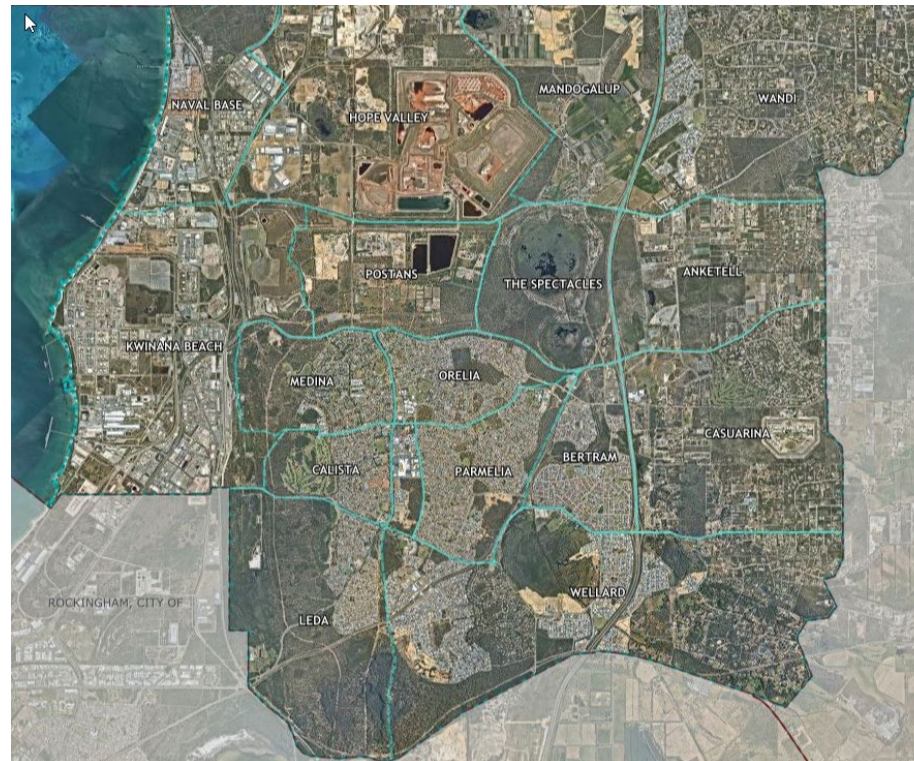


# City of Kwinana

## ASSET MANAGEMENT STRATEGY



**2019 - 2022**

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Document Control					
Rev No	Date	Revision Details	Author	Reviewer	Approver
1	19 November 2019	For approval	A Nicholas	D Elkins	D Elkins



## Executive Summary

Asset management is one of the core business activities of local government, and the City of Kwinana's Strategic Community Plan 2019 - 2029 is founded on, amongst many other things, a plan to develop Asset Management for the benefit of the City and its community. The City recognises that asset management planning is an organisational responsibility and requires the commitment of senior management within the City for it to succeed.

This Asset Management Strategy, feeds into the City's Corporate Business Plan, to provide clear direction in the form of objectives and strategies. These objectives and strategies are reviewed annually, with progress being detailed in the City's Annual Report.

The City's infrastructure assets represent a significant investment over many generations. Millions of dollars are spent annually managing and maintaining the City's infrastructure, and it is imperative that the City utilise the best management skills and practices to ensure related services are delivered economically and sustainably.

In the past, the City has increased community levels of service, through investment in the creation of new infrastructure, without recognising the long-term life-cycle costs associated with the ongoing operation, maintenance and renewal of the infrastructure.

Improving the management of infrastructure can bring major benefits by ensuring that resources are used in the most cost effective manner, and the assets supporting services are managed in a way that guarantees maximum performance for the lowest practical whole-of-life cost.

The City of Kwinana is responsible for the management of assets valued at more than \$640 million. These assets play an integral part in delivering the services provided by the City for the community.

