastructure Management Manual, 2006, as follows:

Rating Description of Condition

1 Excellent:	Only planned maintenance required
2 Very Good:	Minor maintenance required plus planned maintenance
3 Good:	Significant maintenance required
4 Average:	Significant renewal/upgrade required
5 Poor:	Unserviceable

The Level of Service provided by the City's assets is primarily governed by the condition of these assets. The City has been carrying out detailed condition audits for various classes of assets over a number of years. However over the past 3 years, and to meet the requirements of the Integrated Planning Framework, significant resource has been employed to establish up to date condition audits and data confidence for all asset classes.

The modelling within this AMP provides estimates regarding the amount of funds required over the next 10 years for both Maintenance and Capital Renewal for each class of asset so as to maintain the infrastructure in its current condition, based on current service levels. The funding requirements requirement to manage the funding gap and deliver the required levels of service will require incorporation into Council's Long Term Financial Plan (LTFP).

Future revisions of this plan will explore alternative scenarios to adjust levels of service and associated funding which will require extensive consultation with the community. Based on feedback from the community this may include funding options that may increase or decrease levels of service against the current standard.

In addition to comprehensive condition audits, the City undertakes annual Customer Satisfaction Surveys whilst Customer Requests (CRMs) received by the City have been monitored for key asset classes since 2012 using the City's asset management software system (AssetFinda). The Customer Satisfaction Survey is undertaken at the end of each financial year with results fed into the each revision of this combined AMP, the results of these surveys may result in adjustments to annual operating and capital budgets dependent on the feedback received.

This data will be used to determine and adjust the Level of Service provided by the City's assets. The Customer Satisfaction Survey results will indicate what the community Level of Service expectations are as a minimum requirement and highlight any demand for changes to levels of service in future years. Additional funding may be required in order to maintain existing and/or increase levels of service.

The current future trend of the City's assets indicate, that based on past funding, asset condition and therefore levels of service are likely to be deteriorating as funding for maintenance and renewal has not and continues not to match increases in the City's asset base.

Cost of Providing Current Level of Service

The cost to provide the current Level of Service has been modelled over the next 10 years using financial information from the current 2015/16 to 2019/20 Corporate Business Plan. The total average annual Life Cycle Expenditure to provide this service is $18.4m using financial information within the 2015/16 to 2018/19 Corporate Business Plan. This is the minimum anticipated funding needed to meet the current service levels which by definition are deemed acceptable to the community at present. Note that this funding regime delivers an average funding gap of $5.88m per year for the period. The total average annual Life Cycle Cost is $23.92m, indicating a 10 year average shortfall of $5.88m per year to maintain and renew assets as they reach the end of their useful lives and to achieve no funding gap.

This results in a Sustainability Ratio of 0.59 over the next 10 years which indicates that the City is not providing sufficient funds to maintain and replace assets as they reach the end of their useful lives. It should be noted that the "Useful Life" used in the modelling of the City of Bunbury's assets, which affects the Life Cycle Costs, is similar to those used by other Councils. This lower Sustainability Ratio, whilst less than ideal, is currently considered sufficient to maintain the current Level of Service; this may change as a result of adjustments in level of service expectations and demands within the community and the ongoing review of service provision by the City.

In accordance with the Department for Local Government's Financial Sustainability Guide the City has a number of decisions to make with regard to current levels of service that require asset performance reviews across all asset classes that may identify opportunities to better manage the funding gap without the need to generate significantly increased revenues:

- ✓ Services provided that are rarely used or no longer required that may be rationalised such as some buildings or areas of open space within the City.
- ✓ Over serviced assets where opportunities exist to reduce service levels.
- ✓ Services that may be provided in other ways using up to date technology.
- ✓ Services that could be more effectively provided by others.
- ✓ Services that could be delivered via user pays.
- ✓ Alternative service delivery models such as sake and leaseback, leasing or shared service arrangements which within the City of Bunbury could include significant assets such as the BREC, BRAG, Stirling St Arts Centre, SWSC and Airport.
- ✓ Adjustments to funding levels between asset classes to address different funding gaps and based on changed priorities established through community consultation.

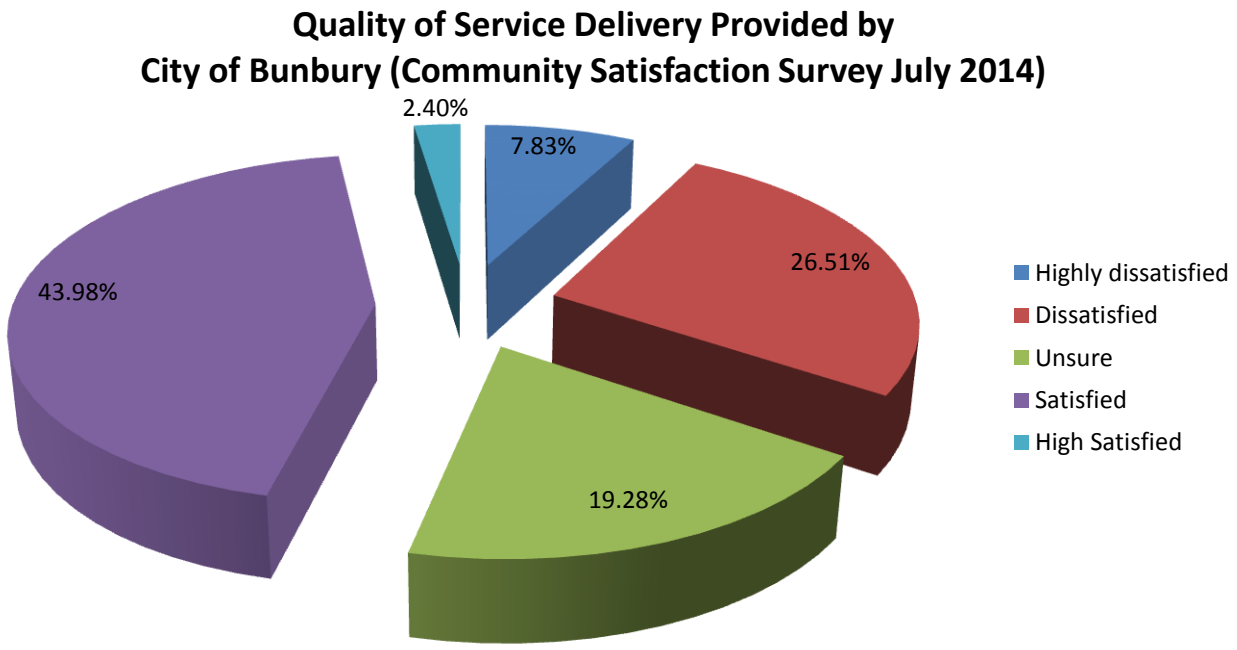
The asset verification process is providing the City with significant information about its assets and their performance. Part of this process has enabled the City to consider adjustments to its renewal cycles based on asset condition and ongoing performance.

In addition the City may adopt strategies to increase revenues through changes to some or all of the following:

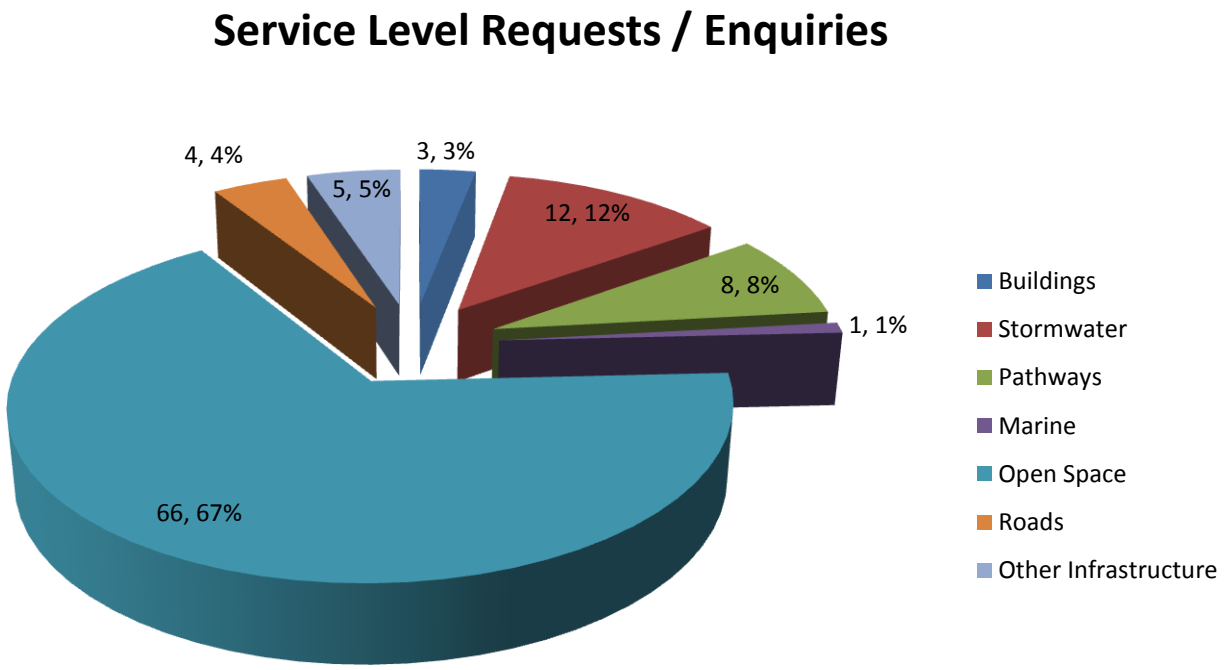
- ✓ Fees and charges which may be adjusted to assist in recouping costs for providing goods and services.
- ✓ Rating level adjustments to generate additional revenues made in consultation with the community.
- ✓ Consideration to changes in ownership of certain public assets to generate one off revenues.
- ✓ Optimisation of borrowings and cash reserves to fund major capital renewal works.

Measuring Community Satisfaction with Levels of Service

Every year the Community is asked to provide feedback on levels of service through the City's annual community satisfaction survey provided by the Household Panel and any other interested community member.



In addition the City is able to determine degrees of community satisfaction through monitoring communication in the form of service level requests and enquiries from members of the Community using AssetFinda, these are shown in below and include all requests since the introduction of AssetFinda in November 2012.



LEGISLATIVE, REGULATORY AND OTHER REQUIREMENTS

There are a number of pieces of State legislation and Australian Standards that Council is required to comply with in regards to Asset Management:

Legislation	Requirement
Local Government Act 1995	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Environmental Protection Act 1986 R	Require permit and flora survey prior to vegetation removal, relates to the prevention of pollution - either to land air or water. Defines two types of harm - material environmental harm or serious environmental harm.
Aboriginal Heritage Act 1972	Preservation of the community places and objects used by traditional owners
Aboriginal Heritage Regulations 1974	Preservation of the community places and objects used by traditional owners
Road Traffic Act 1974	Laws and legislation relating to road traffic
Road Traffic Code 2000	Regulations relating to road traffic
Road Traffic (Vehicle Standards) Regulations 2002	Regulations relating to vehicles and vehicle safety standards
Main Roads Act 1930	Laws and legislation for construction, maintenance and supervision, access and other relative purposes for roads
Land Administration Act 1997	Laws and legislation relating to Crown land and compulsory acquisition of land generally.
Health Act 1911	Discharging causing pollution to waterways
Wildlife Conservation Act 1950	Provides for the conservation and protection of native flora and fauna
Australian Standards	Specific standards relating to individual asset classes
Building Code of Australia	Regulates standards for buildings
Health (Pesticides) Regulations 1956	Regulates the possession and use of pesticides
Open Space Traffic Act 1974	Laws and legislations surrounding Open Space networks
Main Open Spaces Act 1930	The power to legislate the maintenance and works on public Open Spaces
Disability Services Act (1993)	An Act for the establishment of the Disability Services Commission and the Ministerial Advisory Council on Disability, for the furtherance of principles applicable to people with disabilities, for the funding and provision of services to such people that meet certain objectives, for the resolution of complaints by such people, and for related purposes
Disability Services Regulations (2004)	Current amendments to Disability Services Act (1993)
OSH Act 1984	The guidelines for employees and employers to undertake within the work environment
OSH Regulations 1996	The guidelines for employees and employers to undertake within the work environment

FUTURE DEMAND AND DEMAND MANAGEMENT

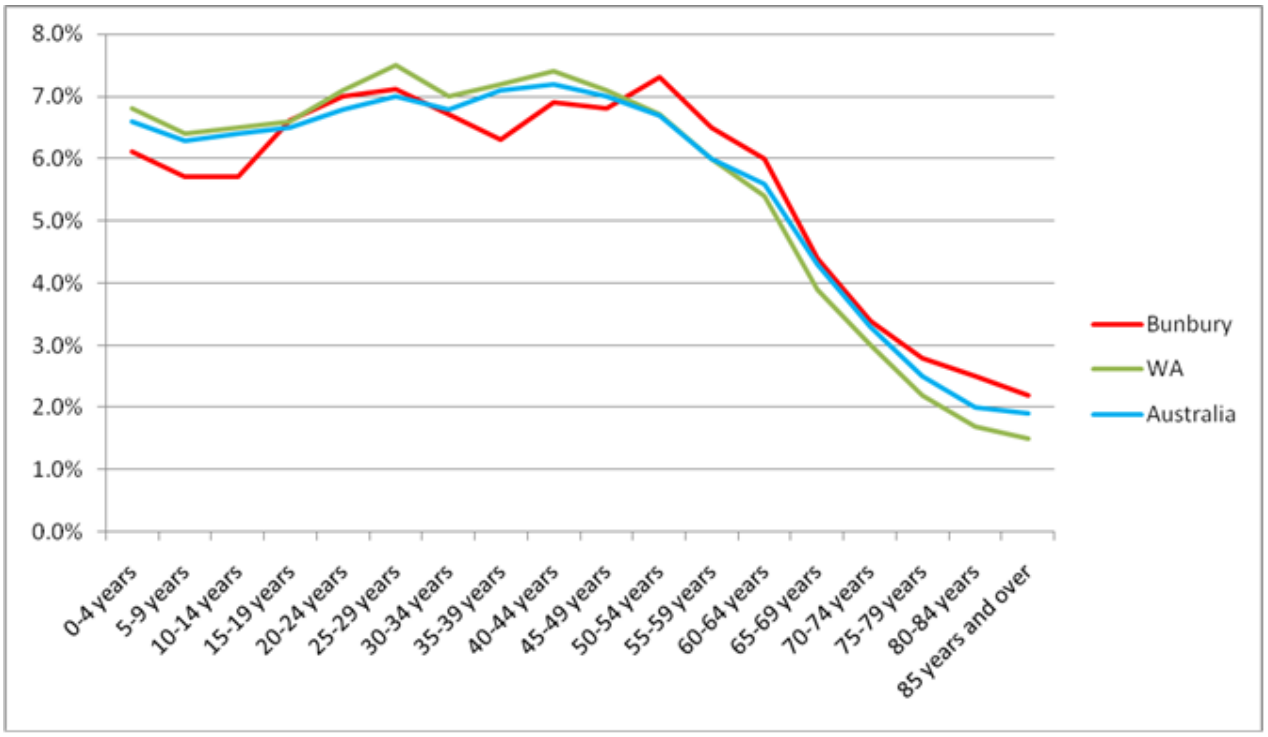
Demand Forecast

Bunbury is a regional city in the South West of Western Australia and provides regional facilities to service the greater Bunbury area.

The City had an estimated residential population of 31,348 in 2011; an increase of 5.5% in the five years since the 2006 census

Of the current population, 49.7% are male and 50.3% are female residents. Indigenous residents account for 3.1% of the City's population and 27.3% of City residents are born overseas, however only 14.6% speak a language other than English at home.

The age distribution within the City is similar compared to the wider Australian population, as illustrated in the graph below. However the City does have a noticeably higher percentage of residents between the ages of 50-64 and 75+ years, and lower percentage of residents between the 0-14 and 30-49 year age groups.



City of Bunbury	2006	2011
City Population	29,702	31,348
City's Catchment Population	69,803	80,628
Number of Electors	20,868	20,896
Budget	$59.9m	$73.0m
Rates	$16.354m	$25.118m
Financial Assistance Grants	$1.134m	$1.154m
City Area	65.6 km^2	65.6 km^2
Median Age	37 years	39 years

Population Age Profiles and Demand Management Planning

Population growth between 2006 and 2011 Is estimated at 5.5% with Bunbury recognised as one of the fastest growing regions in Australia. Annual average growth in the South West over the past 5 years was 2.8% with most forecast growth expected for the Greater Bunbury area and City of Busselton.

The preliminary estimate for the Bunbury LGA population in 2013 is 33,623 which represents 7.2% growth which will continue to put pressure on the City's assets. This combined with similar growth predictions for surrounding LGAs (Dardenup, Capel and Harvey) will continue to increase pressure on demand for City assets.

In addition the breakdown by age group highlights 34% of the total population in the 45-74 year age groups which will alter the demand for asset provision (primarily infrastructure assets)

Age Groups	Male	Female	Combined Total
0-4 years	1,014	903	1,917
5-14 years	1,824	1,764	3,588
15-19 years	1,048	1,016	2,064
20-24 years	1,150	1,029	2,179
25-34 years	2,251	2,073	4,324
35-44 years	2,085	2,057	4,142
45-54 years	2,190	2,232	4,422
55-64 years	1,906	2,008	3,914
65-74 years	1,192	1,266	2,458
75-84 years	694	969	1,663
85 years and over	241	436	677
TOTAL	**15,595**	**15,753**	**31,348**

Demand for new and improved services will be managed through the combined management of existing assets including the upgrade and renewal of existing assets to meet demand as a primary consideration. The provision of new assets to meet changing demand will require careful planning by the City to ensure that asset supply continues to meet demand.

Any new assets provided by Council will require a commitment to fund ongoing whole of life operations and maintenance costs. Operating and maintenance budgets will require to be increased by 1% of the cost of all new capital expansion to ensure sufficient maintenance costs are provided for the lifecycle of newly created assets.

It should be noted that historical budgeting has not provided this allowance which means that currentoperating and maintenance budgets have not kept pace with the additional 1% funding requirement for newly created assets. This has increased pressure on existing operating and maintenance budgets to maintain levels of service.

Demand Management

There are various methods by which the City can manage demand for assets:

- Reduce demand for services
- Reduce levels of service (allowing assets to deteriorate over and above current levels of service)
- Educate the community to accept asset failure where appropriate

All should be considered as part of the City's future demand planning and associated community consultation.

Planning for Future Growth

Levels of service and long term financial planning for asset management must make reference to future population growth whilst seeking to sustain existing infrastructure and ensure that financial plans provide sufficient funding to

manage existing assets at agreed levels of service and provide sufficient funding for the acquisition of new assets to meet the requirements of a growing population both in terms of absolute numbers and changing age groups.

New assets that will become the responsibility of the City in future years (within the current 4 year business plan) include but are not limited to:

- ✓ Hay Park Multi Sports Pavilion (value $4m)
- ✓ Koombana North Foreshore (value $0.8m)
- ✓ Riverlea Subdivision POS (value currently unknown)
- ✓ Stirling St Arts Centre Upgrade (value $6m)
- ✓ Transport Infrastructure New & Upgrade within Yrs 1-4 of LTFP (value $12.1m)
- ✓ Drainage Pump Station Upgrade - Ocean Drive & Horseshoe Lake (value $2m)
- ✓ Leshenault Inlet Masterplan Precinct 2 & 4 Development (value $18.3m)

The known growth of the City's asset base and included in the Long Term Financial Plan is $44m over the next 4 years. This represents an annual average increase of YY% ***($44m / total asset value)*** of the depreciable replacement cost of the City's asset base. In linear terms this represents an average increase in the City's asset values of $4.4m which will require an additional $132,000 per annum in operating and maintenance funding to maintain existing levels of service (3% of capital value).

The impact of this growth has not been used to project required adjustments in annual operating, maintenance and renewal expenditure. This will be required to be dealt with as part of the annual budgeting process to meet asset maintenance requirements and taking into account any adjustments to levels of service over time. Renewal expenditure requirements for these assets should be incorporated into Council's reserves for future use.

Projects that may upgrade / extend existing City assets or be gifted to the City within the next 10 years include but are not limited to:

- ✓ Bunbury Water Playground (approximate value - $3.6m)
- ✓ Koombana Bay & Casuarina Harbour Upgraded facilities (estimated $15-20m)
- ✓ Developments linked to the Bunbury Marine Facilities Initiative (current value unknown)
- ✓ Upgrades to the South West Sports Centre (current value unknown)
- ✓ Upgrades to the Big Swamp Precinct (current value unknown)
- ✓ Ocean to Preston Regional Open Space (current value unknown)

No value has been included within any projections for these assets as at this stage final costs and completion years are unknown.

Changes in Technology

The City has adopted new technologies to manage its assets including AssetFinda asset management software to manage asset data and electronic devices to assist in the collection of asset data and condition reporting. The City will continue to look at ways of using technology to continually improve is asset management systems and practices.

RISK MANAGEMENT

The City is a diverse organisation exposed to a number of risks in its daily operations, these relate not only to the increasingly litigious nature of modern society but also to events that could disrupt or interrupt the delivery of service quality to the community. Examples of these risks include but are not limited to:

- ✓ Financial loss resulted in damage to reputation
- ✓ Financial gap between required levels of service and funding levels resulting in financial loss over time
- ✓ Drainage system failure resulting in business interruption and financial loss due to potential litigation from private property owners.
- ✓ Structural damage to City buildings resulting in financial loss and the potential for personal injury.

