

City of Marion



Transport, Stormwater, Open Space, Buildings and Coastal Walking Trail

Asset Management Plan



Scenario 1 Version 2

December 2015

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1. EXECUTIVE SUMMARY

Context

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner. An asset management plan (AMP) details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

The AMP incorporates key information drawn from individual Transport, Stormwater, Open Space, Buildings and Coastal Walking Trail Asset Management Plans (background documents) that have recently been developed by Council.

One of the principal aims of this plan is to inform the preparation of Council's Long Term Financial Plan (LTFP). The plan uses the Draft 2015/16 10 year LTFP as its basis but ultimately proposes a realignment of funds between the different infrastructure asset types and between renewal and new / upgrade expenditure.

In the development of the plans it became clear that there was opportunity for reform particularly in the programming of the road reseal / reconstruction program. Following the recent adoption of Council's Asset Management Policy¹, projections of upgrade and new work have been removed, so that only projects approved by Council are included in the plan. The result of these two changes is an indicative (unrealised) surplus of \$38.8 million over the 10 years of the Draft 2015/16 LTFP based on projected budget requirements and projected budget availability. However, it is important to note that this does not include provision for major renewal of Council owned buildings, with building renewal plans to be developed over the next two years. It has been recommended that Council provision \$49 million for building renewal², being equivalent to accumulated depreciation on buildings as at June 2014. This would actually result in a net \$10.2 million deficit in renewal expenditure over the 10 year life of the LTFP, as set out below:

Draft 2015/16 LTFP Projections for operations, maintenance & renewal	\$231.3 million
Draft 2015/16 LTFP Projections for approved new stormwater works	\$24.1 million
Less Draft AMP forecasts for Operations, Maintenance & Renewal (excluding building renewals) + new stormwater works	(\$216.6 million)
Less proposed provision for Building Renewals	(\$49.0 million)
Projected funding shortfall based on currently adopted LTFP & draft AMP, including provision for building renewals	(\$10.2 million)

However, it is generally considered unreliable to draw comparisons between annual depreciation figures and sustainable renewal requirements, as infrastructure renewal requirements generally exceed depreciation. The forecast building renewal requirement outlined above is therefore considered conservative (low).

This plan does not include short term assets (such as fleet, furnishings, telecommunications equipment). While land assets are not discussed explicitly, most land assets contain building or open space infrastructure.

Assets covered by this plan and background documents include:

- Bridges
- Buildings
- Bus shelters
- Coastal walking trail
- Footpaths
- Irrigation
- Kerbing
- Playgrounds
- Reserves assets, benches / bins etc
- Road seals and pavements
- Signs
- Sports courts
- Stormwater pipes & pits
- Traffic control devices
- Wetlands

¹ <https://www.marion.sa.gov.au/webdata/resources/files/Asset-Management-Policy.pdf>

² City of Marion Audit Committee 14 April 2015 Report AC140415R6.3
(<https://www.marion.sa.gov.au/webdata/resources/files/AC140415%20-%20Combined%20Agenda%20&%20Reports.pdf>)

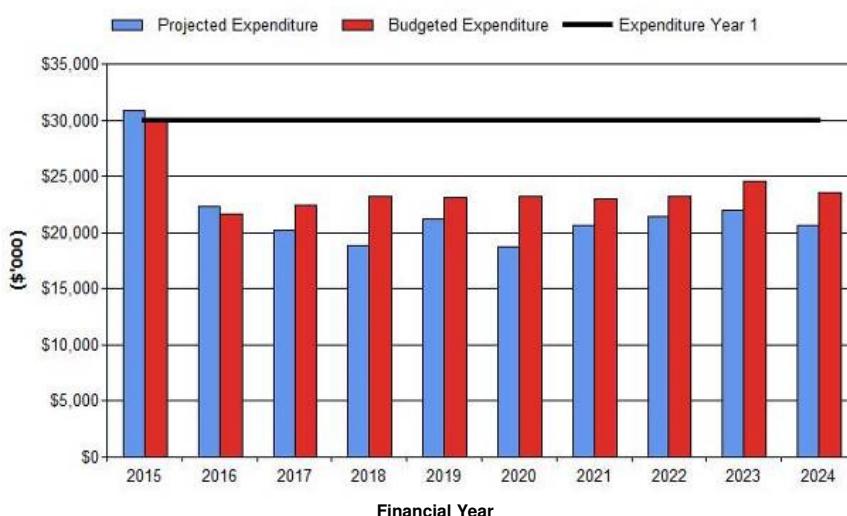
The infrastructure assets have a current replacement cost of \$938.9 million and a depreciable amount of \$609 million (Council audited valuations).

What does it cost?

The projected outlays necessary to provide the services covered by this AMP includes operations, maintenance, renewal and minor upgrade of existing assets plus approved stormwater works over the 10 year planning period is \$216.6 million or \$21.66 million on average per year, excluding major building renewals as discussed above.