The range of infrastructure assets, and the services provided from these assets, is shown below:

**Table 1: Assets used for providing Services**

Asset Class	Description/Services Provided
Roads and Transport	Roads, shared paths, carparks, embayment parking
Stormwater Drainage	Underground pipe and pit network, open channels, detention basins
Parks and Reserves	Artwork, recreational facilities, lighting, irrigation, retaining/feature walls, fencing
Buildings	Civic, community, commercial, heritage, recreational and independent living buildings

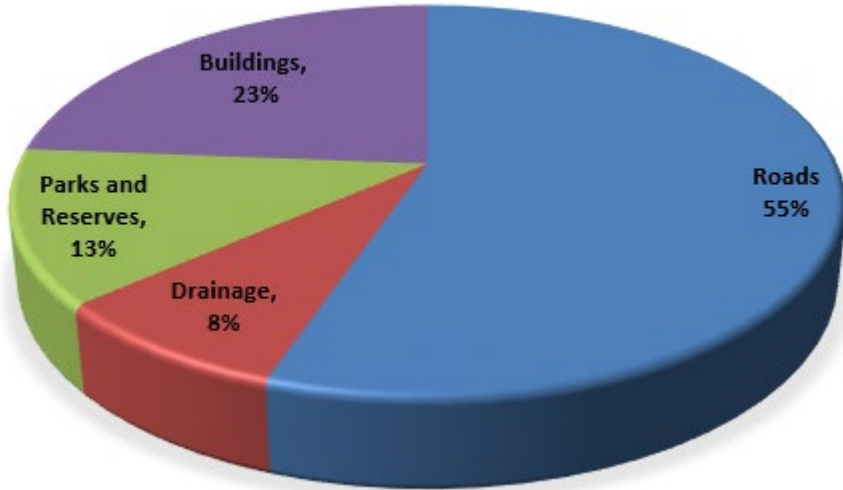
The current (2018) financial status of the City's assets is summarised in the table below:

**Table 2: Financial Status of City Assets**

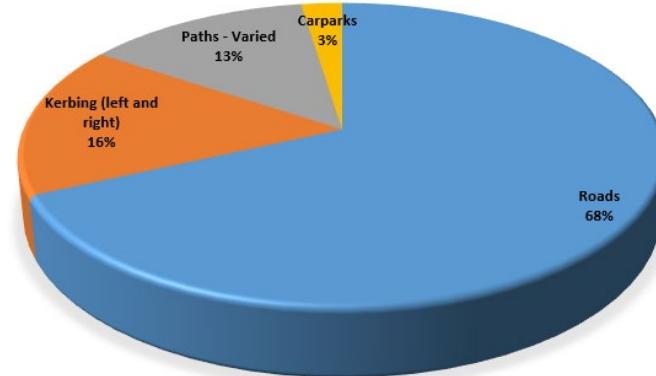
Asset Class	Replacement Cost (\$000)	Depreciable Amount (\$000)	Depreciated Replacement Cost (\$000)	Depreciation Expense (\$000)
Roads and Transport	353,881	244,732	254,218	8,247
Drainage	52,813	52,813	45,179	536
Parks and Reserves	38,675	38,675	10,397	1,727
Parks and Reserves <b>Non Depreciable Assets</b>	42,910	0	0	0
Buildings	151,948	151,948	101,236	4,490
<b>Total</b>	<b>640,227</b>	<b>488,168</b>	<b>411,030</b>	<b>15,000</b>

Figure 1: Asset Replacement Values

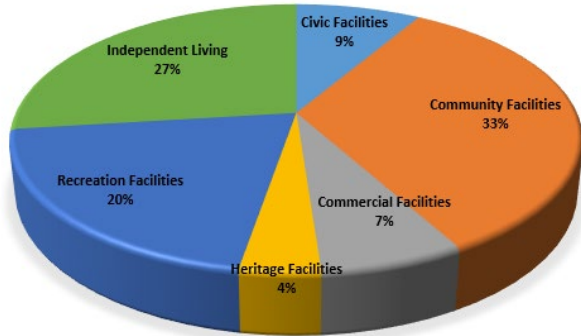
**TOTAL REPLACEMENT VALUE \$640 MILLION**