The City uses a risk based approach to assessing the resources required to effectively manage assets.

Risk Assessment

An assessment of risks associated with service delivery for each asset class is used to identify any critical risks to the City.

Decisions made by Council in relation to levels of service and renewal are a direct reflection of Council's position as the ultimate acceptor of risk associated with managing public assets.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Risk Assessment Matrix – Consequences of Risk

LIKELIHOOD	IMPACT				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Remote	Low	Low	Moderate	Moderate	High

Critical Assets

The City has identified some assets as being "critical" as part of its condition inspection process. Criticality is based on the risk consequence of asset failure; any City asset that presents a high consequence of risk is identified within the following list.

Asset Class	Asset	Risk consequence
Marine	Leschenault Inlet Sea Walls	Sea wall deterioration will result in subsidence of the foreshore and increase risk of flooding
Marine	Koombana Drive Sea Wall & Boardwalk	Erosion and subsidence of Koombana Drive & loss of boardwalk
Stormwater	Drainage Pump Stations (11)	Failure or reduced performance will increase risk of flooding, primarily across South & East Bunbury suburbs.
Stormwater	Main drain culverts located at Hayes, Constitution, Jarvis, Hayward St and beneath the Hockey Stadium at Hay Park	Failure or reduced performance will increase risk of flooding within associated stormwater drainage catchments.
Bridges	Koombana Road Bridge	Bridge failure resulting in loss of primary access route to CBD from north west transport corridors
IT Equipment	IT Servers	Business interruption

Assets Owned by Other Agencies that represent Critical Risk to the City of Bunbury

Asset Class	Asset Owner	Asset	Risk consequence
Bridges	Main Roads	Preston River Bridges x2(Forrest Highway & Estuary Drive)	Primary access routes to Bunbury from north west (including Perth)
Marine	Department of Transport	Flood gates	Loss of ability to control flooding & / or storm surge into Leschenault Inlet
Preston River levee banks	Department of Water	Preston River	Overtopping of levee banks resulting in potential significant flooding of surrounding areas within City including residential suburbs & transport networks

ASSET LIFECYCLE MANAGEMENT

The asset lifecycle management plan for each asset class details how the City plans to operate and maintain assets at agreed levels of service (defined in Section 5) while optimising life cycle costs.

Lifecycle of an asset

The City's Long Term Financial Plan outlines the City's planned expenditure to best manage its asset base through a combination of:

- Maintenance and operations expenditure on existing assets.
- Upgrade works to existing assets.
- Renewal of existing assets
- New asset acquisition through construction of acquisition from other agencies

The whole of life requirements of assets are impacted by past performance (maintenance activity), levels of service, the demand for service and the willingness of the City to accept asset risks linked to levels of service.

Maintenance and Operating Activities

Operations include regular activities to provide services such as toilet & public building cleaning, street sweeping, mowing which all affect service level quality.

Maintenance activities are all those required to maintain as asset as close to its acceptable service level condition as is possible. These activities include road patching, servicing of building plant, repairing minor damage to assets and inspection. Maintenance activities can be further broken down into the following:

1. Routine maintenance which are regular ongoing activities necessary to keep assets operating.
2. Reactive maintenance which are unplanned activities to repair damaged assets
3. Planned maintenance which are activities delivered through a planned maintenance schedule designed to minimise the requirements for reactive maintenance and to maximise asset lifecycles.
4. Specific maintenance which are the replacement of higher value asset parts that do not fall into capital allocations.

The City has historically set maintenance budgets based on previous years' allocations (see comparisons in the Financial Summary) and requirements with no consideration regarding levels of service. In essence this means that maintenance funding allocations have declined over time. In addition newly created or gifted assets have not received the required 3% of capital value funding allocation for maintenance and operating costs. This has required the City to absorb these additional costs into existing funding allocations which have resulted in declining levels of service over time.

Since 2010 the City has completed a number of significant projects including those listed below which have added over $30m of new assets. The required operating and maintenance allocations to meet the requirements of all of these assets has not been included within the annual budgeting process thus requiring these costs to be absorbed into existing funding allocations.

Road network expansion	>$4.5m	(incl Somerville Drive, Parade Rd / Washington Ave)
Footpath network expansion	>$2.0m	(incl Blair St, Beach Rd, Jarvis St, Carob St, Forrest Ave)
Open Space asset expansion	>$2.8m	(incl Des Ugle Pk, Wardandi Pk, Accessible Playground)
Hands Oval	$2.7m	
Bunbury Regional Athletics Track	$3.2m	
Hay Park Premier Soccer Pitch	$0.7m	
Bunbury Regional Entertainment Centre	$12.5m	

Asset Renewal

Renewing existing assets as they reach the end of their useful life is an essential component of asset management financial planning. Renewal consists of major works to replace or restore an asset to its original as new condition.

Asset renewal projects are identified using the following criteria:

- Safety, reliability and quality
- Legislative and/or regulatory requirements
- Condition rating and assessment against useful lives
- Usage and number of customers disaffected
- Cost and funding
- Strategic importance

The City of Bunbury's asset management priorities are concentrated on asset renewal with minimal asset and upgrade projects identified in Council's Long Term Financial Plan. This is as a result of a lack of sufficient investment in asset maintenance and renewal in previous years which has resulted in an increased requirement for asset renewal; this is reflected in the Long Term Financial Plan.

New Asset Acquisition

New assets, whether delivered by the City of Bunbury or gifted from other agencies or private developers, all come with increased costs to the organisation in terms of depreciation, replacement planning and ongoing maintenance and operating costs.

All new assets, prior to construction, should be assessed against the following factors:

- Safety, reliability and quality
- Legislative and/or regulatory requirements
- Community demand
- Strategic importance
- Cost and funding of construction
- Whole of life costs and affordability
- Potential revenue streams directly linked to new assets

Asset Upgrade

Asset upgrades to improve an existing asset should be assessed against established requirement and affordability criteria in the same way that new assets should be assessed as part of the initial business case process.

Funding for projects within the Long Term Financial Plan is identified on a project by project basis with funding sourced internally, externally and a combination of the two depending upon the project.

FINANCIAL INFORMATION & PERFORMANCE INDICATORS

The City's Asset Management Plan identifies management practices for City assets, regulatory compliance requirements and the required funding to provide City assets at levels of service acceptable to the community.

Valuation of Assets

The City's asset register is predominantly held in AssetFinda with some classes still help in Authority. Infrastructure assets are valued using replacement cost using unit rates which reflect a combination of industry standards and specific City of Bunbury experience over time with regard to asset degredation.

Assets that can be valued using 'Fair Value' are valued in this way in accordance with State government reporting requirements.

Valuations and expenditure forecasts have been made using the following key assumptions:

Assumption	Risk
Valuations and Cost Estimates are based on 2014 unit rates and are only updated every 3 years.	Costs may be undervalued in the years between revaluations.
Expenditure requirements for ongoing operating and maintenance activities are based on historical expenditure trends and assumes that the required level of service is met with this level of funding	Changes to levels of service expectations may result in a requirement to increase or decrease maintenance and operating expenditure. Current expenditure may not be sufficient to deliver the current expected level of service.
Useful life and residual values are based on current known best practice using the WA Local Government Accounting Manual Ch 9, Pt 4: Asset Accounting (Appendix 6) and WALGA Asset & Expenditure Indicators and the City's own experience.	Useful lives and residual values should be reviewed as part of the revaluation process which may result in step changes to financial information.
Depreciation is based on replacement cost for infrastructure assets and Fair Value for non-infrastructure assets. Depreciation is based on the WA Local Government Accounting Manual Ch 9, Pt 4: Asset Accounting (Appendix 6) and WALGA Asset & Expenditure Indicators	
Continual improvement to the asset database will result in changes as information is updated.	Failure to maintain an up to date asset database will result in inaccurate financial reporting and forward planning. Asset management must become a core business activity within the organisation at a strategic, financial planning & operating level supported by accurate and up to date information.
Financial forecasts do not account for changes to CPI and interest rates	Long Term Financial Plan could undervalue future expenditure requirements.
Funding forecasts only account for expenditure and do not include items identified for part funding through external sources (such as State & Federal grants)	Funding applications may be unsuccessful which will be a determining factor regarding project implementation timescales with some potentially not being delivered at all which will negatively affect the City's funding gap.

The AMP covers the following assets:

Asset Class	Dimension / Number	Replacement Value ($)
Pathways		**$56.13m**
Pedestrian only pathways	**35km**	$6.47m
Dual Use pathways	**173km**	$48.9m
Pram/Access Ramps	**1,680 no**	$0.76m
Roads (using MRWA Road Hierarchy Type)		**$231.48**
District Distributor 'A' Roads	**17.1km**	
District Distributor 'B' Roads	**9.2km**	$207.04m
Local Distributer Roads	**30.2km**	
Access Roads	**268.9km**	
Kerb	**585.3km**	$24.24m
Car Parks		
Bridges		**$7.43m**
Road Bridges	**1 no**	$6.5m
Foot Bridges	**12 no**	$0.93m
Stormwater Drainage Infrastructure		**$92.77m**
Stormwater Pipes	**237km**	$66.92m
Stormwater Pits & Sumps	**9655no**	$23.20m
Open Channel Drains	**30.9km**	Valued in Land
Stormwater Pump Stations	**12 no**	$2.22m
Drainage Basins	**123 no**	Valued in Land
Culverts & Headwalls	**542 no**	$0.43m
Marine Infrastructure		**$13.37m**
Jetties & Pontoons	**7 no**	$0.68m
Boat Ramps	**4 no**	$0.55m
Sea Walls	**2,882m**	$10.13m
Erosion Protection (Back Beach)	**572m**	$1.99m
Swimming Pontoon	**1 no**	$0.023m
Open Space		**$18.79m**
Playground Equipment (incl outdoor gym equipment)	**244 no**	*$2.18m*
Sporting Infrastructure (surfaces & equipment)	**116 no**	$14.34m
Irrigation Systems*	**Not Verified**	*Not Valued*
Bores & Pumps*	**43 no**	*Not Valued*
Filtration Systems	**6 no**	$0.63m
BBQs	**38 no**	$0.27m
Drink Fountains	**50 no**	$0.16m
Benches / Bench Seats	**608 no**	$0.65m
Bike racks	**113 no**	$0.086m
Bollards	**741 no**	$0.037m
Picnic Settings	**93 no**	$0.35m
Beach Showers	**23 no**	$0.067m
Planter Boxes	**14 no**	$0.021m
Structures		**$23.22m**
Crash Barriers	**24 no**	$0.071m
Hand/Guardrails	**3.78km**	$0.64m
Shelters	**54 no**	$0.62m
Shade Sails	**55 no**	*$0.74m*
Boardwalks & Lookouts	**2.28km**	$2.4m
Stairways / Steps**	**39 no**	*Not Valued*
Fences & Gates (incl Wildlife Park enclosures)	**81km**	$8.66m
Flag Poles	**18 no**	*$0.086m*
Walls	**0.79km**	$0.14m
Retaining Walls	**6.4km**	$4.75m
Entry Statements**	**29 no**	*Not Valued*
Sports Structures (dugouts, ticket boxes, scoreboards)	**23 no**	$0.04m
Public Art	**72 no**	$5.07m

Buildings		**$202.1m**
Commercial	**15**	$28m
Corporate	**24**	$29.43m
Community	**42**	$54.34m
Recreation	**50**	$84.6m
Regulation	**3**	$0.82m
Public Toilet Blocks	**29**	$4.9m
Other Infrastructure		**$11.22m**
Public Lighting (including sportsground lighting)	**1280 no**	$6.5m
Bus Shelters (incl seats at bus stops)	**151 no**	$1.41m
Street Name Signs	**2,625 no**	*$0.42m*
Other Signs (advisory, information, parking, tourist)	**2,991 no**	*$0.44m*
Bins & Bin Enclosures	**49,399 no**	$2.45m
Land		**$104.08m**
Commercial	**52.37ha**	$34.69m
Community	**946ha**	$49.36m
Corporate	**102.57ha**	$20.03m
Crown Land under Management Order	**(926.13ha)**	-
Plant & Vehicles		**$8.9m**
Major Plant	**15**	$1.778m
Minor Plant	**25**	$1.5m
Heavy Vehicles	**17**	$2.9m
Light Vehicles	**78**	$2.73m
Furniture & Fittings		**$0.59m**
Office Equipment	**805 no**	$0.59m
Equipment		**$13.77m**
Parking Meters	**140 no**	$1.02m
IT Equipment (incl CCTV Cameras)	**1149 no**	$4.32m
Administration Equipment (TVs, Refridgerators etc)	**507 no**	$0.41m
South West Sports Centre Equipment (gym, aquatic)	**348 no**	$3.75m
Commercial Kitchen Equipment	**50 no**	$0.1m
Survey Equipment	**15 no**	$0.09m
Visual & Performing Arts Equipment	**268 no**	$0.76m
Arts and Culture		**$2.73m**
Christmas Decorations	**21 no**	$0.23m
Artwork	**909 no**	$2.39m
Musical Instruments	**99 no**	$0.11m
TOTALS		**$786.58m**

* Requires verification and is not included in Open Space Valuation
** Requires verification and is not included in Structures Valuation

Asset Ratios by Asset Class

Asset Class	Asset Consumption Ratio	Asset Sustainability Ratio	Asset Renewal Funding Ratio
Pathways	0.82	0.50	0.62
Roads	0.55	0.52	3.28
Stormwater Infrastructure	0.58	0.68	0.70
Marine Infrastructure	0.50	0.94	0.69
Open Space	0.55	0.95	1.47
Structures	0.36	0.50	0.07
Buildings	0.53	0.24	0.54
Other Infrastructure	0.46	0.73	0.22
Land	n/a	n/a	n/a
Plant & Fleet			
Furniture & Fittings	0.52	0.27	0.10
Equipment	0.26	0.32	0.09

	Standard is not met
	Basic Standard
	Advanced Standard

ASSET DATA MANAGEMENT AND ASSET DATA CONFIDENCE

Data quality is crucial to our ability to accurately and confidently create asset modelling, asset revaluation and asset depreciation.

Asset Data is primarily managed through the City's asset management software system, AssetFinda with some asset classes maintained within the City's corporate finance system, Authority. In addition all infrastructure assets are mapped in ArcGIS to provide spatial information to City employees involved in asset management, maintenance, operations and planning.

The data held in our asset management system is graded and benchmarked based on the grading system found in IPWEA's 2011 IIMM.

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

Asset Data Confidence

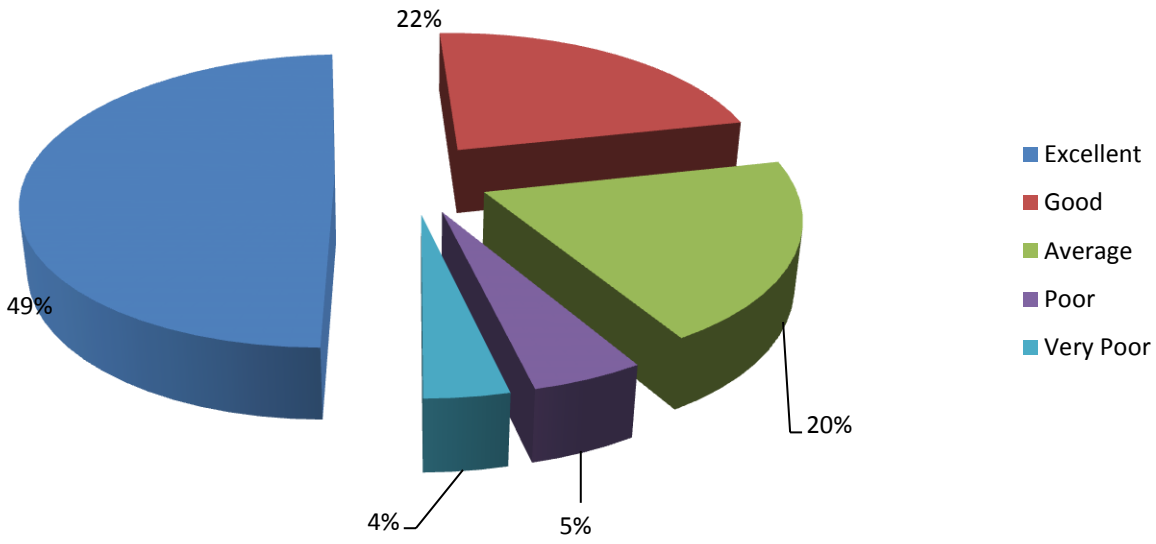
Asset Class	Data Confidence Rating
Pathways	B
Roads - Access & Local Distributor	B
Roads – Distributor A & Distributor B	B
Stormwater Drainage Infrastructure	C
Marine Infrastructure	C
Open Space	B
Structures	C
Buildings	C
Other Infrastructure	B
Land	B
Plant & Vehicles	B
Furniture & Fittings	C
Equipment	B
Arts & Culture	B

Asset Condition Rating

The condition profile of the City's assets is shown below. Condition was measured using the 1 – 5 rating system outlined in the International Infrastructure Management Manual (IIMM):

1. Excellent: Only planned maintenance required.
2. Good: Minor plus planned maintenance required
3. Average: Significant maintenance required.
4. Poor: Significant renewal/upgrade required (10-40%).
5. Very Poor: Unserviceable (>50% of asset requires replacement)

Infrastructure Assets Summary Condition Rating



LIFECYCLE MANAGEMENT PLANNING

All asset classes' financial information is taken from the 2015/16 to 2018/19 Corporate Business Plan with 2018/19 financial information used for all years shown from 2019/20 onwards as these years remain unfunded at present.

Lifecycle Management Plan Summary

The City's assets are varied, both in terms of type and function but also in terms of age and condition. In order for the City to continue to adequately provide and maintain its assets into the future there is a requirement to both invest in funding asset maintenance and renewal in the short, medium and long term, providing the Community with service level options that will inform future funding whilst investigating other options to support the sustainability of the City's asset base.

Future planning will require consideration of the following options:

1. Increase allocations to capital renewal funding over the period and commit to ongoing increased renewal funding towards the 30-50 year horizon to address the funding gap.
2. Financial optimisation to provide better allocation of resources to meet the needs and demands of the community, this will involve changes to levels of service and the associated funding requirements both in terms of maintenance and renewal.
3. Asset rationalisation which will have a positive effect on asset lifecycle maintenance and renewal costs.
4. Options to change service delivery options such as the introduction of the private sector involvement in asset ownership and maintenance of public assets or shared service arrangements.
5. Opportunities to increase revenues provided to manage and maintain City assets.

In all cases Council should ensure that any strategic asset management decisions are not made in relation to single asset classes. It is important that all asset classes are considered within any review and consultation to ensure that feedback and subsequent decisions are based on Council and community expectations in relation to all asset classes jointly.

Asset Expenditure Summary

The proposed average maintenance and operations expenditure for all assets averages $12.55m per year over the next 10 years. Renewal funding for the same period averages $5.83m per year. Based on the financial information provided within the 2014/15 to 2018/19 Corporate Business Plan and the City's asset data and condition ratings this results in a funding gap of approximately $5.88m per year.

In order for the City to achieve a reducing funding gap over the period up to $58.8m additional expenditure is required to provide a combination of increased maintenance and asset renewal, this is an average expenditure requirement of up to $5.88m pa over and above the existing budgeted levels for maintenance and operating and capital renewal expenditure.

This outcome is unlikely to be something that the City can achieve solely through adjustments to revenue (through changes to rates and external funding grants) and expenditure controls (through reduction or budget reallocations). In addition, and as previously stated the City should not seek to achieve a funding gap of zero but look to achieve a gap that is financially manageable whilst meeting community expectations.