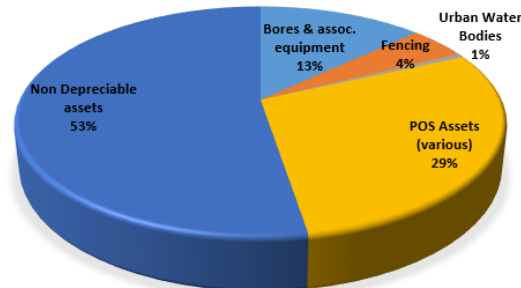
**ROADS AND TRANSPORT REPLACEMENT COST \$353 MILLION**



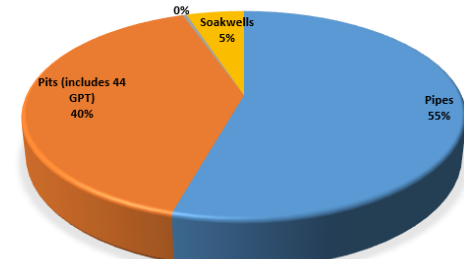
**BUILDING REPLACEMENT COST \$152 MILLION**



**POS REPLACEMENT COST \$81 MILLION**



**DRAINAGE REPLACEMENT COST \$52 MILLION**





## Parks and Reserves

The parks and reserves asset class is possibly the most diverse, with assets across 1,713 sites, covering 511 hectares. Public open space takes the following forms:

- Sports spaces;
- Recreation spaces;
- Nature/bushland spaces; and
- Streetscapes.

A ten year forward works program, which is updated annually, has been developed for the City's public open spaces. The work proposed for each is based on inspections, annual audits, condition and risk assessments.



## Drainage

Drainage is made up of a network of pipes, pits and sumps. The majority of these assets are buried, and the service they provide significantly contributes to the health of the community.

The Stormwater drainage depreciable assets comprise of:

- 191.72 km of pipes;
- 8,341 pit units;
- 194 culvert units;
- 137 storage chamber units;
- 44 Gross Pollutant Trap (GPT) units; and
- 29 fenced drainage sumps.

Stormwater drainage assets are normally long life assets. There is no current renewal program for these assets. New and upgrades of stormwater assets have been prioritised for inclusion in annual construction programs. Minor renewal requirements, such as drainage nets, will be managed on an ad hoc basis as part of the normal budget processes.

Even though there is no current renewal program for drainage assets, the assets are being used, and will ultimately need replacement. The consumption of the asset will ideally be recognised through an asset reserve, to ensure funds are available to replace each drainage asset at the end of life.





## 2. Where are we now

This asset management strategy identifies the projected operations, maintenance and capital renewal expenditure required to provide an agreed level of service to the community over a 20 year period (ten years of detail). This provides input into 20 year financial and funding plans aimed at providing the required services in a sustainable manner. These projected expenditures have been compared to budget allocations for the 20 year planning period, to identify any funding shortfall.

### Roads and Transport

The projected 20 year average cost is \$10.1m per year. The estimated available 20 year average Long Term Financial Plan (LTFP) budget is \$3.4m per year, which is 34% of the cost to provide the service. This is a funding shortfall of \$6.7m on average per year.

### Buildings

The projected 20 year average cost is \$8.6m. The estimated available 20 year average LTFP budget is \$4.4m which is 51% of the cost to provide the service. This is a funding shortfall of \$4.2m on average per year.

### Parks and Reserves Infrastructure

The projected 20 year average cost is \$7.4m. The estimated available 20 year average LTFP budget is \$6.4m which is 86% of the cost to provide the service. This is a funding shortfall of \$1.05m on average per year.

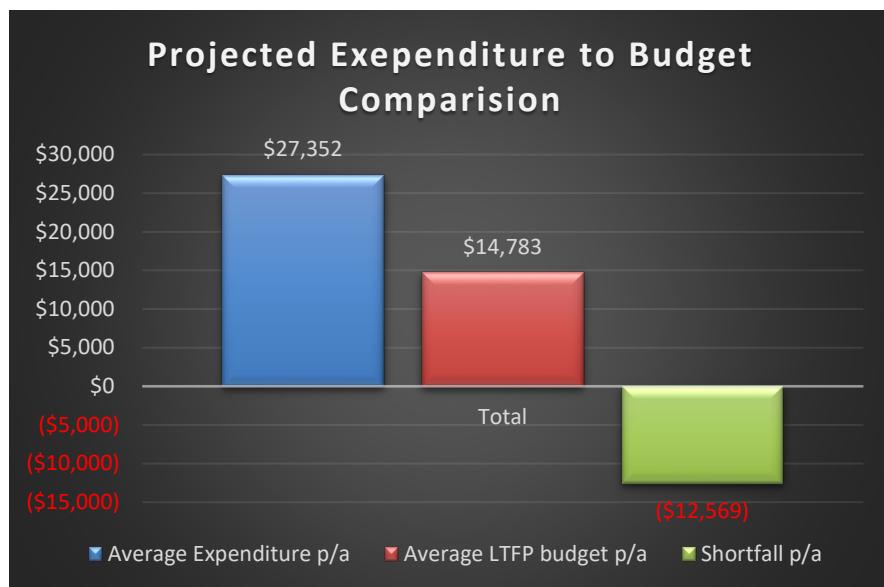
### Stormwater Drainage

The projected 20 year average is \$1.1m. The estimated available 20 year average LTFP budget is \$527,000 which is 48% of the cost to provide the service. This is a funding shortfall of \$598,000 on average per year.

### Total Asset Summary

The projected 20 year average operations, maintenance and capital renewal expenditure cost is \$27m. The estimated available 20 year average Long Term Financial Plan budget is \$14.7m, which is 46% of the cost to provide the service. This is a funding shortfall of \$12.5m on average per year.

- *Projected 20 year average cost = average operations and maintenance expenditure plus depreciation expense*
- *Estimated available 20 year average LTFP budget = average operations and maintenance plus capital renewal*



The projected expenditure to budget comparison highlights the difference between the LTFP allocation and the average cost of providing the service over the long term. The budget being less than the projected expenditure indicates that the LTFP allocation will need to be increased or cuts in services made in the future. It also suggests a need to carefully consider all new asset creation projects and proposed increases in services.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks,

projected expenditures and financing, to achieve sustainable asset management in the long term.