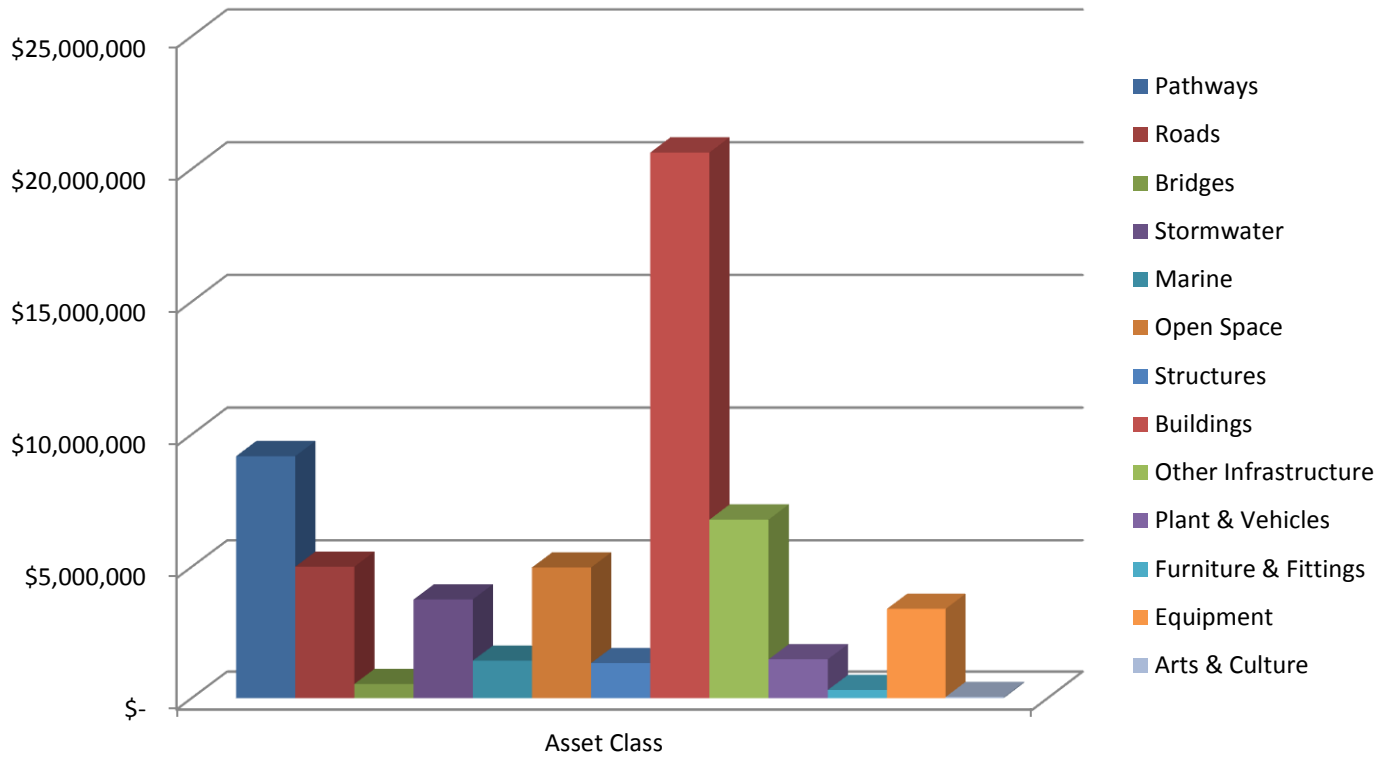
For the City to successful manage its current and future funding gap it will be necessary to explore innovative approaches to how the City's public assets are managed; this may be through a combination of increased revenues through rate increases and external funding, expenditure reductions or reallocations but also new approaches to asset management that involve public private sector partnerships.

Capital renewal will be undertaken using 'low life cycle cost' methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than

replacement cost. In addition the City may consider deferred renewal by which assets identified for renewal but not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Funding Gap by Asset Class

The City's total funding gap is $58.8m, this is made up of gaps in each asset class as shown below:



The City has a significant asset funding gap to address, this is due to a number of factors including but not limited to:

1. Prolonged insufficient budgeting for maintenance and operations activities to prolong asset useful life.
2. Poor renewal planning and lack of historical renewal funding provision by Council.
3. Growth of the City's administration function without commensurate increases in rates to fund increased activities and associated costs.
4. Metropolitan focus of State government which limits available funding to regional cities such as Bunbury for asset upgrade and renewal.
5. Funding demands for 'regional' assets constructed, managed and maintained only through funds provided by the City of Bunbury but serving the regional community.
6. Limited funding availability from State and Federal governments for non-road assets.

The City should seek to manage the funding gap to meet strategic objectives and the community's level of service expectations. This will not require the City to achieve a zero funding gap but one that enables assets to be maintained and renewed at rates that satisfy strategic and community objectives and are financially affordable. This will require the City to consider adjustments to levels of service and changes to the nature and type of services that the City may or may not be delivered into the future.

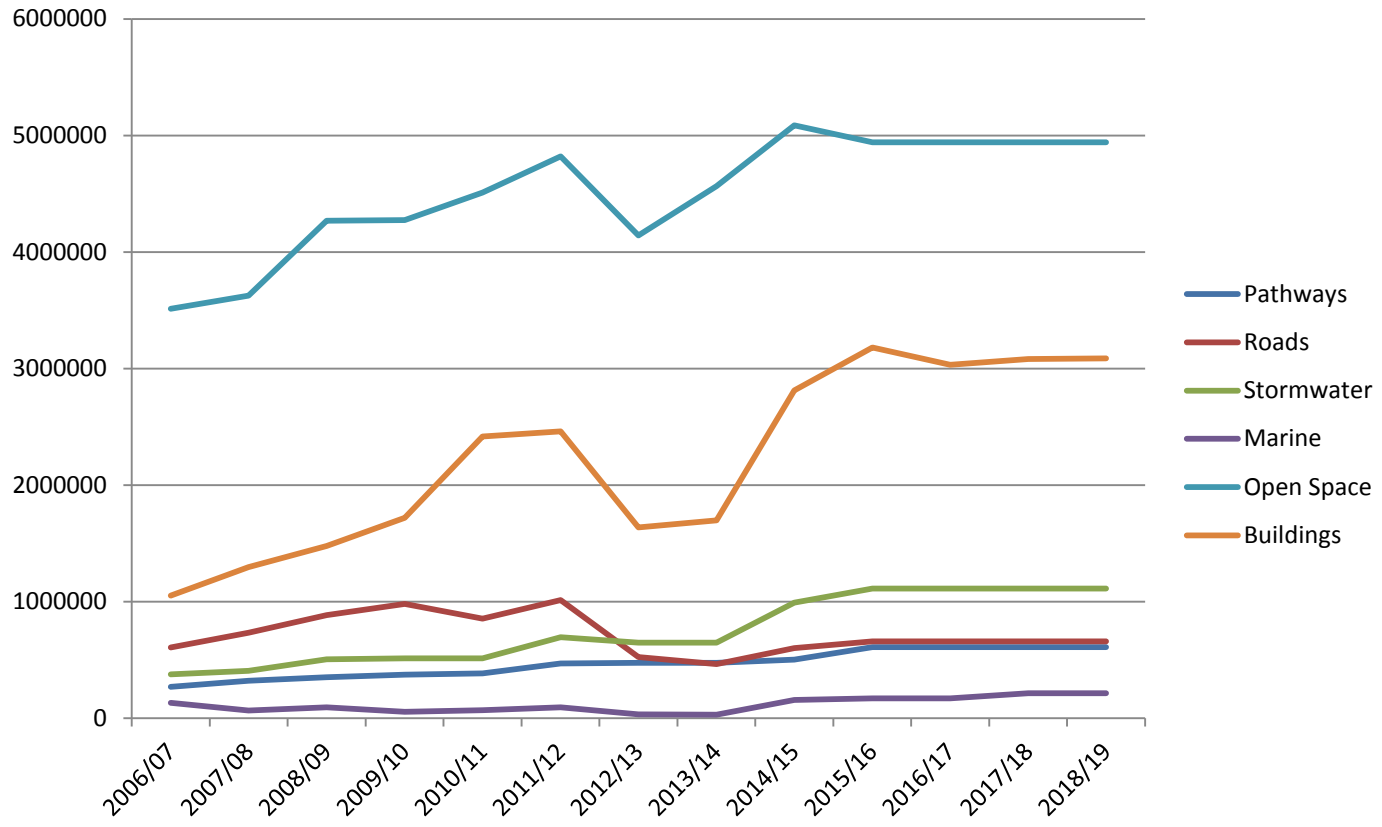
Maintenance Funding Comparisons 2006/07 to 2018/19

The comparison information provided below shows maintenance and operations expenditure for the period for 6 of the City's largest asset classes.

The following needs to be taken into account when comparing year on year data:

1. Expenditure for the period 2006-07 to 2011/12 is taken from the City's former account structure.
2. Expenditure for the period 2012/13 to 2013/14 is taken from the City's current account structure.
3. Like for like comparisons between the 2 periods are difficult due to these changes in account structure
4. Expenditure for the period 2006/07 to 2013/14 is based on **actual** expenditure.
5. Expenditure for the period 2015/16 to 2018/19 is from the City's current Corporate Business Plan and represents **budgeted** expenditure.

Taking the above into account it appears that annual increases in funding have not addressed the City's funding gaps for each asset class shown over the period; only Stormwater, Open Space and Buildings have seen an increase in maintenance and operating funding over the period, funding for Pathways and Marine has remained largely unchanged whilst for roads it has decreased. However it should be noted that road funding models are such that the City is able to leverage good levels of funding for capital renewal projects which has offset this reduction in part. It can also be seen that there was an apparent reduction in maintenance and operating expenditure across each asset classes in 2012/13.



These funding levels are resulting in assets becoming increasingly hard to maintain at levels of service to meet community expectation when considered alongside the considerable shortfalls in capital renewal funding for each asset class. In addition the continuation of underfunding for asset maintenance has and will continue to increase pressure on the requirements for renewal over time as assets reach the end of their useful life and fail.

This is a funding area that the City needs to address in the medium to long term to ensure that its asset base remains sustainable.

ASSET CLASS INFORMATION

BUILDINGS

Valuation

The City owns the following buildings which were last valued in April 2013:

Building Asset Type	Number	Replacement Value ($)
Commercial	15	$28m
Corporate	24	$29.43m
Community	42	$54.34m
Recreation	50	$84.6m
Regulation	3	$0.82m
Public Toilets	29	$4.9m
TOTAL	**193**	**$202.1m**

Building Maintenance and Operations

Building maintenance activities include planned maintenance activities (M&E servicing, inspections, electrical testing and maintenance, painting etc), reactive maintenance to repair damage and breakages and operational activities including cleaning, pest control and utility costs.

Inspections and Condition Rating

The City last conducted a complete inspection and condition assessment of its buildings in 2010. This work was completed by CT Management and identified a number of buildings requiring significant works, these are detailed in the following section.

The City should plan to conduct a repeat inspection and condition assessment within the next 12 months to ensure that accurate building replacement valuations and renewal programming can be developed.

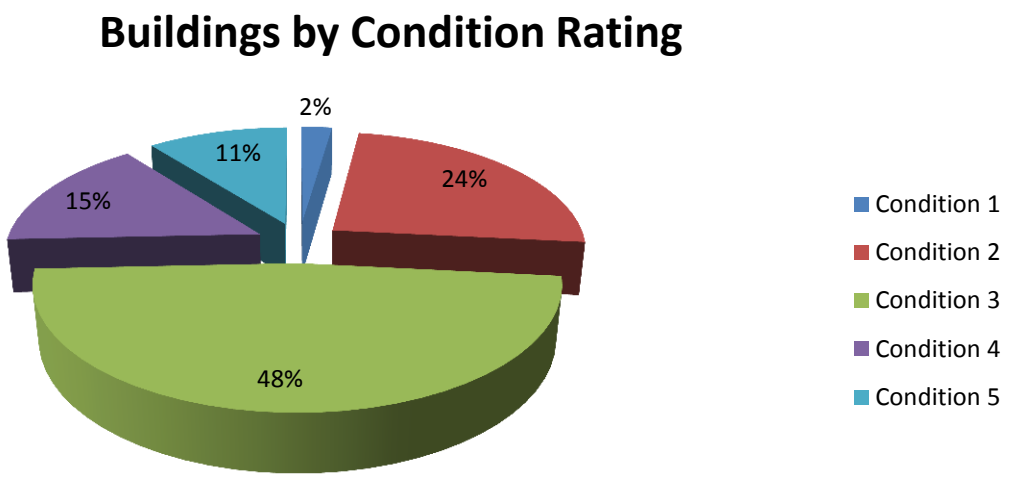
Capital Renewals

23 of the City's buildings have been Condition Rated 5 which means that they are at the end of their useful life and require renewal or replacement. Of these buildings the Dog Pound upgrade project is funded for delivery in 2014/15 whilst the remaining are unfunded during the period to 2019/20. Currently the following buildings are identified as requiring replacement*:

- B&DHA Hockey Clubrooms (Hay Park)
- Exies Hockey Club (Hay Park)
- Len Nisbett Pavilion (Hay Park)
- Kit Keddie Pavilion (Hay Park)
- SWJFL Kiosk (Hay Park)
- Hay Park South toilet block (Hay Park)
- Public Toilets (Cobblestone Drive)
- City of Bunbury Depot (Various buildings)

*CT Management Building Assets inspection, condition rating and maintenance plan (2010)

**of the above only $200,000 for the upgrade of the Len Nisbett Pavilion is included within the 2015/16 to 2019/20 Corporate Business Plan.



Notably many of these buildings are located at Hay Park which is one of the City's primary venues and a regional sporting precinct.

In addition 33 City buildings are identified as Condition 4. This along with those identified as being at the end of their useful life (Condition 5) requires the City to plan for their upgrade, replacement or rationalisation over the course of the next 10 to 15 years. Buildings identified as Condition 4 include:

- Bunbury Croquet Club (Cobblestone Drive)
- City of Bunbury McCombe Road Depot buildings (Halifax)
- Picton Hall (Picton)
- Soccerdrome buildings (Hay Park)
- Forrest Park Pavilion
- Myles Junior Football Pavilion
- Hands Oval changing rooms
- Public Toilets (Casuarina Drive, Stirling Street, Hands Oval (x2), Carmody Place & Maidens Reserve)

Note. For the above buildings the requirements may be limited to internal refurbishment and structural repair rather than complete replacement; this will require determination through structural survey reports.

In addition a significant proportion (104) of City owned buildings are currently rated at Condition 3; these will age over the course of the next 15-30 years during which time the City will need to consider and plan for renewal funding for a large section of the City's building assets.

Strategic Level of Service Recommendations

It is worth noting that 4 specific City buildings (the South West Sports Centre, Bunbury Museum and Heritage Centre and City Libraries) utilise >40% of the City's building maintenance and operating expenditure and so represent a significant ongoing cost to the City. The potential to adjust the way these buildings are managed is an opportunity that could provide the City with options to positively affect the building funding gap whilst maintaining levels of service to the Community.

Additionally consideration should be given to the following options:

- Rationalisation of building assets to remove assets that are either no longer required or have been replaced. Examples include the Soccerdrome (replaced by the Hay Park Multi Sports Pavilion (HPMSP)), Seniors Computer Club which could relocate to either the Withers Library or HPMSP, BMX/Soccer toilets which will be replaced by the public toilets at the HPMSP and the SW Junior Football League kiosk at Hay Park Central which is no longer required.

- Options to transfer asset risk on significant buildings through sale and leaseback options, buildings for consideration of this option could include the City Administration building, South West Sports Centre, Bunbury Library or the BREC.

Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Funding Gap – Buildings

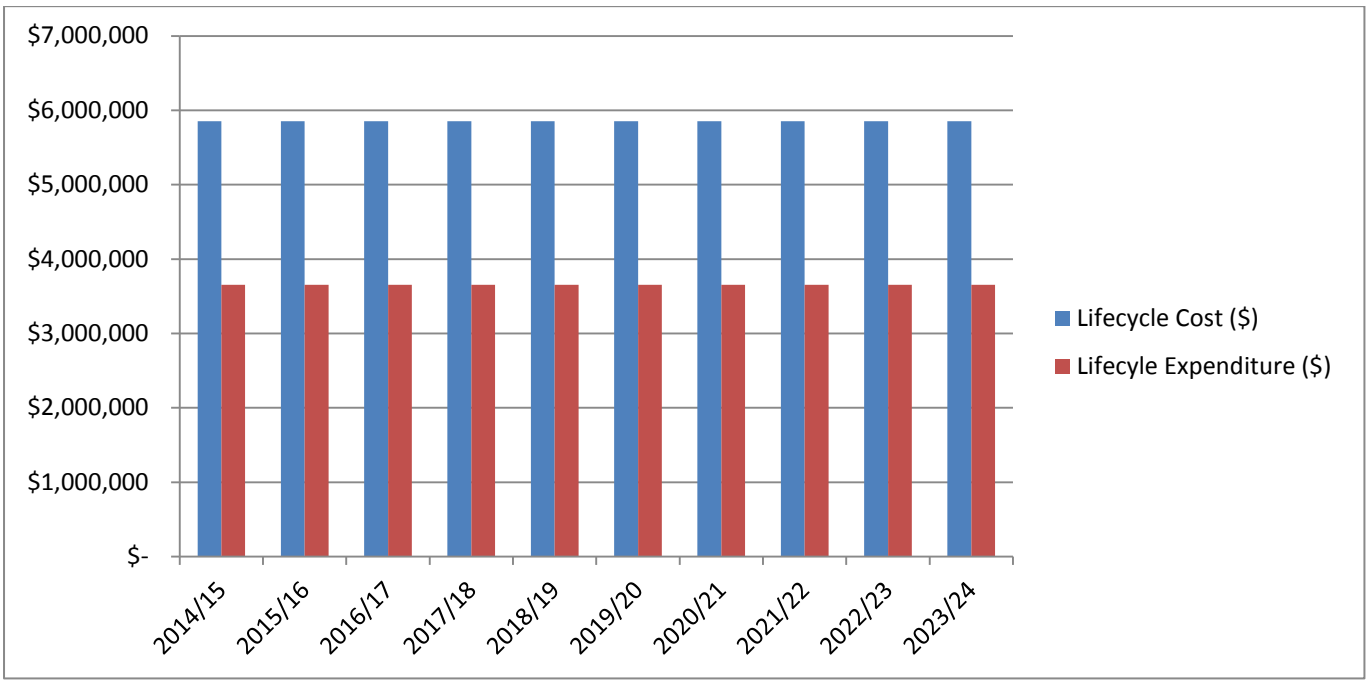
Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital Renewal	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 2,811,681	$ 2,495,195	$ 5,306,876	$ 2,321,558	$ 5,133,239	-$ 173,637
2015/16	$ 3,180,787	$ 2,712,828	$ 5,893,615	$ 457,399	$ 3,638,186	-$ 2,255,429
2016/17	$ 3,033,026	$ 2,724,039	$ 5,757,065	$ 347,000	$ 3,380,026	-$ 2,377,039
2017/18	$ 3,080,302	$ 2,743,058	$ 5,823,360	$ 140,000	$ 3,220,302	-$ 2,603,058
2018/19	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
2019/20	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
2020/21	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
2021/22	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
2022/23	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
2023/24	$ 3,087,898	$ 2,766,551	$ 5,854,449	$ 565,003	$ 3,652,901	-$ 2,201,548
TOTAL	$ 30,633,184	$ 27,274,426	$ 57,907,610	$ 6,655,975	$ 37,289,159	-$ 20,618,451

Notes

1.Lifecycle expenditure = annual maintenance plus capital renewal & upgrade

2.Funding Gap = lifecycle cost less lifecycle expenditure

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The Funding Gap for building infrastructure is $20.618m over the 10 year period and should be a focus for the City as it represents the most significant funding gap. It highlights the need to address levels of service, renewal funding and the provision of annual maintenance and operating funds to preserve and extend useful lives as part of the organisation's financial planning and budget setting process. The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at relatively stable levels to maintain the City's buildings at current levels but does not provide sufficient renewal funding to commence addressing the funding gap; the annual average shortfall for building renewal is over $2m. The 2015/16 to 2018/19 Corporate Business Plan provides for average renewal funding of $766,000pa which is heavily skewed by the 2015/16 budget of $2.3m; the average for the remaining 4 years of the period is $377,000 increasing to a 10 year average of $665,000pa (including the 2015/16 financial year). This is resulting in continually increasing pressure on the funding gap for buildings and the levels of service that the City is able to deliver which in turn may result in a reduction in useful life.

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense whilst looking to increase renewal funding where possible. This may also require the investigation of opportunities to rationalise building assets; this could be achieved through various means including asset sales, asset rationalisation and disposal or the potential to involve the private sector to support The City's strategic objectives.

At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap. Consideration should be given to budgeting to transfer funding to the following reserves to support future works: Building Restoration and Maintenance, Heritage Building Maintenance and the Recreation Centre Development Reserves.

Any new assets added to the register will incur an increased requirement for annual maintenance and operating expenditure and will increase annual depreciation. New buildings should only be considered in accordance with strict guidelines to determine requirements including affordability and the potential for rationalisation of existing assets.

13.2 TRANSPORT INFRASTRUCTURE - ROADS

Valuation

The City owns, manages and maintains road assets worth $m classified in accordance with Main Roads Road Hierarchy Type as below. The road network has the most comprehensive data of all asset classes due to the requirements to report information to Main Roads both for information and to meet funding requirements.

Road Type	Length / Number	Replacement Value ($)
District Distributor 'A' Roads	17.1 km	$207.04m
District Distributor 'B' Roads	9.2km	
Local Distributer Roads	30.2 km	
Access Roads	268.9 km	
Kerb	585.3 km	$24.44m
Public Car Parks	37 no	$5.63m
TOTAL	**325.4km***	**$237.1m**

*Road length only

Road Maintenance and Operations

Road maintenance and operations activities include repairing potholes, surface defect repairs, localised bitumen seal repairs, line marking replacement, kerb repairs, surface and edge break repairs, reinstatements, street sweeping and inspections.

Planned maintenance activities are based on predicted useful life and the works required within this period to ensure that levels of service are maintained (for example surface resealing at 25 year intervals to maintain a road pavement life of 50 years).

Reactive maintenance activities are generally driven by requests from internal staff, residents or road users. As the repair work is uncoordinated, there is generally a loss of efficiency of plant, labour and materials. It is impossible to completely remove all unplanned maintenance events. However, a key element of advanced asset management planning is determining the most cost-effective mix of planned and unplanned maintenance.

Inspections and Condition Rating

Inspections of the road network are designed to identify defects that have the potential to create a risk of damage or inconvenience to the public. Road condition is monitored throughout the year by the City's Works and Services Department, including customer requests. Defects are identified and the necessary remedial work is programmed and undertaken in accordance with current maintenance standards and best practice. The quantity and type of work undertaken is dependent on the needs of the network, maintenance strategies, maintenance intervention levels and available funding.