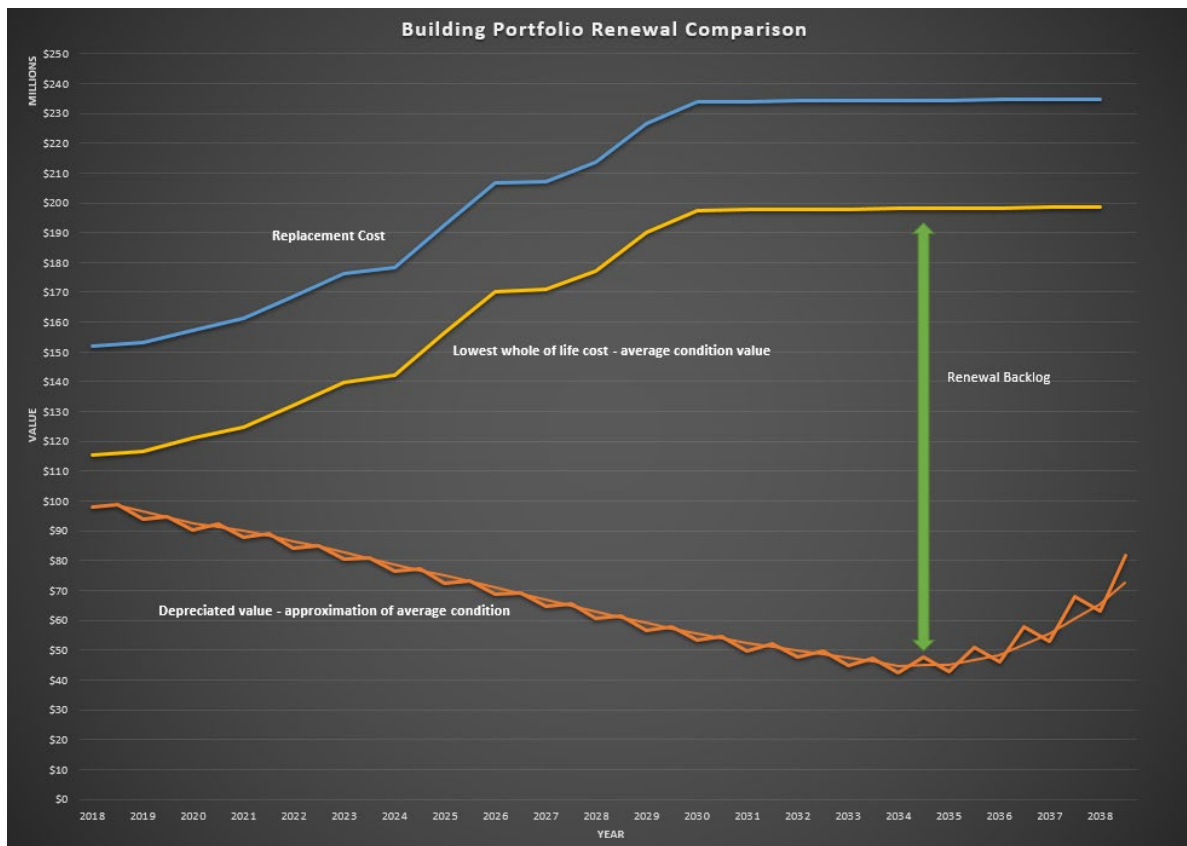
### Infrastructure Scorecard

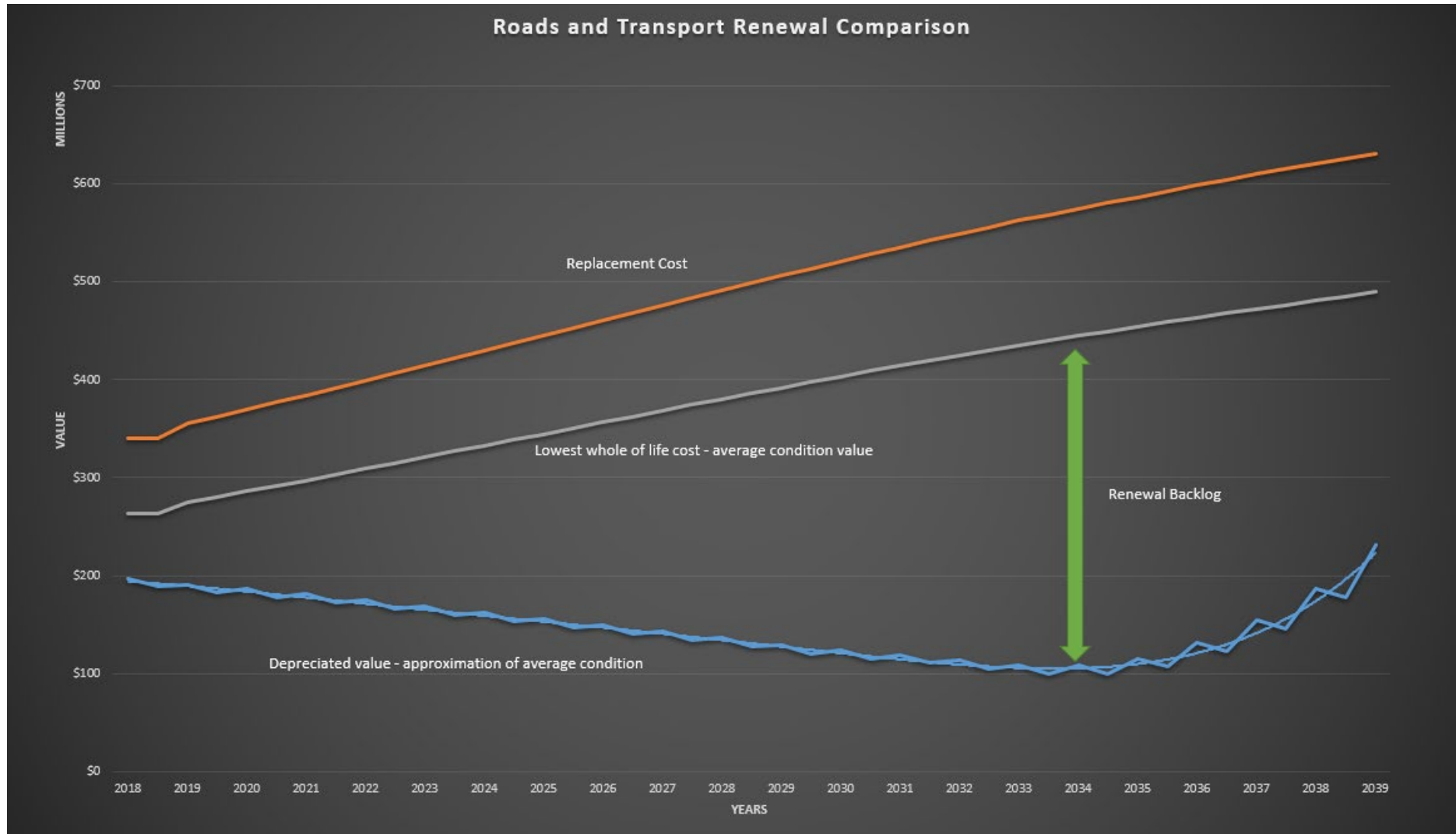
The Asset Sustainability Ratio shows current performance is at 22%, which is 68% below the required range of 90% to 100%. This is due to the City's proportion of expenditure on existing capital assets being insufficient when compared to the annual consumption of assets. As a consequence, the City is in effect asking future generations to fund the lifestyle of the current generation.