The condition of the road pavement is also monitored through the undertaking of roughness and condition rating surveys. These surveys enable trends in the condition of the network to be determined, comparisons made between the condition of roads in different areas and assist in identifying sections of road that should undergo closer inspection for maintenance and renewal treatments.

The most recent automated roughness survey was undertaken in 2012 using a vehicle mounted digital laser profilometer that also records rutting and surface texture (macrotexture). The roughness is measured at 10 metre intervals and recorded.. A visual condition assessment was also undertaken from video recorded by the same vehicle using standard condition rating criteria. The City also undertakes the following inspections:

<u>Sealed Road Pavements</u>: The City's sealed road network is continually inspected with particular attention to roads of heavy traffic volume. Any defects observed are reported and entered into the works request module in Assetfinda. Maintenance requests are also captured via the works request module.

Unsealed Road Pavements: The City's unsealed road network, along with a small number of Right of Ways, are inspected and maintained reactively.

In addition to these inspections, the City receives requests from the public for improvements to the road network and information on damaged road pavements. These requests are inspected, assessed and actioned as a maintenance item, or recorded for possible future upgrade treatment as part of the renewal program.

Intervention Levels

Intervention levels support the technical levels of service provided to the community by defining the trigger points for determining the types of works to be carried out. They are also useful in the development of ongoing maintenance programmes and the tasks set within AssetFinda, and their triggers are shown below. The triggers refer to condition ratings contained in AssetFinda.

Defined intervention levels also assist the City in being able to organise maintenance works on a risk priority basis, rather than be susceptible to carrying out works on a chronological basis, or as a result of pressure from individuals within the community. It is considered, however, that their greatest benefit is served by assisting in providing a sound legal argument as to why certain works were, or were not, carried out.

In the table below, a ranking of 1 indicates excellent condition while 5 indicates very poor condition.

Task	Trigger
1. New Seal for Traffic: Generated where an existing gravel road has traffic volumes that exceed the trigger, these roads will have traffic volumes and suitability reviewed to ensure that the works are warranted.	Traffic > 150
2a. Chip Reseal: This task is a reseal of an existing sealed road using hot bitumen and aggregate (stone) wearing course. Defects are checked to ensure that larger works are not required.	Binder Condition = 5 Defect severity < 4
2b. Crack Seal: This task is generated when a sealed road has cracking in the bitumen surface. The task is relativity inexpensive and prevents moisture from entering the pavement which often results in pot holes or pavement failure. The crack sealing is generally done using a special mixture of bitumen and rubber that forms an elastic seal.	Crack severity = 5
3. Asphalt Reseal: This task is a reseal of an existing sealed road using a hot bitumen and aggregate mix. The surface is rolled and leaves a finished product that is smooth with good skid resistance. This task is more expensive than chip seals or slurry seals but the process gives a very smooth surface and improves ride ability and the life of the pavement. Other defects and cracks are checked to ensure that larger works are not required	Asphalt ≥ 4.5 Crack Severity < 1.5 Defect severity < 2
4. Asphalt and Kerbing: This task is generated where the kerbing is required to be replaced and the road requires resealing. Other defects and cracks are checked to ensure that larger works are not required	Kerb condition > 1 Asphalt ≥ 4 Crack severity < 1.5 Defect severity < 2
5a. Widen and Reconstruct: This task is generated where an existing sealed road requires to be widened due to traffic volumes or current width standards and the existing road needs to be reconstructed as the pavement has failed.	Traffic > Max traffic* and Roughness ≥ 250 or Crack Type = 2 or Crack Severity = 5 or Local Surface = 5 or Patches = 5
5b. Reconstruct: This task is generated where an existing sealed road requires to be reconstructed as the pavement has failed.	Roughness ≥ 250 or Crack Type = 2 or Crack Severity = 5 or Local Surface = 5 or Patches = 5

*Max traffic varies considerably across uses (rural/residential, commercial and industrial), Austroads Standards cover this.

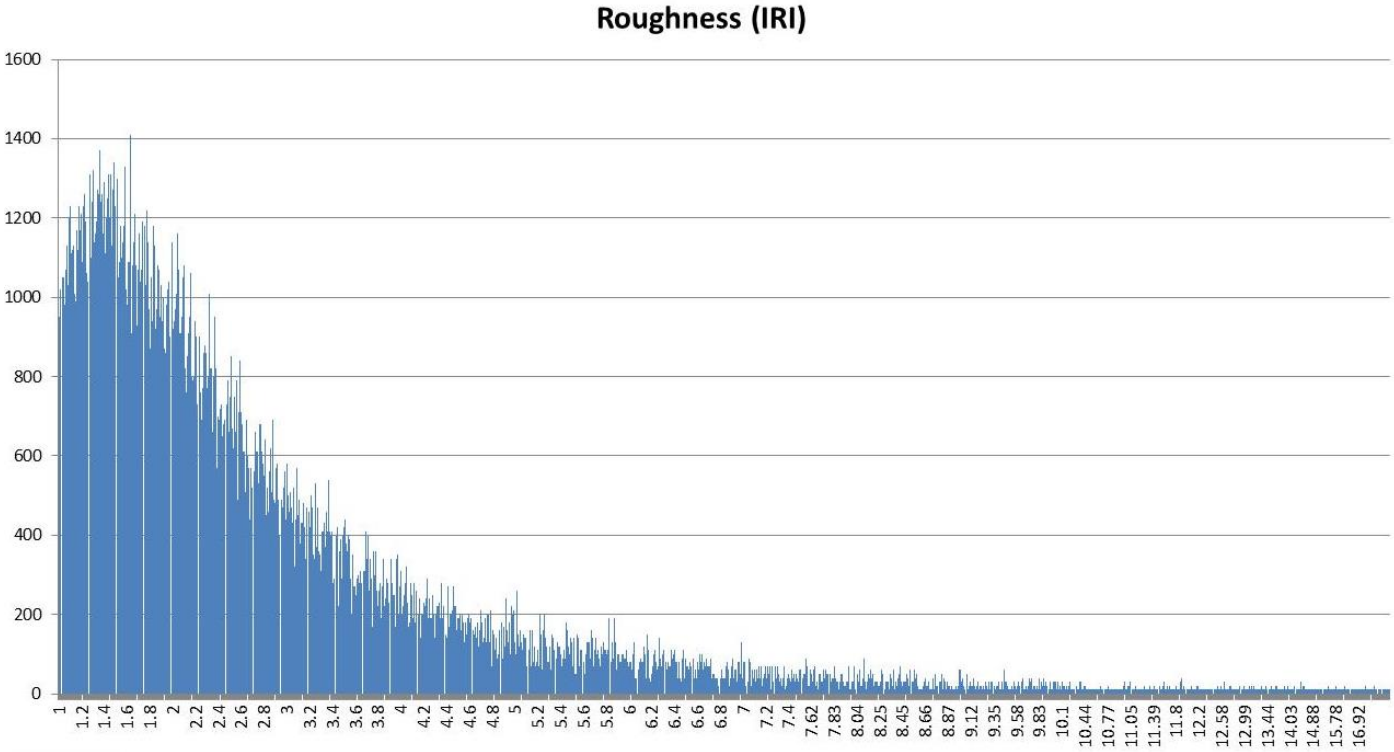
Volume Monitoring

Traffic counters provide vehicle numbers, types and speed data to the City. Routine traffic counts for all City roads are required to fully understand demand levels and likely impacts on the useability and the rate of deterioration of a road system. The City currently has a 2 year contract in place for the recording of traffic volumes.

Performance Monitoring

Pavement, surface and kerb performance is monitored utilising Assetfinda software.

A roughness survey of the sealed road network was undertaken in 2012 to measure the quality of ride experienced by motorists when travelling on the road. A condition profile for the network indicating the length of sealed road at each roughness level is shown below. A roughness rating of between 1 and 7.5 is generally considered as acceptable for sealed roads, this shows that >90% of the City's network is within the acceptable standard for roughness.



Capital Renewals

Major renewal projects have been identified and scheduled within the 2015-16 to 2018-19 Corporate Business Plan, these include renewal and upgrade works to:

- Spencer St (Stuart St to Stirling St)
- Koombana Drive
- Ocean Drive (Hayward Street to Washington Avenue)
- Parade Road (various sections)
- Nuytsia Avenue
- Princep St / Haley St / Carmody Pl

In addition the City will complete projects linked to funding provided through the Regional Road Group funding programme, Roads to Recovery funding programme and the Federal Blackspot funding programme. These funding programmes provide between 60-100% project funding. The City will also need to make a decision with regard to overdue renewal works on Estuary Drive based on the proposed developments and staging of works within the Port of Bunbury.

Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Based on the existing asset funding gap, a program of road asset rationalisation will be put in place. This program requires the City to be focused on improving the service potential of existing road assets and where practical, rationalising or decommissioning sub-standard road assets.

In light of the above the City has adopted a 'renew before new' approach to road asset management. This approach puts the funding for renewal, upgrade or repair of existing road assets ahead of requests for new road assets.

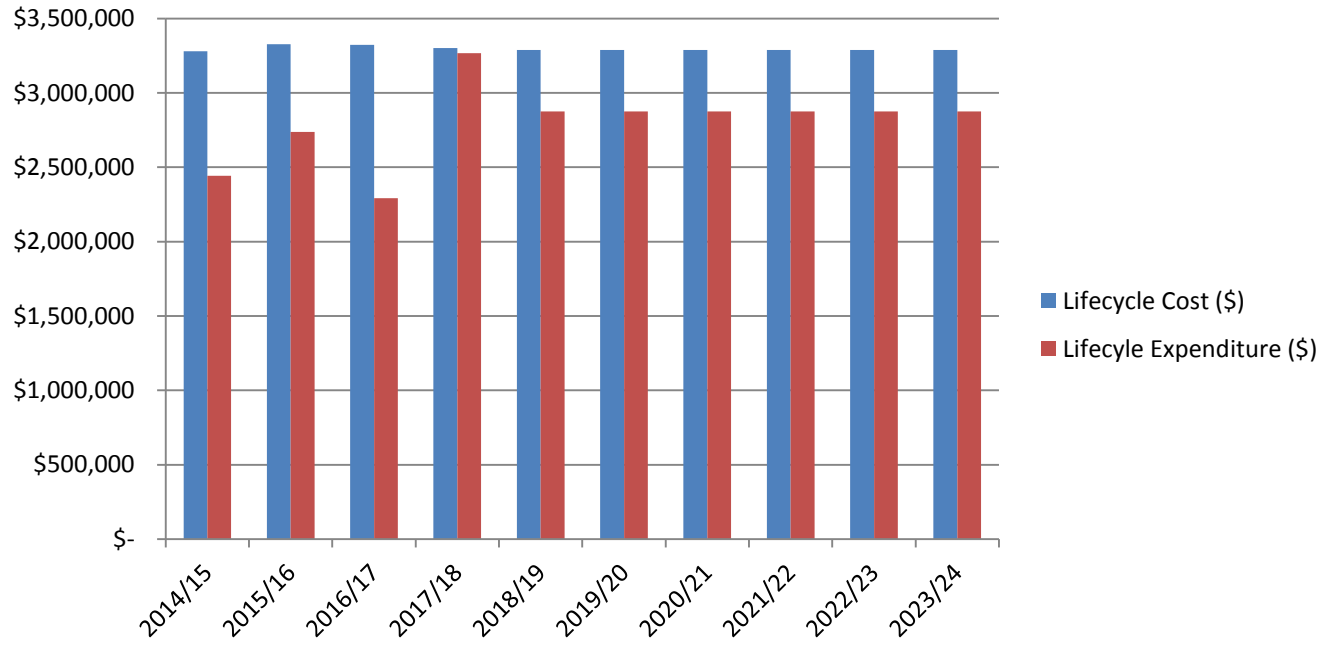
Funding Gap – Roads

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital Renewal	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 600,156	$ 2,683,709	$ 3,283,865	$ 1,841,901	$ 2,442,057	-$ 841,808
2015/16	$ 659,856	$ 2,670,734	$ 3,330,590	$ 2,078,113	$ 2,737,969	-$ 592,621
2016/17	$ 659,856	$ 2,665,827	$ 3,325,683	$ 1,632,813	$ 2,292,669	-$ 1,033,014
2017/18	$ 659,856	$ 2,645,294	$ 3,305,150	$ 2,607,000	$ 3,266,856	-$ 38,294
2018/19	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
2019/20	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
2020/21	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
2021/22	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
2022/23	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
2023/24	$ 659,856	$ 2,631,463	$ 3,291,319	$ 2,215,000	$ 2,874,856	-$ 416,463
TOTAL	$ 6,538,860	$ 26,454,342	$ 32,993,202	$ 21,449,827	$ 27,988,687	-$ 5,004,515

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The Funding Gap for roads is $5.1m over the 10 year period. Outwardly this represents a reasonable gap to address and highlights the need to address levels of service, renewal funding and the provision of annual maintenance and operating funds to preserve and extend useful lives as part of the organisation's financial planning and budget setting process. It should be noted that this gap represents only 2% of the replacement cost of the network. From a funding perspective a significant proportion of renewal funding (approx. 60%) for the City's road network is provided by external funding from the State and Federal governments.

However it should also be noted that much of this gap relates to the City's access and local road network which represents 83% of the total road network; of this 75km of access and local roads will require renewal within the 15 year period between 2021 and 2035. At today's reseal rates this represents expenditure of $16.98m. With only limited external funding available (based on current funding models) it is highly likely that the City will have to fund this work through internal funding alone. It is strongly recommended that the City look to establish a rolling programme of reseal for this component of the network commencing in 2020-21 to deliver, for example, $1m to $1.5m of reseal of access and local roads per year for a 15 year period to cover this requirement. It is recommended that the process be initiated early to ensure that the City is able to fund this programme over the period.

Options to generate the required own source revenue funding include but are not limited to:

- An increase in rates for this specific purpose with funds being added to reserve to ensure that any excess funds generated can be preserved for ongoing reseal requirements. A rates related levy for this specific purpose may also be raised over an extended period before and after works are undertaken to spread the cost burden across an extended funding period.
- Implementing a new road renewal / upgrade contribution scheme requiring development applications on all lots fronting City roads to make a reasonable contribution to the City's Asset Management and Renewal Reserve with contributions protected for use on the road network only.
- Increased annual budget transfer allocations to the City's Asset Management and Renewal Reserve.
- Adjustments in Level of Service expectations within the community to reduce the requirement for funding the reseal of the City's access roads within the identified timeframe.

The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at relatively stable levels to maintain the City's roads at current levels (primarily through external road funding sources) but does not provide sufficient renewal funding to commence addressing the funding gap that relates specifically to the City's access road network which represents 83% of the total road network. This component of the road network is ageing at a rate that requires a programme of renewal to be established and delivered over the next 10-15 year period

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap (with particular reference to the requirements detailed in this section).

13.3 TRANSPORT INFRASTRUCTURE – PATHWAYS

Valuation

The City pathway network comprises of the following:

Asset Class	Dimension	Replacement Value ($)
Pedestrian only pathways	35km	$6.47m
Dual Use pathways	173km	$48.9m
On Road Cycle Lane	3.6km	Valued in Roads
Pram / Access Ramps	1680no.	$0.76m
TOTAL	**211.6km**	**$56.13m**

Pathway Maintenance and Operations

Pathway operations comprise activities and costs relating directly to the delivery of services provided by each Pathway and include:

- ✓ Pathway cleaning
- ✓ Pathway inspections (asset condition, safety and compliance inspections)
- ✓ Pathway utility costs (electricity, water, sewerage, telephone etc.)
- ✓ Planned maintenance activities identified and managed through a pre-defined maintenance program
- ✓ Reactive maintenance or unplanned repair work carried out in response to ad-hoc maintenance requests

Planned Pathway maintenance activities and associated costs are based on an assessment of each Pathway components useful life.

Sufficient pathway maintenance budgets are required to ensure Pathway assets deliver their service potential over a normal expected lifespan, excluding any unforeseen circumstances, conditions or emergencies.

Planned Pathway Maintenance Tasks include:

- ✓ Replacing expansion gap rubbers in concrete paths
- ✓ Refreshing dual path stencilling
- ✓ Path sweeping
- ✓ Path edging (grass and lawn)
- ✓ Vegetation Control

Reactive Pathway Maintenance Tasks include:

- ✓ Repair tree root damage
- ✓ Repair cracking (subsidence, heavy vehicles)
- ✓ Replace brick paving (subsidence, heavy vehicles)
- ✓ Replace concrete slabs (subsidence, heavy vehicles)
- ✓ Reinstatement after 3rd party works (Aqwest, Telstra, etc…)

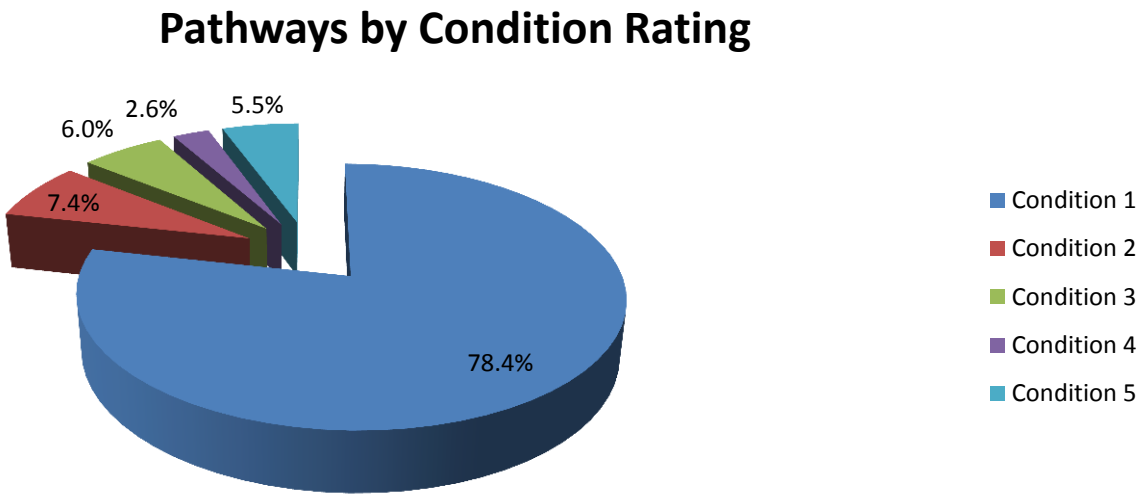
Capital Renewal

The 2015-16 to 2018-19 Corporate Business Plan (including the current financial year) provides for $1.8m of capital renewal to the footpath network. This includes pathway renewals in the following streets:

- ✓ Blair St
- ✓ Wittenoom St
- ✓ Stirling St
- ✓ Mary St
- ✓ Wellington St

- ✓ Money St
- ✓ Cranbrook Way
- ✓ College Row

The City's pathway network is predominantly in good or very good condition as shown in the table below with only % 8.2% rated as being either conditions 4 or 5 and therefore requiring replacement. However with 14.2% of the pathway network in Condition 3 or worse the City will need to plan to replace over $13m of the network over the next 20-25 years.



Funding Gap Analysis

The Funding Gap for pathways is $6.02m over the 10 year period. This can be reduced through the reassessment of levels of service, renewal funding and the provision of annual maintenance and operating funds to preserve and extend useful lives as part of the organisation's financial planning and budget setting process.

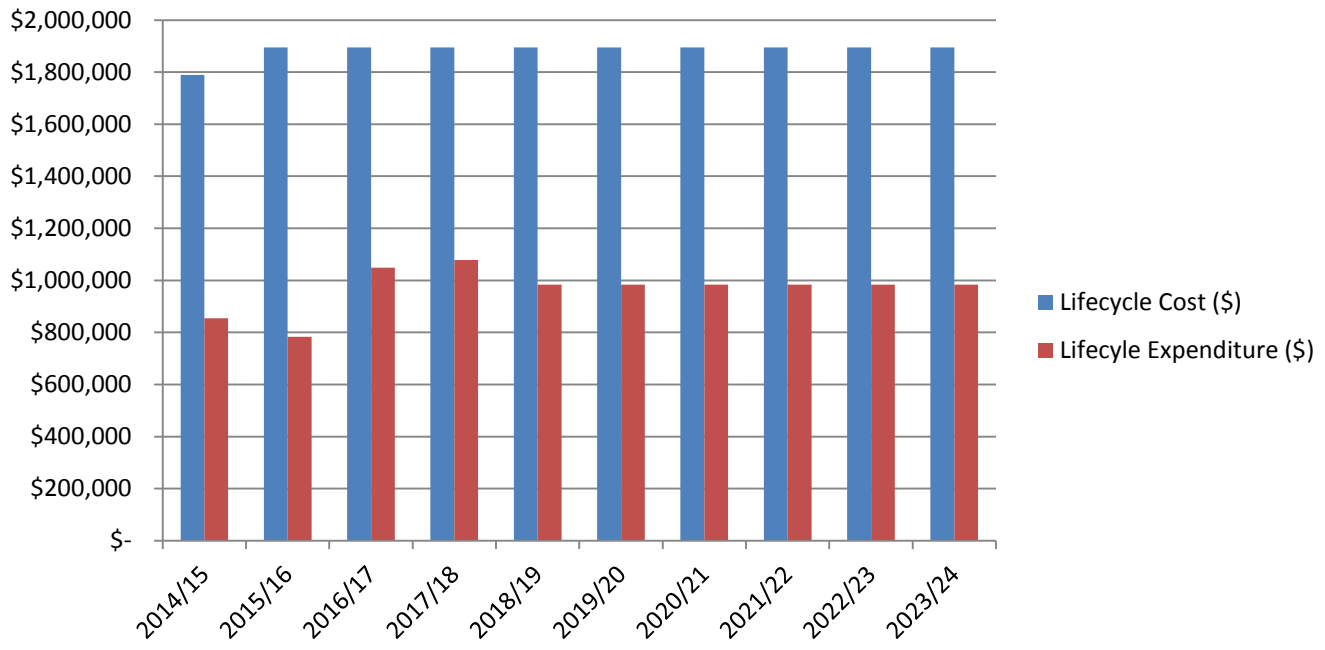
The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at relatively stable levels to maintain the City's pathways at current levels but does not provide sufficient renewal funding to commence addressing the funding gap that exists.

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 503,449	$ 1,286,309	$ 1,789,758	$ 350,573	$ 854,022	-$ 935,736
2015/16	$ 608,843	$ 1,286,309	$ 1,895,152	$ 175,000	$ 783,843	-$ 1,111,309
2016/17	$ 608,843	$ 1,286,309	$ 1,895,152	$ 440,000	$ 1,048,843	-$ 846,309
2017/18	$ 608,843	$ 1,286,309	$ 1,895,152	$ 470,000	$ 1,078,843	-$ 816,309
2018/19	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
2019/20	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
2020/21	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
2021/22	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
2022/23	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
2023/24	$ 608,843	$ 1,286,309	$ 1,895,152	$ 375,000	$ 983,843	-$ 911,309
TOTAL	$ 5,983,036	$ 12,863,090	$ 18,846,126	$ 3,685,573	$ 9,668,609	-$ 9,177,517

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap; this should include adjustments to strategic levels of service that impact how the network as a whole is managed, maintained and renewed.

With 92% of the network in Condition 1 – 3 the funding gap for pathways could be addressed with an adjustment in service level to allow a slight increase in asset deterioration before interventions are scheduled. This would result in a minimal change to the perceived level of service to the community with regard to the City's pathway network. Based on funding gap issues with other asset classes this is a recommended action which can be achieved through consultation with the Engineering and Civil Operations departments to establish a minor reduction in the current level of service that will address the current funding gap for pathways.

Level of Service Strategic Recommendations

Various options exist to adjust levels of service for the pathway network at a strategic level, these include:

1. Pathways to be provided on every residential street as a medium to long term objective.
2. Pathways to be provided on both sides of streets within the CBD, on Distributor A and Distributor B roads and within 250m radius of schools, district and neighbourhood centres.
3. Rationalise the existing pathway network to meet the strategic objectives in 1 and 2 above as assets reach the end of their useful life or condition inspections determine their removal is the most cost effective treatment.

13.4 TRANSPORT INFRASTRUCTURE – BRIDGES

Valuation

The City owns the following bridges:

Asset Class	Number	Replacement Value ($)
Koombana Drive Road Bridge	1	$6.5m
Footbridges	12	$0.93m
TOTAL	**13**	**$7.43m**

Bridge Maintenance and Operations

Operations and maintenance activities for bridges deliver activities to maintain bridge serviceability; these include Level 1 inspections, planned and unplanned repairs, vegetation clearing, cleaning and deck joint adjustments, repair and replacement of deck joints, seals, individual steels or timbers and minor repairs to abutments.

Level 2 inspections on road bridges are provided by Main Roads with any maintenance works or level 3 engineering inspection requirements identified remaining the responsibility of Council.

In 2014 the City took on the maintenance responsibility for the footbridge on the old rail line crossing the Plug from the PTA for a fixed 5 year period until 2018/19. The bridge remains as a PTA asset with the PTA providing $12,000 per year to the City for maintenance to the footbridge for the duration of the agreement. At the end of the agreement term the City maintains the right to renegotiate the agreement or return the maintenance responsibility to the PTA.

Capital Renewal

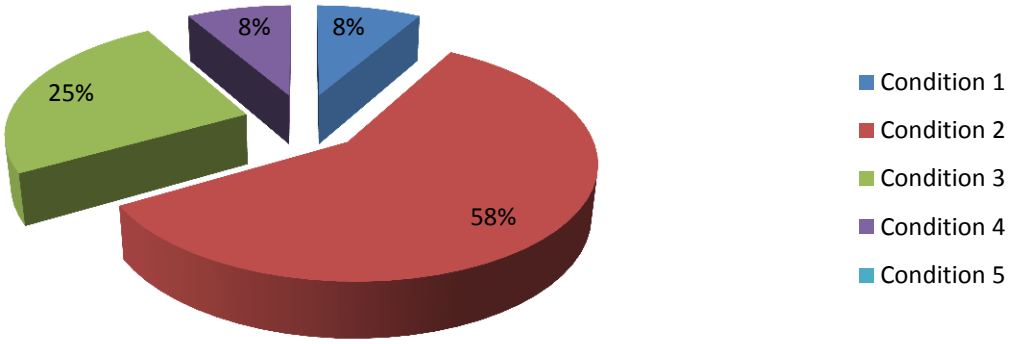
The 2015-16 to 2018-19 Corporate Business Plan (including the current financial year) provides for $454.000 of capital renewal to Koombana Bridge as a result of Level 2 inspections completed by Main Roads in 2008 and subsequent 2013 Level 3 Engineering report. This work to be undertaken in 2015/16 and 2017/16.

In addition the footbridge (BR108) providing access from the Soccerdrome to Hay Park is scheduled to be replaced with a culvert in 2016/17 which will result in the disposal of the existing structure and the rationalisation of the footbridge register from 11 to 10 with a compensating addition within the Stormwater asset database.

In recent years the City has replaced footbridge decks at Queens Gardens, Five Mile Brook outfall/Ocean Drive and Timperley Road with GRP decks to prolong asset life. In addition the City has disposed of a footbridge on Parade Road adjacent to the PCYC and replaced with a culvert to further reduce asset risk. The programme of deck replacement will continue over the course of the next 10 years as maintenance funds permit.

The City's footbridge network is predominantly in Condition 2 as shown in the table below with only 8% (1 footbridge) rated as being either conditions 4 or 5 and therefore requiring replacement. This footbridge at Hay Park is scheduled for replacement in 2016/17 when it will be replaced with a culvert and therefore disposed from the bridge asset class database with a new item being created in stormwater.

Bridges by Condition Rating



Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Based on the existing asset funding gap the City's ongoing annual maintenance programme will allow the City to continue to deliver service at the desired levels for the bridge infrastructure network.

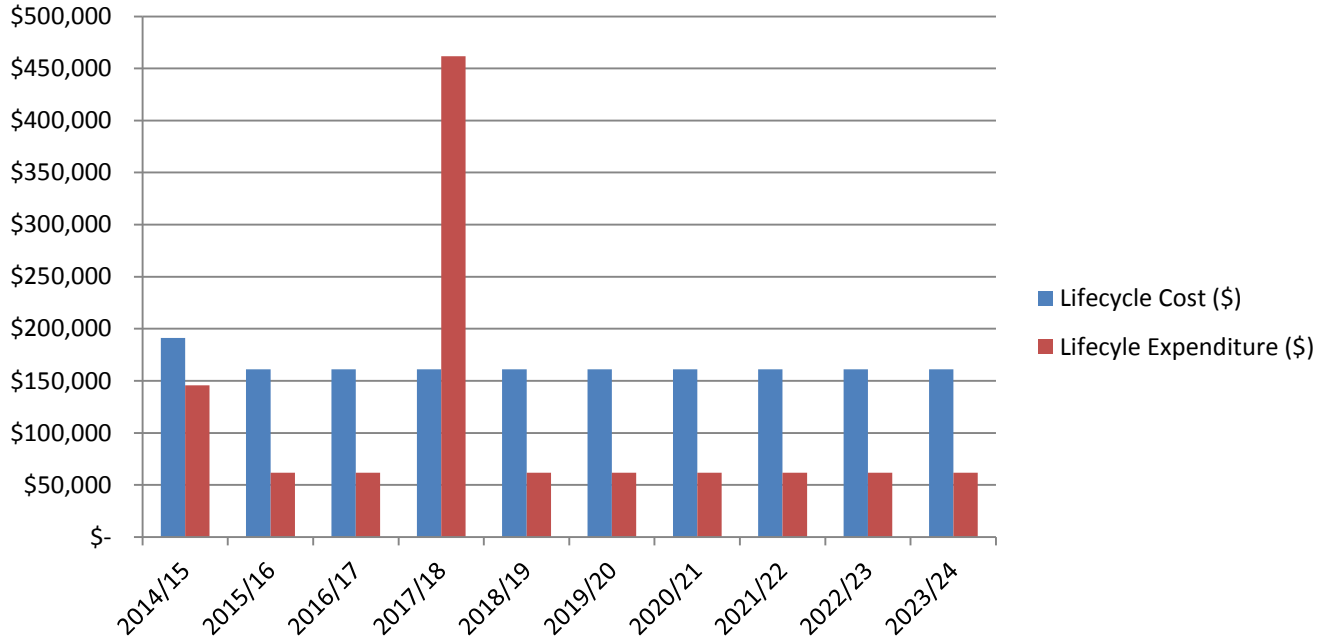
In light of the above the City has adopted a 'renew before new' approach to bridge asset management. This approach puts the funding for renewal, upgrade or repair of existing road assets ahead of requests for new bridge assets; it has resulted in the renewal funding within the 2015/16 to 2018/19 Corporate Business Plan for the Koombana Bridge to provide a projected 75 years of useful life.

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 91,836	$ 99,334	$ 191,170	$ 54,000	$ 145,836	-$ 45,334
2015/16	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2016/17	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2017/18	$ 61,772	$ 99,334	$ 161,106	$ 400,000	$ 461,772	**$ 300,666**
2018/19	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2019/20	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2020/21	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2021/22	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2022/23	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
2023/24	$ 61,772	$ 99,334	$ 161,106	$ -	$ 61,772	-$ 99,334
TOTAL	$ 647,784	$ 993,340	$ 1,641,124	$ 454,000	$ 1,101,784	**-$ 539,340**

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The 2015-16 to 2018-19 Corporate Business Plan provides insufficient maintenance and operating funding at levels for the City's bridge infrastructure which will result in their continued deterioration over time. The City has allocated $454,000 of renewal works to the Koombana Bridge to ensure its continued operation at the required level of service. However there is no funding allocated to renewal of any of the City's footbridges (completely or in part) and so the City will be required to look both at providing renewal funding and funding to extend useful life and maintain levels of service through maintenance expenditure based on condition inspections.

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap.

13.5 STORMWATER INFRASTRUCTURE

Valuation

The City owns the following stormwater infrastructure:

Asset Class	Number / Length	Replacement Value ($)
Stormwater Pump Stations	12	$2.22m
Stormwater Drainage Basins	123	Valued in Land
Pipes	237km	$66.92m
Culverts	131	$1.95
Pits	8851	$23.2m
Open Drains	30.9km	Valued in Land
Headwalls	411	$0.43m
TOTAL	**9529 no/267.9km**	**$92.77m**

Financial Assumptions

Various key assumptions have been made in presenting this information and in preparing forecasts for required operating and capital expenditure and stormwater valuations, depreciation and carrying amount estimates.

Since 2012 the City has captured 29% of stormwater pits, 35% of the pipe network, 79% of culverts, 87% of headwalls, 100% of pump stations, open drains and drainage basins through visual inspection to confirm and condition rate infrastructure; this data has been used to extrapolate the condition and renewal value for the entire network. Over the course of the next 4 years the City expects to complete the visual inspection of the complete network which will ensure the improved accuracy of stormwater asset data.

Stormwater infrastructure unit rates have been obtained from recently completed capital works projects, recently accepted tenders and verified against the unit rates identified in "Rawlinson's Australian Construction Handbook 2012", or where no City specific information is available using Rawlinson's unit rates.

Gaps in our knowledge of stormwater assets remain with regard to pipe and pit size and materials used. A programme is in place to provide the missing data at which point a more accurate valuation of our stormwater assets will be made. However until all of the stormwater data has been visually inspected, condition rated and verified a number of assumptions have been made to enable valuation and depreciation; these are detailed below.

Pipes & Stormwater Lines

1. Any pipes not yet verified are assumed to be 300mm reinforced concrete and valued on this basis.
2. Asbestos, earthenware or unknown material pipes are valued for replacement with reinforced concrete with a minimum pipe diameter of 300mm.
3. Asbestos and earthenware pipes with a diameter less than 300mm are replaced with sewer grade PVC on a like for like basis.

Stormwater Drainage Pits, Culverts and Headwalls

1. All stormwater drainage pits are valued for replacement using 1200mm diameter concrete well liner pits.
2. Standard headwalls & culverts are valued for replacement on a like for like precast concrete basis.
3. Non standard headwalls are valued for replacement using unit rates from recent City of Bunbury projects.
4. Any pits not verified are assumed to be side entry or junction pits and costed for replacement using 1200mm concrete well liner pits.

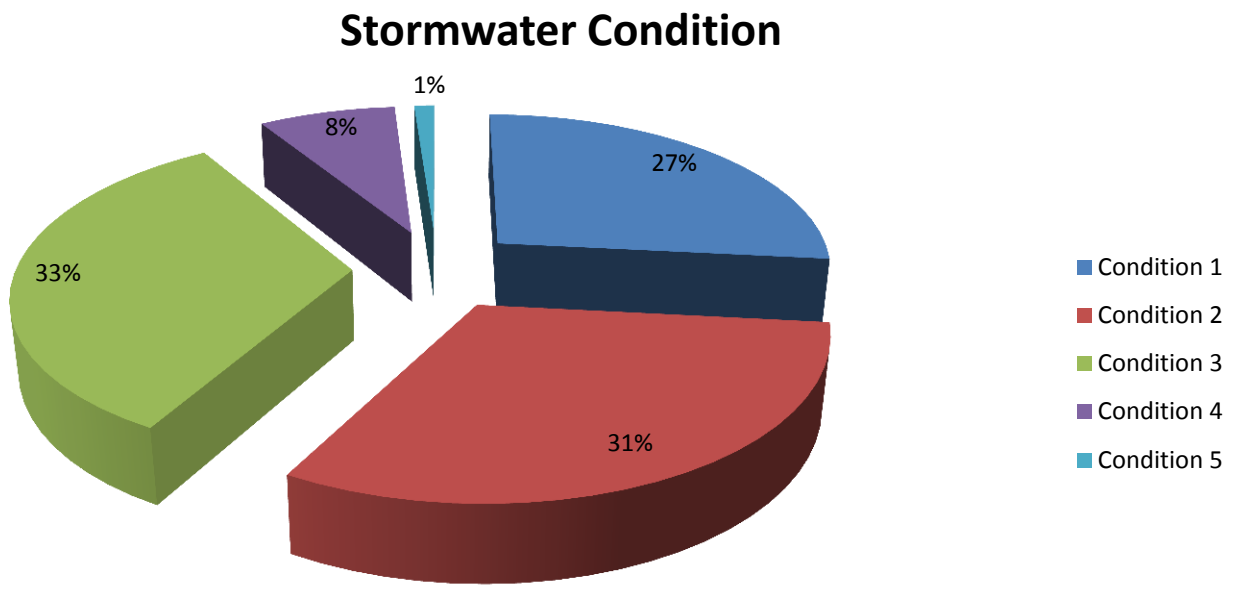
Pump Stations are valued on a like for like replacement basis.

Open drains and drainage basins are considered to be assets within the Land Assets Class and so not allocated a replacement cost.

This data collection represents 28.5% of the total network (5398 assets inspected and verified from a total of 18,944), the known replacement cost for the assets inspected and verified totals $32.93m, using this information it is

estimated that a total replacement cost of $115.6m may represent a more accurate cost estimate. As stormwater data collection is continuing within the next 12 months a more accurate valuation will be determined with a fully accurate determination generated once the network has been completely inspected and verified.

This process has allowed the City to improve its decision making with regard to maintenance and renewal expenditure across the network; this process will continue to identify and prioritise capital renewal projects for the period from 2017/18 onwards. The City has also undertaken independent studies of various high risk catchments including Otway St, Five Mile Brook Hydrology Study, Horseshoe Lake Drainage Review and an overall Stormwater Management Strategy for the City of Bunbury.



Stormwater condition data is based only on assets that have been verified and so does not provide an accurate picture of the complete network. However it is an accurate dataset for assets that have been picked up and verified for age, condition, type and service condition and represents 28.5% of the total network.

Stormwater Maintenance and Operations

Stormwater operations comprise activities and costs relating directly to the delivery of services provided by each Stormwater and include:

- ✓ Stormwater cleaning.
- ✓ Stormwater inspections (asset condition and safety inspections)
- ✓ Stormwater utility costs (electricity, water, sewerage, telephone etc.)

Stormwater maintenance comprises the following activities:

- ✓ Planned maintenance activities identified and managed through a pre-defined maintenance program, these include water quality monitoring, clearing and cleaning of drainage pipes and conducting annual inspections and servicing of drainage pump stations.
- ✓ Reactive maintenance or unplanned repair work carried out in response to ad-hoc maintenance requests; these include clearing of blockages in pits and pipes, repairs to pit lids and root pruning within pipes.

Planned Stormwater maintenance activities and associated costs are based on an assessment of each stormwater component's useful life.

Sufficient Stormwater maintenance budgets are required to ensure stormwater assets deliver their service potential over a normal expected lifespan, excluding any unforeseen circumstances, conditions or emergencies.

Capital Renewal

Renewal and upgrade projects since 2010/2011 have included works at Tim Shaw Park, Roman Road, West Road Pump Station, Rathmines Pump Station, Lake King drainage basin, Rathmines outflow, Creek Street outflow, Forrest Avenue, Jarvis St (Five Mile Brook culverts), Lovegrove Avenue, Halsey St (Five Mile Brook culverts) and improvements to the Five Mile Brook 1 in 100 levee banks.

The 2015-16 to 2018-19 Corporate Business Plan (including the current financial year) provides for $5.2m of capital renewal which includes major projects to renew the pump station at the Five Mile Brook outflow, renewal and improvements to the pump stations at Horseshoe Lake and Stubbs Close as well as renewal of various other key locations within the network with a particular emphasis on the City's older suburbs.

The City's older suburbs (East Bunbury, Carey Park, and the residential areas immediately south of the CBD) contain assets that are at least 45 years old and were designed for a far less dense urban area. Much of the new sections of the network have been provided through subdivision (either by the City or private developers) within the suburbs of College Grove, Glen Iris and Marlston Hill.

Future capital renewal projects will be identified through ongoing data capture and investigation of identified high risk areas.

Based on the data verified to date condition data is not included for stormwater as this may provide an unreliable picture of the City's stormwater asset condition. The ongoing verification process will provide increasingly accurate data which will enable the City to provide condition information to assist in the decision making process.

Funding Gap Analysis

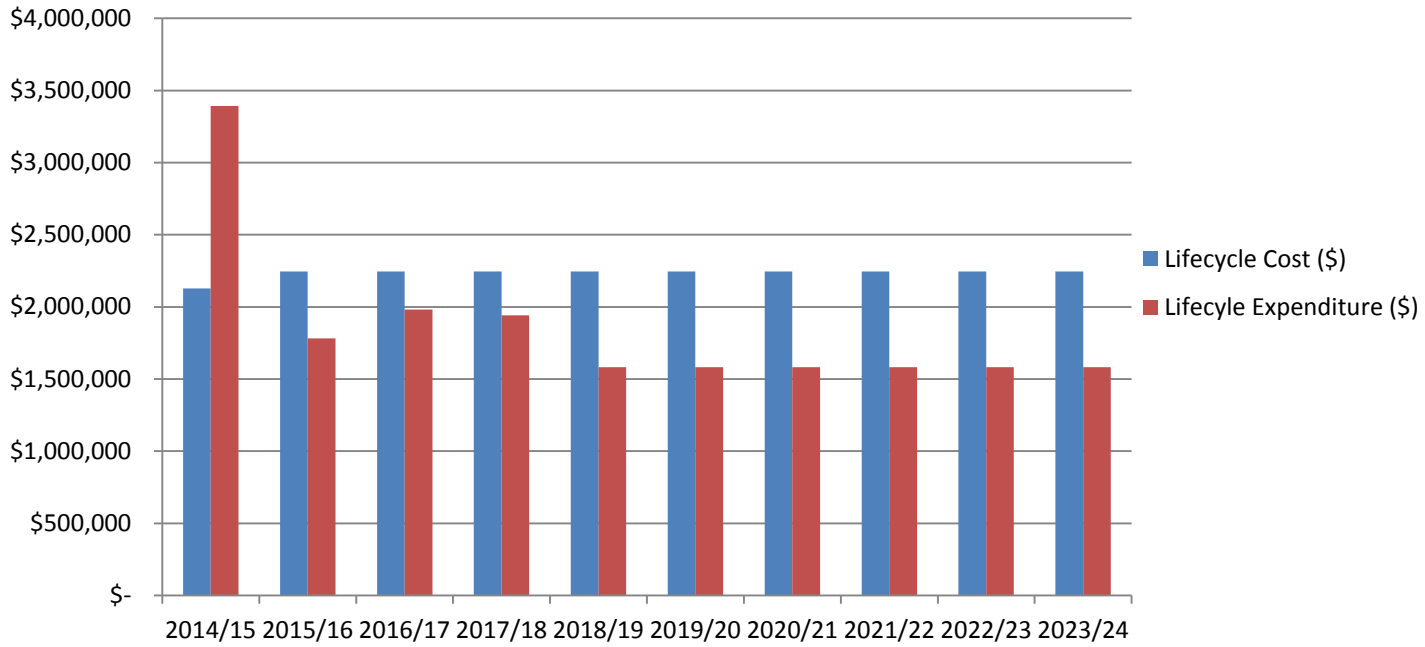
The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 992,241	$ 1,135,215	$ 2,127,456	$ 2,399,692	$ 3,391,933	$ 1,264,477
2015/16	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 670,000	$ 1,781,652	-$ 464,300
2016/17	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 869,500	$ 1,981,152	-$ 264,800
2017/18	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 830,000	$ 1,941,652	-$ 304,300
2018/19	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
2019/20	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
2020/21	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
2021/22	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
2022/23	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
2023/24	$ 1,111,652	$ 1,134,300	$ 2,245,952	$ 470,000	$ 1,581,652	-$ 664,300
TOTAL	$ 10,997,109	$ 11,343,915	$ 22,341,024	$ 7,589,192	$ 18,586,301	-$ 3,754,723

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at stable levels to maintain the City's stormwater infrastructure at current levels but does not provide sufficient renewal funding to commence addressing the funding gap. Maintenance funding for the stormwater network has increased significantly since 2013/14 when maintenance and operating expenditure was increased by 50%; this reflected Council's acceptance that the network required increased funding to maintain existing levels of service. Whilst renewal funding is high for 2014/15 ($2.4m) this figure reduces to an average of $576,600 per year for the remainder of the current 5 year Corporate Business Plan which will make it difficult for the City to continue to address the funding gap for stormwater.