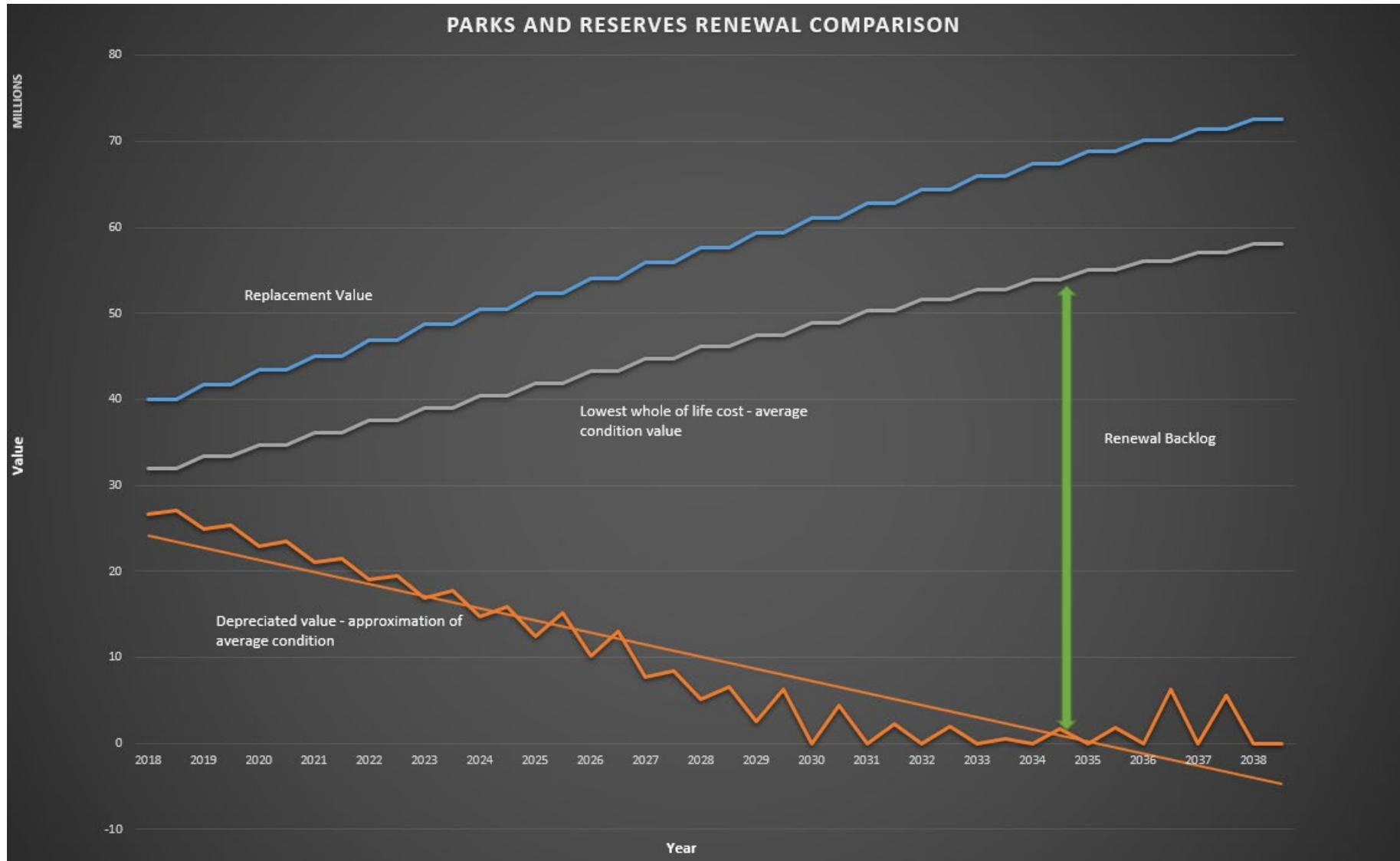
Ratio	Formula	DLG Min Standard	18 / 19
Asset Sustainability	$\frac{\text{Capital renewal and replacement expenditure}}{\text{Depreciation}}$	0.9 - 1.1	0.22
Asset Consumption	$\frac{\text{Depreciated replacement costs of depreciable assets}}{\text{Current replacement cost of depreciable assets}}$	0.6 - 0.75	0.79
Asset Renewal Funding	$\frac{\text{NPV of planned capital renewal over 10 years}}{\text{NPV of required capital expenditure over 10 years}}$	0.95	0.91

*NVP = Net Present Value*

The following graphs indicate the projected decline in asset condition and value, and the increasing renewal backlog under the current funding scenario. It is not possible to model the increased costs related to delayed renewal works, so the graphs overstate the condition of the asset (i.e. the backlog of investment will be greater than depicted on the graph). Latter years in the Long Term Financial Plan start to address the renewal gap.







### 3. Where are we heading?

The biggest financial challenge facing the City is the cost of renewing its asset infrastructure. By growth percentage, the City of Kwinana remains the fastest growing local government in Perth's south-west metropolitan area, and is the second fastest growth area in Western Australia.

Due to the unprecedented growth of the City, a large portion of the City's roads, buildings and public open space assets were constructed within the last ten to 15 years. Major renewal of these assets will all fall due at the same time. If sufficient capital funds are not set aside to cater for these renewals, the condition and functionality of the assets will deteriorate, and the lack of sufficient funding will have a detrimental impact on the City's financial sustainability.