It is important to note that many components of the stormwater assets were constructed in the 1960s and 1970s and whilst these assets remain within their predicted useful lives the stormwater management requirements of the network have changed considerably since. These changes, both in urban concentration and climate, are resulting in reduced runoff times as infiltration levels decrease due to increased urban development and increased event intensity due to climate variations. In both cases this is putting increasing pressure on the existing network's ability to manage the changing runoff volumes to mitigate short term flooding issues associated with winter rainfall events; in effect these changes have degraded both technical and community levels of service over an extended period of time.

As a result all renewal activity requires the City to increase pipe capacities as an integral component of each project which, in the majority of cases, requires complete renewal to be undertaken.

In this instance it is unlikely that the City will be able to either rationalise the network (rather it will continue to grow as the City expands) and so should need to address this finding gap as a priority. In addition the City will need to look to utilise its increased maintenance and operating expenditure budget to ensure that the network continues to operate optimally throughout the period. At the very least this should ensure the City maintains is existing technical levels of service whilst capital projects should seek to improve technical and community levels of service.

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap.

13.6 MARINE INFRASTRUCTURE

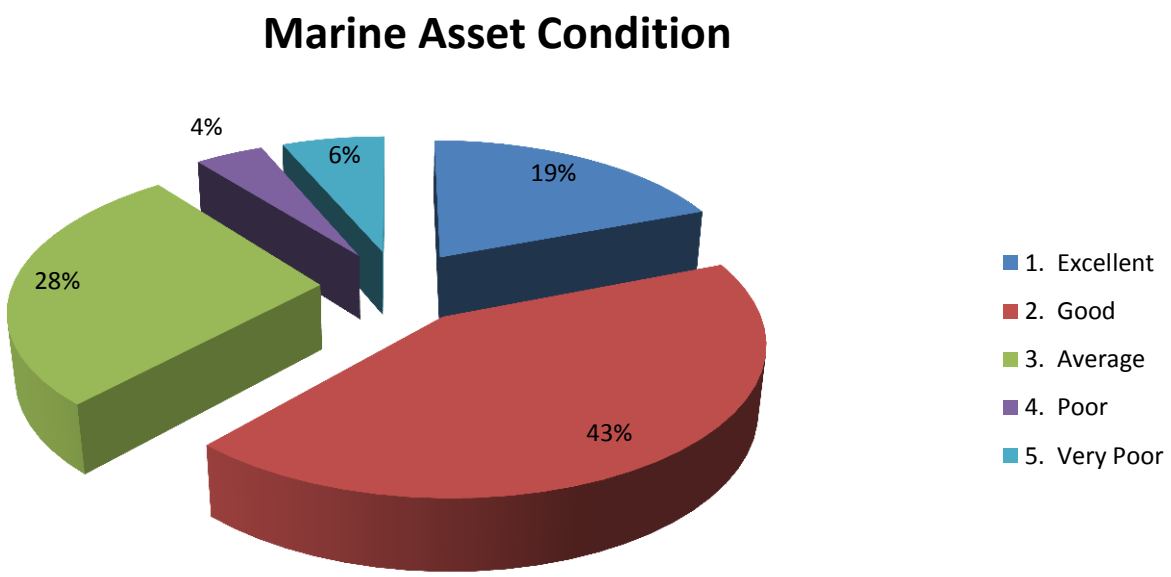
Valuation

The City's marine assets consist of the following:

Asset Type	Number / Length / Area	Value ($)
Recreational Jetties & Pontoons	7	$0.68m
Boat Ramps	4	$0.55m
Sea Walls	2882m	$10.13m
Erosion Protection	572m	$1.99m
Swimming Pontoon	1	$0.023m
TOTAL		**$13.37m**

Condition

The City's marine infrastructure condition has been assessed during the 2014/15 financial year. In many cases marine assets are old and have been subject to reduced levels of service over a number of years. As a result the City has had to replace 2 jetties in the previous 2 financial years as they had reached the end of their useful life (Sykes Boat Ramp Jetty and Stirling St Boat Ramp Jetty); in additional one recreational jetty / pontoon has been disposed of as part of the renewal project at Stirling St. The City's Marine Asset condition is shown below:



Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work, cleaning, inspections (asset condition, and safety and compliance inspections), utility costs associated with operating marine assets (electricity, water, sewerage etc)

Capital Renewals

The City has renewed marine assets at Sykes Foreshore and Stirling St in the past 3 years; future funding provides for $2.2m of renewals over the 10 year period with $2m allocated to the renewal of the City's sea walls and erosion protection. The City's boat ramps and jetties have an allocation of $90,000 throughout the period (with an

assumption based on the 2014/15-2018/19 Corporate Business Plan that no renewal funds are allocated after 2016/17. This exposes the City to the risk of failure of the boat ramp at Pelican Point and jetties located at Pelican Point and Pat Usher Foreshore which are currently in average condition (condition 3).

Marlston Foreshore and within the Leschenaiult Inlet. Renewals based on condition ratings show that the City has requirements to fund replacement for a total of $800,000 for the period 2015/16 to 2018/19.

Funding Gap Analysis

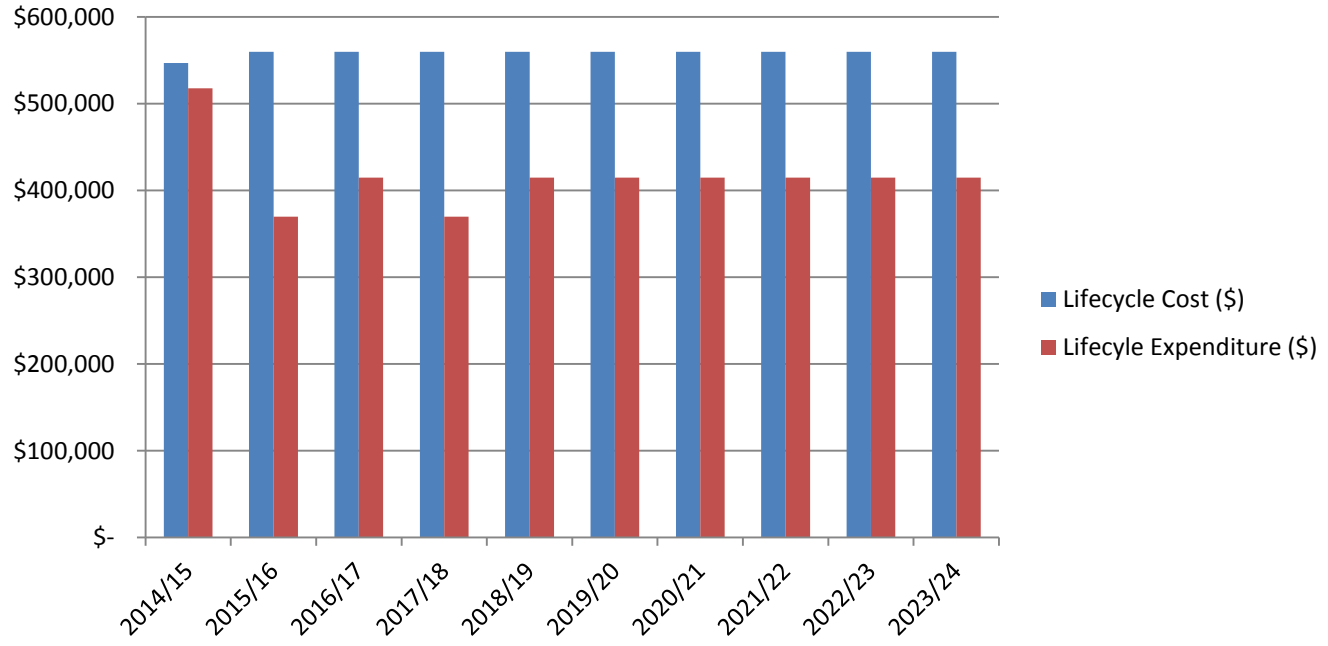
The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Year	Annual Maintenance & Operations*	Annual Depreciation**	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 156,606	$ 389,988	$ 546,594	$ 360,928	$ 517,534	-$ 29,060
2015/16	$ 169,797	$ 389,988	$ 559,785	$ 200,000	$ 369,797	-$ 189,988
2016/17	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2017/18	$ 169,797	$ 389,988	$ 559,785	$ 200,000	$ 369,797	-$ 189,988
2018/19	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2019/20	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2020/21	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2021/22	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2022/23	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
2023/24	$ 169,797	$ 389,988	$ 559,785	$ 245,000	$ 414,797	-$ 144,988
TOTAL	$ 1,684,779	$ 3,899,880	$ 5,584,659	$ 2,475,928	$ 4,160,707	-$ 1,423,952

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at consistent levels to maintain the City's marine infrastructure at current levels but does not provide sufficient renewal funding to commence addressing the funding gap. Maintenance funding for marine assets has fluctuated over time but has stabilised in the current 5 year Corporate Business Plan to provide average annual maintenance expenditure of approx. $167,000 per year. Opportunities exist to improve financial optimisation of maintenance expenditure to improve useful lives of marine assets during the period. This includes the establishment of a beach erosion monitoring programme from July 2015 to improve understanding of erosion patterns over time and inform maintenance activities into the future.

In addition recent budgets have provided renewal funds for sea walls which continue over the next 5 year period. These budget allocation adjustments will have a positive effect on the City's ability to maintain its marine assets which remain a key component of the City's sea defences.

However to ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap.

13.7 OPEN SPACE

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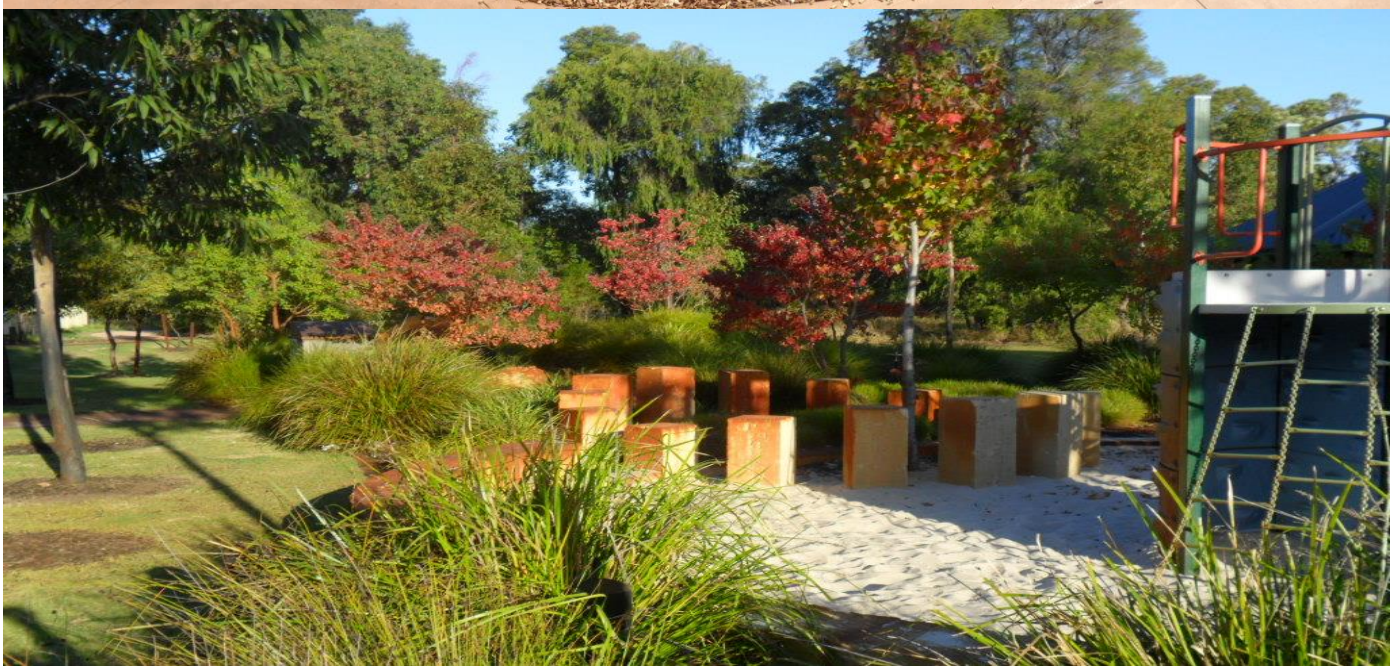


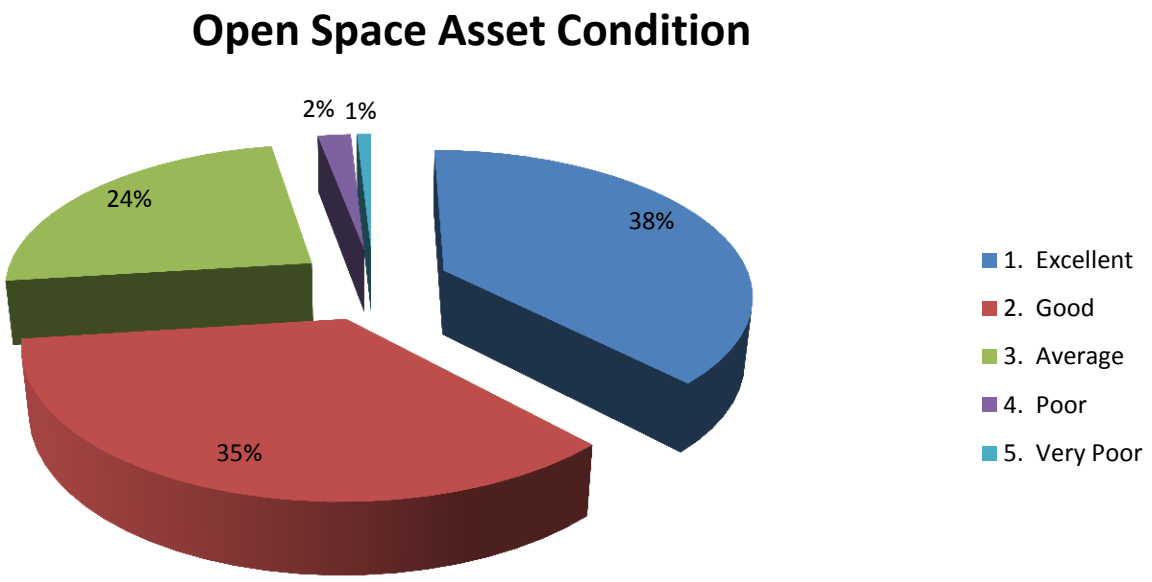
Valuation

The City's open space assets comprise one of the most significant and varied asset classes and consist of the following:

Asset Type	Number / Length / Area	Value ($)
Playground Equipment	244	$2.18m
Sporting Infrastructure	116	$14.34m
Irrigation Systems	Not Verified	Not Valued
Bores & Pumps	43	Not Valued
Filtration Systems	6	$0.63m
BBQs	38	$0.27m
Drink Fountains	49	$0.16m
Benches / Bench Seats	663	$0.65m
Bike Racks	112	$0.086m
Bollards	336	$0.037m
Picnic Settings	93	$0.35m
Beach Showers	23	$0.067m
Planter Boxes	14	$0.021m
TOTAL	**1731**	**$18.79m**

Condition

The City's open space infrastructure condition has been assessed during the 2014/15 financial year. In many cases open space assets are old and have been subject to reduced levels of service over a number of years. A programme of replacement for a number of components has been in place for a number of years which has reduced the funding gap, this includes replacement programmes for playground equipment and irrigation systems in particular which will continue to be funded for replacement during the current period. A significant number of new assets have been added to Open Space over the past 5 to 10 years without any significant change in maintenance expenditure which has generally increased in line with inflation only. As a result this has increased pressure on the City's ability to maintain current levels of service. The City's Open Space asset condition breakdown is shown below:



Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work (including mowing, pruning, weeding and reticulation maintenance), cleaning, inspections (asset condition, and safety and compliance inspections) plus utility costs associated with operating open space assets (electricity, water, sewerage etc)

Capital Renewals

The City has and continues to programme the renewal of Open Space assets, in particular with regard to playgrounds and irrigation systems with funding allocations across all 5 years of the 2015/16 to 2018/19 Corporate Business Plan plus the initiation of renewal funds for Barbeques; however no allocations have been made for sporting infrastructure, drink fountains, benches, bike racks, picnic settings or beach showers. Whilst these items are not significant capital items in their own right Council should ensure that allocations are made in future years for renewal of these assets.

Funding Gap Analysis

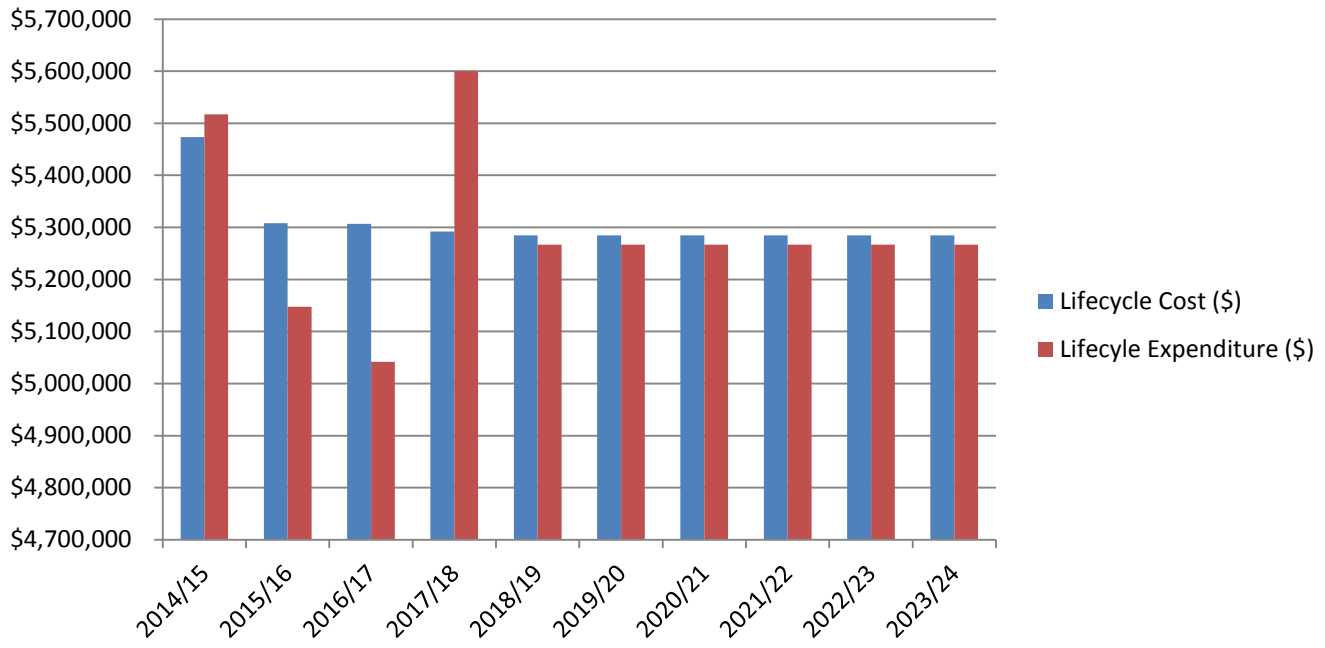
The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Year	Annual Maintenance & Operations*	Annual Depreciation**	Annual Average Lifecycle Cost	Planned Capital Renewal	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 5,072,068	$ 846,820	$ 5,918,888	$ 445,231	$ 5,517,299	-$ 401,589
2015/16	$ 4,926,874	$ 846,636	$ 5,773,510	$ 220,500	$ 5,147,374	-$ 626,136
2016/17	$ 4,926,874	$ 846,636	$ 5,773,510	$ 115,000	$ 5,041,874	-$ 731,636
2017/18	$ 4,926,874	$ 846,636	$ 5,773,510	$ 673,500	$ 5,600,374	-$ 173,136
2018/19	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
2019/20	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
2020/21	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
2021/22	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
2022/23	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
2023/24	$ 4,926,874	$ 846,636	$ 5,773,510	$ 340,000	$ 5,266,874	-$ 506,636
TOTAL	$ 49,413,934	$ 8,466,544	$ 57,880,478	$ 3,494,231	$ 52,908,165	-$ 4,972,313

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure
- Depreciation based on 2015 valuation

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The City's Open Space assets require a significant proportion of the City's maintenance and operating funding to deliver the current levels of service (approximately 40%). The period 2015/16 to 2018/19 will see this asset class increase in size as new assets at Koombana North, Koombana foreshore, Casuarina Harbour and the Water Playground are constructed or handed to the City by the State government. In all cases these new assets will demand high levels of service due to both their marine location but also their community significance and will have a direct effect on the current funding position, they will also add significantly to the City's asset replacement liability (estimated replacement value may be as much as $25m). This will increase the City's burden with regard to continuing to deliver the current levels of service. As an example the Water Playground is forecast to require approximately $200,000 per annum to operate and maintain whilst the completion and handover of enhancements to the Koombana and Casuarina foreshores will add an estimated $150,000 to $200,000 per annum in operating and maintenance costs; none of these assets are included within the current Corporate Business Plan.