As the City's assets are consumed (and not renewed through lack of investment), more investment in asset maintenance will be required to ensure that the current level of service is delivered to the community. Ultimately, however, if the lack of renewal expenditure is not addressed, some assets will fail in the future. The City can also expect increased community dissatisfaction with asset condition, and

there will be a rising short-term and long-term cost of managing assets.

The growing problem of underfunding assets includes the backlog of asset renewal from underfunding of previous years, and is an issue that can only be addressed over the longer term.

Moving forward, in order to provide services from infrastructure assets in a sustainable manner, it is envisaged that an increase in renewal funding allocations will be prioritised in future iterations of the Long Term Financial Plan.

## 4. Initiatives and Improvements

The Asset Management Strategy proposes the following initiatives and improvements to enable the asset management objectives to be achieved.

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
1	Long Term Financial Plan	Review and update LTFP for all asset classes annually	Manager Finance / Manager Asset Management Services	Annually	Staff time
2	Asset Management Strategy	Adoption of the Asset Management Strategy	Elected Members	Dec 2019	
3		Review Asset Management Strategy 3 yearly	Manager Asset Management Services	Dec 2022	Staff time
4	Asset Management Plans	Adoption of asset management plans	Elected Members	Mar 2020	
5		Review asset management plans 3 yearly	Asset Management Team	Mar 2022	Staff time
6	Levels of Service	Consultation with the community to review Levels of Service (LoS) and determine the wider community willingness to pay for continued LoS or improved LoS.	Asset Management Team	Jun 2019	Staff time

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
7		Review Parks and Reserves LoS identifying whole of life costings for Regional, District, Neighbourhood and Local parks.	Technical Officer Public Open Space Assets, Landscape Architects, Coordinator Facility Maintenance	19/20 – 20/21	Staff time
8		Determine LoS per building hierarchy	Technical Officer Building Assets	20/21	Staff time
9		Disability Access and Inclusion Plan (DAIP) accessibility – identify number of fully accessible playgrounds as part of the Playground Upgrade Strategy.	Landscape Architects	19/20	Staff time
10	Data and Systems	Implementation of asset component of corporate business system (CBS);	Asset Management Team	20/21	Staff time
11		New CBS - Financials to allow for capture of operational, maintenance and renewal costs for asset reporting for POS and Civil assets.	Manager Finance	20/21	Staff time



Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
12		Financial systems to allow for capture of data between planned, reactive and specific maintenance.	Assets/Finance/Operations	20/21	Staff time
13		Identify playgrounds adjacent to roads and assess priority for fencing. Make provision in annual budget as per forward works program.	Technical Officer Public Open Space Assets		Staff time
14		Condition assessment to be undertaken of fencing network.	Technical Officer Public Open Space Assets,/external	19/20	\$12,000
15		Breakdown adventure park assets at component level, condition rate	Technical Officer Public Open Space Assets/external	19/20	\$5,000
16		Medina Green infield irrigation – investigate areas which required irrigation. Area subject to redevelopment.	Coordinator Technical Operations	19/20	Staff time
17		Review Natural Areas Management Plan to include hard infrastructure assets in next revision of the Parks & Reserves asset management plan	Wetlands Officer – Environment	Ongoing	Staff time
18		Undertake a review of in-field pipes / irrigated areas to ensure that they align.	Technical Officer Parks	20/21	Staff time

Ref:	Theme:	Task:	Responsibility	Timeframe	Resources
19		Undertake a review of streetscapes and complete data gap.	Technical Officer Parks	20/21	Staff time
20		Revaluation of Parks and Reserves assets - breakdown of Urban Water Body components for the purposes of the revaluation.	Technical Officer Public Open Space Assets,	22/23	Staff time
21		Chisham Oval Bore Hole – at risk of collapse. Investigate alternate use of this site, as half of site owned by the State.	Technical Officer Public Open Space Assets,/ CTO	19/20	Staff time
22		Develop a Lighting Asset Management Plan	Technical Officer Civil Assets	Nov 2019	Staff time