Strategic Level of Service Recommendations

Current levels of service have been degraded over time as a result of expansion of the City's facilities within public open space growing at rates over and above growth in the levels of funding provided for maintenance and operational activities. Recent examples of expansion without compensatory increases in base operating funding include Wardandi Park, Big Swamp Toddlers and Accessible Playgrounds, Hudson Road Reserve, Des Ugle Park, Kloombana North foreshore, Sykes Foreshore Ployground and outdoor gym, Glen Iris Skatepark, the Premier soccer pitch and Hands Oval upgrade.

A number of options exist with regard to how Open Space assets are managed and maintained into the future. These include:

1. Financial optimisation of existing maintenance budgets through changes in management practices with regard to maintenance activities.
2. Consultation with a view to adjusting service levels to provide a greater difference between high category and low category public open space (financial optimisation).
3. Rationalisation of assets within public open space (such as playground equipment)
4. Potential to rationalise facilities in public open space in instances of overservicing to align levels of service with the City's planning schemes.
5. Investigating changes to user group funding models for open space assets to offset maintenance costs.
6. Increasing partnerships with the private and not for profit sectors to assist in delivering maintenance and reduce Council's direct maintenance liabilities.

In all cases the City will have difficult decisions to make and will be required to weigh the cost of any changes in terms of financial sustainability, community support and appetite for change. In addition any proposed changes will require community involvement in the decision making process as the provision of public open space and associated facilities is one that generates a significant level of public interest.

Whilst the current funding gap is minimal the City will need to consider the impact of additional infrastructure as it is added to the City's Open Space register in terms of ongoing maintenance and renewal planning. Options for investigation will include water availability and distribution and adjustments to levels of service across the City's Open Space to reflect community demand and affordability.

3.8 STRUCTURES

Valuation

The City's structure assets consist of the following:

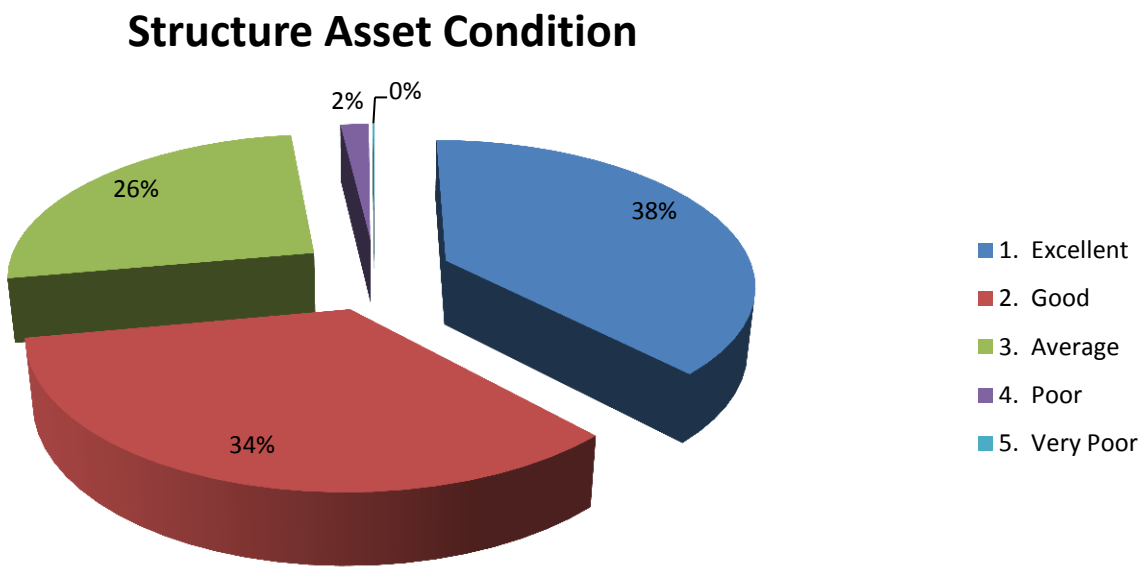
Asset Type	Number / Length / Area	Value ($)
Crash Barriers	7	$0.0071m
Hand/Guardrails	2.24km	$0.64m
Shelters	53	$0.62m
Shade Sails (locations)	25	$0.74m
Boardwalks & Lookouts (locations)	2.28km	$2.4m
Stairways / Steps	39	Not valued
Fences	79km	$8.66m
Flag Poles	18	$0.086m
Walls	788m	$0.14m
Retaining Walls	6.4km	$4.75m
Entry Statements	28	Not valued
Sports Structures (dugouts, ticket boxes etc)	23	$0.04m
Public Art	72	$5.07m
TOTAL	**265/90.71km**	**$23.22m**

The Structures asset class data collection and verification is currently incomplete, outstanding asset types requiring complete data collection, verification and valuation are Boardwalks & Lookouts, Stairways & Steps, Retaining Walls and Entry Statements; these will be identified, verified and valued by June 2016. The following information is provided using the verified data and renewal costs for the remaining types within the asset class and known data for the incomplete asset types listed. The Structures asset class will be completed over the course of the next 12 months.

Condition

The City's structures have been assessed during the 2014/15 financial year. A significant proportion of structures are constructed from wood and require regular maintenance, these include shelters, boardwalks, lookouts and fences.

The City's Structure Asset condition is shown below:



Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work, cleaning, inspections (asset condition, and safety and compliance inspections) flag and flag rope replacement, annual oiling of boardwalks, wooden lookout and shelters and the restraining of fencing.

Capital Renewals

The 2015/16 to 2018/19 Corporate Business Plan provides for $403,895 of renewal expenditure for the City's structures; the primary allocations within this expenditure are the relocation of the Pilot Sculpture to Robertson Drive Roundabout and the replacement of the southern retaining wall at the Bunbury Library car park, these 2 projects accounts for $265,000 of the total expenditure. A further $91,000 allocation is provided for renewal projects at the Bunbury Wildlife Park for animal enclosures which leaves a total of $47,895 for renewal projects for the remaining assets types within this class.

Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

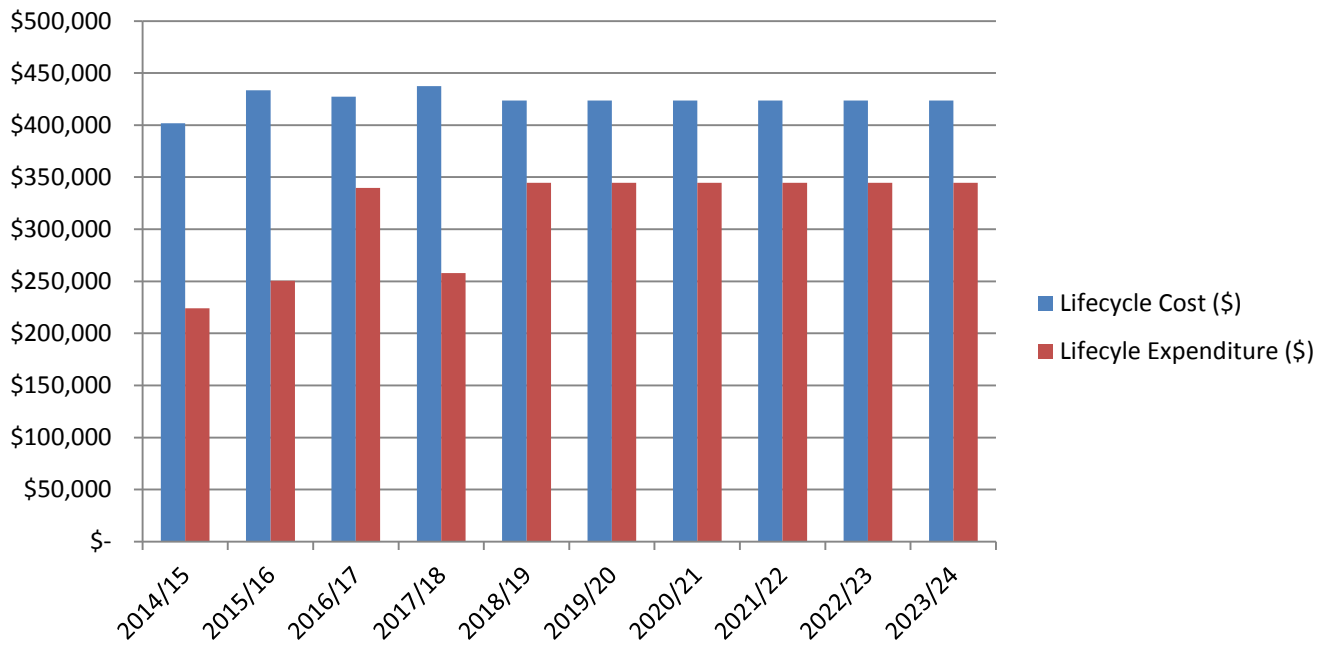
Year	Annual Maintenance & Operations*	Annual Depreciation**	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle	Funding Gap
2014/15	$ 177,425	$ 246,933	$ 424,358	$ 46,787	$ 224,212	-$ 200,146
2015/16	$ 209,659	$ 246,933	$ 456,592	$ 40,800	$ 250,459	-$ 206,133
2016/17	$ 204,689	$ 245,495	$ 450,184	$ 135,000	$ 339,689	-$ 110,495
2017/18	$ 216,719	$ 244,717	$ 461,436	$ 41,308	$ 258,027	-$ 203,409
2018/19	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
2019/20	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
2020/21	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
2021/22	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
2022/23	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
2023/24	$ 204,749	$ 242,130	$ 446,879	$ 140,000	$ 344,749	-$ 102,130
TOTAL	$ 2,036,986	$ 2,436,858	$ 4,473,844	$ 1,103,895	$ 3,140,881	-$ 1,332,963

Source:Corporate Business Plan 2015/16 - 2018/19

Funding for 2019/20 onwards based on funding for 2018/19

Depreciation based on AssetFinda valuation May 2015/16-18/19

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at consistent levels to maintain the City's structure infrastructure at current levels, however this results in a funding gap of $1.33m over the period.

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap.

Although full analysis has not been completed for this asset class it is likely that the current renewal expenditure provision will be insufficient to meet renewal requirements, in particular for Boardwalks, Lookouts, Fences and Retaining Walls where annual maintenance expenditure allocations will not permit the City to continue to maintain the current levels of service. It should be noted that each of these asset types perform functions for the City that include risk management and so it is important that consideration is made regarding changes to risk for the City that may arise as a result of reduced levels of service for these asset types.

13.9 OTHER INFRASTRUCTURE

Valuation

The City's infrastructure assets that do not fit any specific categories are listed within 'Other Infrastructure' and consist of the following:

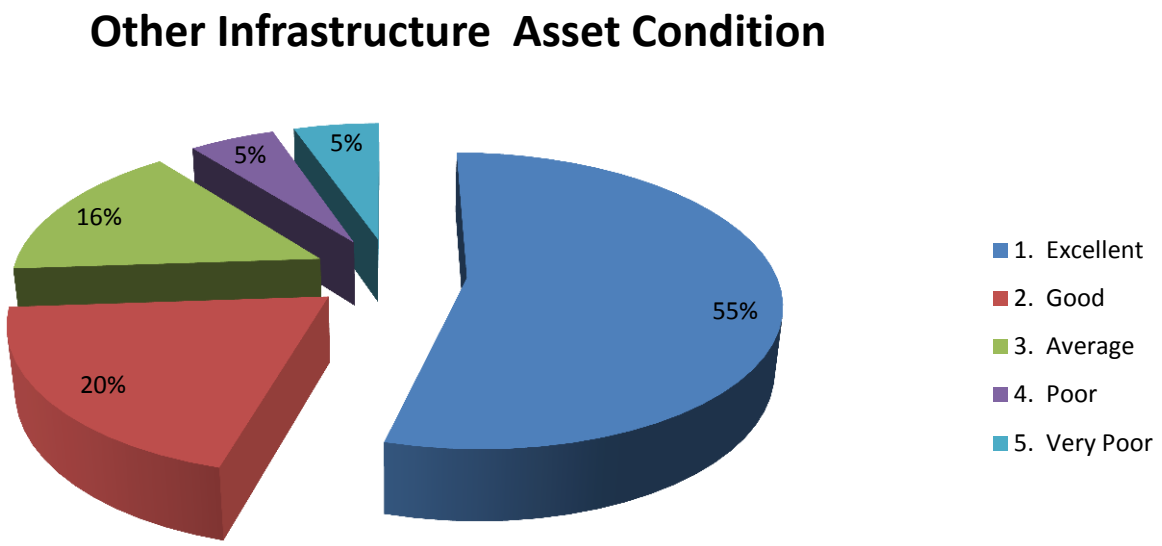
Asset Type	Number	Value ($)
Public Lighting	1280	$6.5m
Bus Shelters (includes seats at bus stops)	151	$1.41m
Street Name Signs	2625	$0.42m
Other Signs (advisory, information, parking & tourist)	3045	$0.44m
Bins & Bin Enclosures	49,339	$2.45m
TOTAL	**56440**	**$11.22m**

Public lighting includes all lighting owned and operated by the City and consists of Street Lighting, Pathway Lighting, Sportsground lighting, Security Lighting, Airport Lighting, Playground Lighting and Information Bay / Ornamental Lighting.

Condition

The City's other infrastructures have been assessed during the 2014/15 financial year.

The City's Other Infrastructure Asset condition is shown below:



Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work such as the replacement of light bulbs and waste bins (public and residential) and the replacement of damaged signs, cleaning and inspections (asset condition, and safety and compliance inspections).

Capital Renewals

The 2015/16 to 2018/19 Corporate Business Plan provides for $509,536 of renewal expenditure for the City's structures; the primary allocations within this expenditure are for $336,000 to replace bins and $100,000 to replace parking machines which leaves only $73,536 for renewal projects for the remaining assets types within this class.

Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

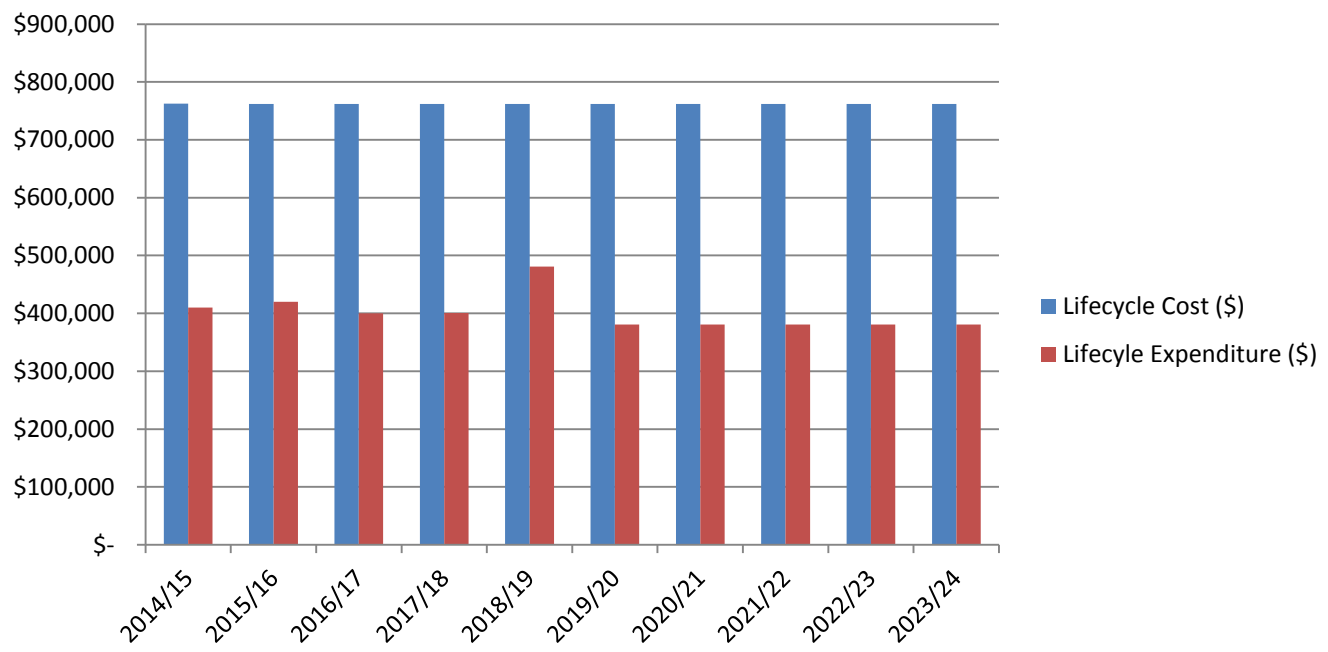
Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle	Funding Gap
2014/15	$ 336,569	$ 762,425	$ 1,098,994	$ 73,536	$ 410,105	-$ 688,889
2015/16	$ 316,308	$ 761,729	$ 1,078,037	$ 103,500	$ 419,808	-$ 658,229
2016/17	$ 316,308	$ 761,729	$ 1,078,037	$ 83,500	$ 399,808	-$ 678,229
2017/18	$ 316,308	$ 761,729	$ 1,078,037	$ 84,500	$ 400,808	-$ 677,229
2018/19	$ 316,308	$ 761,729	$ 1,078,037	$ 164,500	$ 480,808	-$ 597,229
2019/20	$ 316,308	$ 761,729	$ 1,078,037	$ 64,500	$ 380,808	-$ 697,229
2020/21	$ 316,308	$ 761,729	$ 1,078,037	$ 64,500	$ 380,808	-$ 697,229
2021/22	$ 316,308	$ 761,729	$ 1,078,037	$ 64,500	$ 380,808	-$ 697,229
2022/23	$ 316,308	$ 761,729	$ 1,078,037	$ 64,500	$ 380,808	-$ 697,229
2023/24	$ 316,308	$ 761,729	$ 1,078,037	$ 64,500	$ 380,808	-$ 697,229
TOTAL	$ 3,183,341	$ 7,617,986	$ 10,801,327	$ 832,036	$ 4,015,377	-$ 6,785,950

Source:Corporate Business Plan 2015/16 - 2018/19

Funding for 2019/20 onwards based on funding for 2018/19

Depreciation based on AssetFinda valuation May 2015/16-18/19

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



The 2015-16 to 2018-19 Corporate Business Plan provides maintenance and operating funding at consistent levels that should maintain the City's structure infrastructure at current levels with an average funding gap over the period of $67,800. However this level of funding will see the City continue to struggle to maintain activities such as street name sign replacement during the period which will further degrade the current level of service.

To ensure asset sustainability the City should seek to manage the funding gap over the period to minimise risk through a combination of increased maintenance and operating expenditure to extend useful asset life and reduce depreciation expense and look to continue to replace old technology with new wherever appropriate, as an example the replacement of high pressure sodium street light bulbs with LED bulbs to extend operating life and reduce maintenance costs. At the same time the City should plan to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap.

Although full analysis has not been completed for this asset class it is likely that the current renewal expenditure provision will be insufficient to meet renewal requirements, in particular for Boardwalks, Lookouts, Fences and Retaining Walls where annual maintenance expenditure allocations will not permit the City to continue to maintain the current levels of service. It should be noted that each of these asset types perform functions for the City that include risk management and so it is important that consideration is made for changes to risk for the City that may arise as a result of reduced levels of service for these asset types.

Bussell Hwy
Socceroos Pl

13.10 PLANT AND VEHICLES

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Valuation

The City's plant and fleet assets consist of the following:

Asset Type	Number	Value ($)
Major Plant	15	$1.78m
Minor Plant	25	$1.50m
Heavy Vehicles	17	$2.90m
Light Vehicles	78	$2.73m
TOTAL	**135**	**$8.91m**

- Major Plant consists of assets including graders, rollers, loaders, tractors, backhoes, compactors and trailers.
- Minor Plant consists of assets including mowers, small trailers, chainsaws, brushcutters and other miscellaneous plant.
- Heavy Vehicles consist of assets including prime movers and trucks.
- Light Vehicles consist of assets including cars, motorcycles and scooters.
- The above figures are inclusive of Waste Services vehicles which are 'owned' by BHRC of which the City is a 90% stakeholder, all Waste vehicle replacement costs are included within the 5 Year Corporate Business Plan.

Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work, cleaning, inspections (asset condition, and safety and compliance inspections) and operating costs associated with running fleet vehicles (including fuel, oil and tyres).

Capital Renewals

Due to current budgetary constraints a program is being developed which requires the City to be focused on extending planned renewal periods, improving the service potential and therefore extending the useful life of the City's Plant and Vehicle assets. However the City is still budgeting total renewals of $16.8m over the period. Additionally the City should seek, where practical, opportunities to rationalise or decommission sub-standard Plant and Vehicle assets.

Funding Gap Analysis

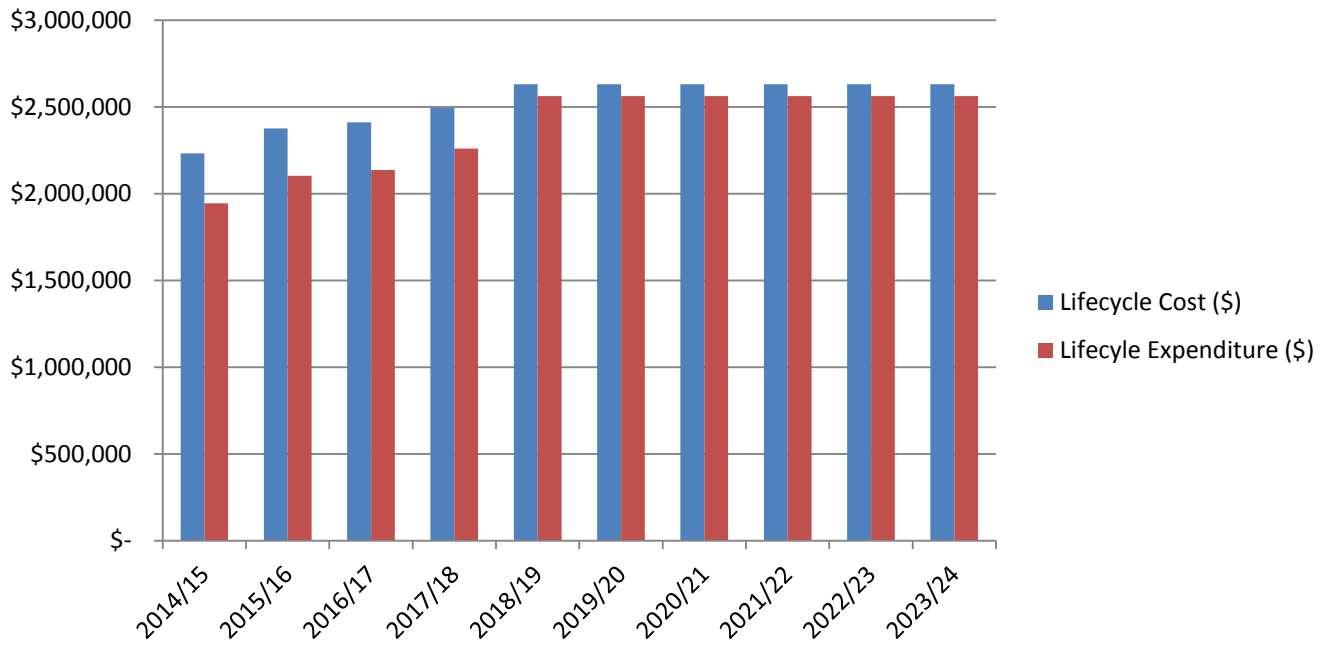
The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital Renewal (net of plant recovery)	Planned Capital Renewal	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 1,329,503	$ 901,833	$ 2,231,336	$ 614,993	$ 1,057,038	$ 1,944,496	**-$ 286,840**
2015/16	$ 1,333,043	$ 1,042,824	$ 2,375,867	$ 769,902	$ 1,130,835	$ 2,102,945	**-$ 272,922**
2016/17	$ 1,333,043	$ 1,077,693	$ 2,410,736	$ 803,419	$ 1,196,550	$ 2,136,462	**-$ 274,274**
2017/18	$ 1,333,043	$ 1,159,922	$ 2,492,965	$ 926,568	$ 2,965,289	$ 2,259,611	**-$ 233,354**
2018/19	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
2019/20	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
2020/21	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
2021/22	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
2022/23	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
2023/24	$ 1,333,043	$ 1,296,551	$ 2,629,594	$ 1,228,704	$ 1,748,505	$ 2,561,747	**-$ 67,847**
TOTAL	$ 13,326,890	$ 11,961,578	$ 25,288,468	$ 10,487,106	$ 16,840,742	$ 23,813,996	**-$1,474,472**

Notes

- Lifecycle expenditure = annual maintenance plus capital renewal & upgrade
- Funding Gap = lifecycle cost less lifecycle expenditure

Annual Lifecycle Cost and Lifecycle Expenditure Comparison



There are various options that the City can investigate to manage the funding gap for Plant and Vehicles.

These include the following options:

- ✓ Reducing the size of the City's light and heavy fleets as part of organisational financial optimisation. With 78 light vehicles in the fleet this may be achieved through limiting the number of vehicles allocated to specific positions and providing compensatory pool vehicles available to more than one member of staff or looking at options to hire heavy fleet vehicles that are used only on an irregular basis as this will facilitate a reduced fleet size and associated liabilities.
- ✓ Investigating options to lease and / or allow employees to implement novated lease arrangements for some of the City's light vehicle fleet. The benefits of adopting this approach would be the reduction of the City's vehicle assets and their associated running and replacement costs.
- ✓ Consider changing the vehicle types to smaller light fleet vehicles to reduce capital and running costs.
- ✓ The City should also take into account other factors which influence the requirements to maintain certain fleet assets on the City's register; these include inadequate funding for ongoing plant and vehicle maintenance, workforce changes and associated changes in operational needs plus fluctuations in the level of capital works being undertaken in house and / or through contract.

To ensure asset sustainability the CIty should seek to manage the funding gap over the period to minimise risk through a combination of adjustments to the budgeted maintenance and operating expenditure to extend useful asset life and reduce depreciation expense, planning to fund the required capital renewal of assets in such a way that is affordable in the medium to long term whilst realistically addressing the funding gap and / or looking at options to reduce the fleet size and the associated operating and replacement costs.

13.11 FURNITURE AND FITTINGS, EQUIPMENT, ARTS & CULTURE ASSETS

These 3 asset classes are combined in this plan solely for the purpose of the plan. The City owns the following assets within each class:

Asset Class	Number	Value ($)
Furniture & Fittings	**805**	**$0.59m**
Office Equipment	805	$0.59m
Equipment	**2,477**	**$10.45m**
Parking Meters	140	$1.02m
IT Equipment (incl CCTV Cameras)	1,149	$4.32m
Administration Equipment (TVs, Refridgerators, Freezers etc)	507	$0.41m
South West Sports Centre Equipment (gym, aquatic)	348	$3.75m
Commercial Kitchen Equipment	50	$0.10m
Survey Equipment	15	$0.09m
Visual & Performing Arts Equipment	268	$0.76m
Arts and Culture	**1,029**	**$2.73m**
Christmas Decorations	21	$0.23m
Artwork	909	$2.39m
Musical Instruments	99	$0.11m
TOTAL	**4,311**	**$13.77m**

Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work, cleaning, inspections (asset condition, and safety and compliance inspections) and operating costs associated with operating the equipment types within this asset class; predominantly this will involve operations and maintenance activities for Parking Meters and IT Equipment, Gym and Aquatic Equipment at the South West Sports Centre.

Capital Renewals

The 2014/15 to 2018/19 Corporate Business Plan provides for renewal of $1.1m of equipment assets (projected to $1.6m over the current 10 year period), of this $572,000 is provided to renew IT infrastructure essential to enable Council to deliver services with the remainder identified to replace office equipment, telecommunications hardware and CCTV infrastructure.

Funding Gap Analysis

The funding gap is the difference between the lifecycle cost and the lifecycle expenditure of an asset. The annual lifecycle cost comprises annual maintenance and depreciation expenses. Depreciation measures the consumption of an asset's service potential over time; there are many factors that impact the rate of consumption of service potential including levels of maintenance, utilisation and technical obsolescence. The Written Down Value (WDV) and residual life of the asset is generally determined by its condition and age.

There are opportunities for the City to adjust its management practices with regard to this asset class; these fall into the options presented within Section 8: Life Cycle Management Planning Summary that may enable the City to maintain or improve current levels of service at lower costs.

Furniture and Fittings

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 114,476	$ 52,061	$ 166,537	$ 10,000	$ 124,476	-$ 42,061
2015/16	$ 110,000	$ 57,314	$ 167,314	$ 10,000	$ 120,000	-$ 47,314
2016/17	$ 110,000	$ 48,334	$ 158,334	$ 10,000	$ 120,000	-$ 38,334
2017/18	$ 110,000	$ 41,539	$ 151,539	$ 22,000	$ 132,000	-$ 19,539
2018/19	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
2019/20	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
2020/21	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
2021/22	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
2022/23	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
2023/24	$ 110,000	$ 36,434	$ 146,434	$ 10,000	$ 120,000	-$ 26,434
TOTAL	$ 1,104,476	$ 417,852	$ 1,522,328	$ 112,000	$ 1,216,476	-$ 305,852
Source:Corporate Business Plan 2015/16 - 2018/19						
Funding for 2019/20 onwards based on funding for 2018/19						

Equipment

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital Renewal	Annual Life Cycle	Funding Gap
2014/15	$ 1,794,136	$ 1,068,195	$ 2,862,331	$ 260,393	$ 2,054,529	-$ 807,802
2015/16	$ 1,879,624	$ 938,145	$ 2,817,769	$ 486,000	$ 2,365,624	-$ 452,145
2016/17	$ 1,879,624	$ 671,249	$ 2,550,873	$ 106,000	$ 1,985,624	-$ 565,249
2017/18	$ 1,879,624	$ 390,861	$ 2,270,485	$ 148,000	$ 2,027,624	-$ 242,861
2018/19	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
2019/20	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
2020/21	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
2021/22	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
2022/23	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
2023/24	$ 1,879,624	$ 325,331	$ 2,204,955	$ 104,000	$ 1,983,624	-$ 221,331
TOTAL	$ 18,710,752	$ 5,020,436	$ 23,731,188	$ 1,624,393	$ 20,335,145	-$ 3,396,043
Source:Corporate Business Plan 2015/16 - 2018/19						
Funding for 2019/20 onwards based on funding for 2018/19						

Arts and Culture

Year	Annual Maintenance & Operations	Annual Depreciation	Annual Average Lifecycle Cost	Planned Capital Renewal	Annual Life Cycle Expenditure	Funding Gap
2014/15	$ 139,275	$ 52,061	$ 191,336	$ 12,973	$ 152,248	-$ 39,088
2015/16	$ 109,181	$ 43,438	$ 152,619	$ 15,000	$ 124,181	-$ 28,438
2016/17	$ 109,181	$ 43,153	$ 152,334	$ 16,497	$ 125,678	-$ 26,656
2017/18	$ 109,181	$ 38,481	$ 147,662	$ 16,638	$ 125,819	-$ 21,843
2018/19	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
2019/20	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
2020/21	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
2021/22	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
2022/23	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
2023/24	$ 109,181	$ 4,343	$ 113,524	$ 16,779	$ 125,960	$ 12,436
TOTAL	$ 1,121,904	$ 203,191	$ 1,325,095	$ 161,782	$ 1,283,686	-$ 41,409
Source:Corporate Business Plan 2015/16 - 2018/19						
Funding for 2019/20 onwards based on funding for 2018/19						

13.12 LAND ASSETS

The City owns or manages on behalf of the Crown the following land assets:

Asset Type	Dimension (ha)	Value ($)
Commercial Land	52.37	$34.69m
Community Land	946	$49.36m
Corporate Land	102.57	$20.03m
Crown Land under Management Order	(926.13)	-
TOTAL	**1100.94**	**$104.08m**

Notes

1. Commercial Land includes land owned or managed by the City zoned for commercial or industrial use.
2. Community Land includes land owned or managed by the City and zoned for recreation, car parking, library and museum.
3. Corporate Land includes land owned or managed by the City and zoned for administrative, transport, drainage and waste functions.
4. Crown Land under Management Order includes land managed on behalf of the Crown within all of the above categories.

Maintenance and Operations

Maintenance and operations activities include planned and unplanned maintenance activities / repair work (such as mowing), cleaning, inspections (asset condition, and safety and compliance inspections) and operating costs associated with managing and maintaining land such as water costs.

Asset Rationalisation

The City's land assets represent one asset available to the City to be used to manage the funding gap through land rationalisation which can be used to fund increased levels of either maintenance or renewal activities. However the City should consider the medium to long term implications surrounding any proposed land is released for sale; land sales should not be seen simply as a quick solution to current financial challenges as once sold any land assets are lost to the City. It is important therefore that any proposed land sales are considered against the City's Strategic Community Plan goals and objectives and not treated in isolation.

Whilst caution and careful consideration is necessary there are a number of opportunities that the City could explore to rationalise its land assets for development which will create secondary benefits of increased population and economic activity.

These include but are not limited to the following:

- ✓ Lots 210 and 211 Holywell St (former Punchbowl Caravan Park) which have been on the market for a considerable length of time. An alternative suggestion to the currently offered sale would be to consolidate the lots into a single lot, subdivide the single lot and offer for sale with subdivisional approval completed in accordance with Town Planning Scheme No. 7.
- ✓ Lot 3 Rawlings Rd (Pistol Club)
- ✓ Eastern & southern boundaries of Lot 100, 16 Herbert Rd (Payne Park) which could be subdivided to create housing lots, this option has also been explored previously.
- ✓ Lot 471, Barr Road, Carey Park which is also under investigation for potential disposal.
- ✓ Lot 8, Spencer St (Plaza Shopping Centre) which is currently land incorporated into the Plaza Shopping Centre car park and could be sold to the shopping centre landowner.

1. ASSET MANAGEMENT PLANNING IMPROVEMENT STRATEGY & ACTIONS

The revised Asset Management Strategy (2015 – 2020) identifies key activities to support the City delivering improved management of its assets which support the Asset Management Plan 2015/16 to 2023/24.

The key outcome from the revised strategy are detailed below:

1. Shifting the focus to management of assets through preparing plans that provide a strategic framework for asset management and drive asset renewal forecasting in the Long Term Financial Plan;
2. Linking strategic asset management to the corporate planning process to emphasise the relationship between the quality of service delivery and the performance of assets;
3. Integrating strategic asset management through the development of service delivery strategies that satisfy legislative and community requirements while maximising the efficiency of resource allocation; and
4. Aligning asset management planning and practices to the goals and objectives of the Strategic Community Plan (SCP).

This Asset Management Plan links strategic asset management to the corporate business planning process and highlights the funding requirements to achieve improved management of the City's assets into the future. The plan aligns the City's asset management planning processes to the Corporate Business Plan 2015/15 to 2018/19 and, as a result aligns it to the goals and objectives of the Strategic Community Plan. It will also be used to inform asset renewal expenditure forecasting in the Long Term Financial Plan.

Asset Management Improvement Actions

The following actions will be undertaken prior to the next plan revision and / or as ongoing good asset management practice to ensure that they City continually improves its asset understanding and strategic decision making with regard to the management of assets into the future.

Asset Condition Inspections and Revaluation

The City will undertake planned condition inspections of all of its assets on a rolling annual basis; the objective is to reinspect 20% of the asset base each year to ensure that the complete inventory is inspection on a 5 year cycle.

Revaluations will be undertaken on an annual basis to ensure that asset valuations are calculated using the most up to date and accurate data. This will help to ensure that budgeting for maintenance and renewal can be undertaken using the most accurate asset data.

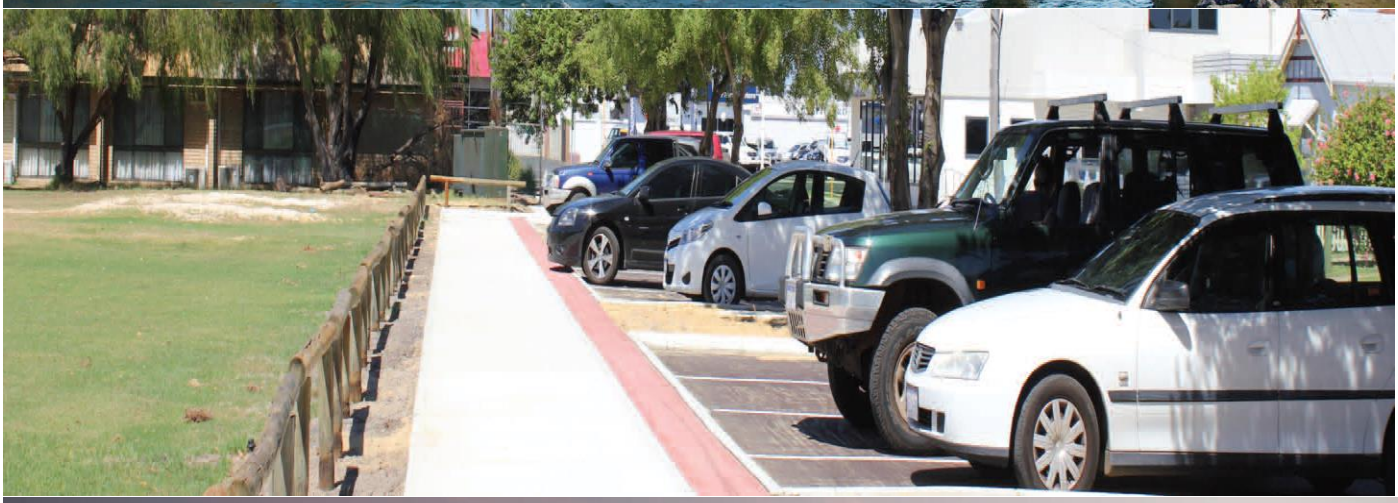
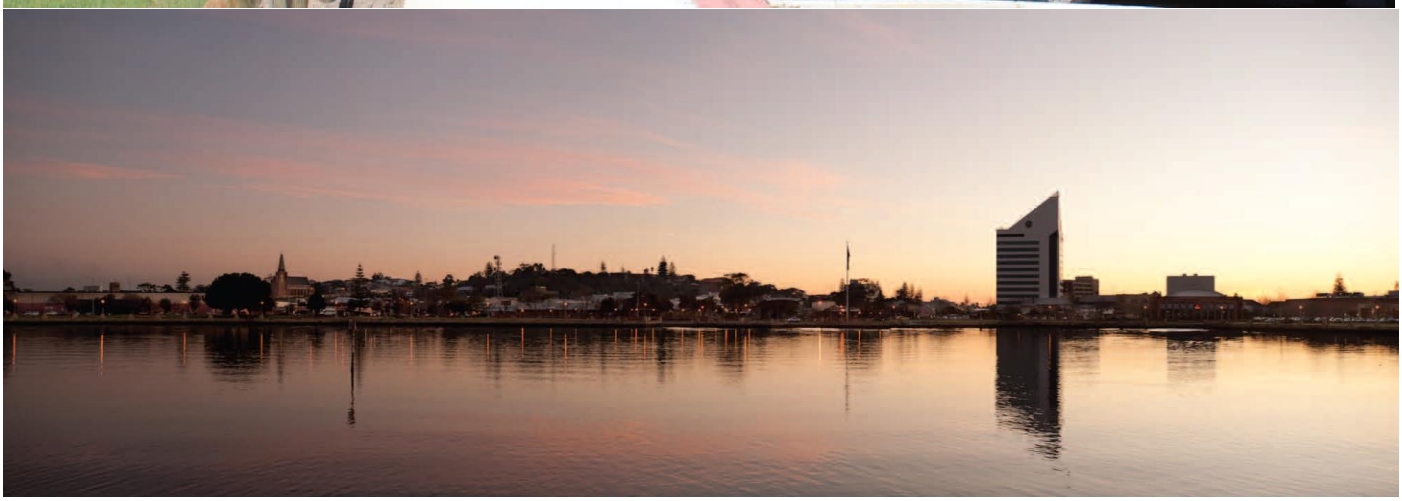
Levels of Service

There is limited information currently available with regard to levels of service in relation to community requirements; this should be a key focus area for the next period to ensure that the City is allocating funds optimally to achieve strategic asset management outcomes aligned to community expectations and their willingness to pay. This will include linking required maintenance expenditures with required service levels and will assist in informing Council of the ongoing funding requirement deliver community expectations.

Opportunities for improvement include linking Authority Customer Request Management and AssetFinda to link requests to asset records. This will improve the flow of data between systems which will improve levels of service delivery and reporting and reduce costs.

Financial Optimisation

The City will seek to continuously improve its operating efficiency by seeking ways to optimise service level performance within budgeted operating and capital renewal expenditures.

Opportunities for improvement exist in a number of areas including:

- ✓ Improved project costing accounting to record project costs and maintenance activities more accurately against assets.
- ✓ Developing levels of service based on performance criteria established through community consultation to ensure that asset class expenditure is matched to community expectations and demands and affordability.
- ✓ Community determination of a hierarchy of services based on relevance and importance to identify which services should be delivered as priorities and which may not be required by the community or may be delivered at reduced levels of service or by other means.
- ✓ Identifying alternative service delivery options to support the City's strategic objectives.
- ✓ Establish future revenue requirements through own source income driven by the community using the improvement outcomes outlined above.