Estimated available funding for this period according to the Draft 2015/16 LTFP is \$255.4 million or \$25.54 million on average per year which is 118% of the cost to provide the service, excluding major building renewals. Projected expenditure required to provide services in the AMP compared with planned expenditure currently included in the LTFP are shown in the graph below.

Marion City - Projected and Budget Expenditure for (Strategy)



Changes to Council rates or service standards and the development of building renewal plans will impact on the forecasts outlined in this plan.

What is included in financial projections

We plan to provide services for the following:

- Operation, maintenance, renewal and minor upgrade of infrastructure to meet service levels set in annual budgets.
- No major upgrades within the 10 year planning period, other than currently approved Council building projects, stormwater and some signage.
- Rectify identified defects where they are deemed maintenance and renewal activities.

What is not included in financial projections

New work or upgrades beyond existing service levels have not been included in financial projections, unless there is a specific Council resolution for that work to be undertaken.

Confidence Levels

This AMP is based on medium to high level of confidence information.

2. INTRODUCTION

2.1 Background

This AMP is to demonstrate responsible management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide existing levels of service over a 10 year planning period, with financial projections extending over 20 years.

The AMP is based on the format for AMPs recommended in Section 4.2.6 of the International Infrastructure Management Manual³.

In the preparation of this plan, information has been drawn from a number of background papers which include more detail for transport, stormwater, open space, building and coastal walking trail assets.

Once adopted, this AMP will inform the next iteration of the LTFP. When compared to the Draft 2015/16 LTFP, available funds for approved stormwater works, asset operating, maintenance and renewal and minor upgrades amount to \$255.4 million while this plan identifies a resource requirement of \$216.6 million, resulting in a surplus of \$38.8 million before any provision is made for major building renewal plans. A range of measures have been identified, including:

- A detailed review has been undertaken of the Council's road resealing / reconstruction practices which has found significant potential savings provided that an alternative philosophy and program of works is adopted.
- In accordance with Council's current Asset Management Policy, upgrades of assets have not been included in the plan unless there is a specific Council resolution to do so.
- Other than existing building projects, stormwater assets and some signage works, construction of new assets has not been considered.
- Prior to upgrades to existing assets or construction of new assets, Council will prioritise works and have regard to whole of life costs and impacts on the LTFP.

It has been recommended that Council provision \$49 million for building renewal, being equivalent to accumulated depreciation on buildings as at 30 June 2014 and the projected depreciation of these assets over the life of the plan. This would result in a net \$10.2 million deficit in renewal expenditure over the life of the LTFP.

The infrastructure assets covered by this AMP are shown in Table 2.1. The cost to renew the asset has been calculated using asset management information including Council's estimated actual costs in undertaking renewal works or brownfield unit rates.

Table 2.1: Assets covered by this Plan

Asset category/sub-category	Dimension	Renewal Cost (\$million)
TRANSPORT		
Seals	458km	71.2
Pavements	482km	220.2
Kerb	980km	140.2
Footpath	777km	111.3
Traffic Control Devices	10758 of	13.4
Signs	14,811 of	2.7
Bus shelters	515 of	1.9
Bridges	31 of	5.0
SUB-TOTAL		565.9

³ IPWEA, 2011, Sec 4.2.6, Example of an Asset Management Plan Structure, pp 4|24 – 27.

Asset category/sub-category	Dimension	Renewal Cost (\$million)
STORMWATER		
Drainage pipes	258km	145.9
Drainage pits, manholes, inlets & outlets.	6.550 of	28.7
Box culverts	6.1km	12.1
GPTs and trash racks	45 of	2.2
Wetlands, dams and detention basins	12 of	17.9
SUB-TOTAL		206.8
OPEN SPACE		
Reserve general assets including park benches, bins, fences, etc	1256 of	22.5
Irrigation systems	72 of	3.0
Playgrounds (like for like)	93 of	5.2
Tennis Courts (not club courts)	29 of	1.6
SUB-TOTAL		32.2
BUILDINGS		
Structure	99 of	43.9
Roofing	99 of	13.8
Fitout	99 of	28.5
Services	99 of	31.5
Entire simple buildings	106 of	5.4
SUB-TOTAL		123.1
COASTAL WALKING TRAIL		
Path	6.5km	5.4
Benches	38 of	.076
Signs	61 of	.018
Bins	3 of	.005
Bridges	3 (37m total length)	.213
Structures	564m	3.8
Balustrade	728m	.036
Fencing	5.489km	.017
Drainage	36 items	.027
Viewing Points	5 of	.113
Links	26 of	.989
SUB-TOTAL		10.9
TOTAL		938.9

2.2 Goals and Objectives of Asset Management

The City of Marion exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by ‘purchase’, by contract, construction by our staff, by donation of assets constructed by developers, by co-contribution via grant funding and others to meet increased levels of service for open space.

Our goal in managing infrastructure assets is to meet the existing level of service (as amended from time to time, in accordance with Council's Asset Management Policy) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,

- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.⁴

2.3 Plan Framework

Key elements of the plan are

- Levels of service – specifies the services and levels of service to be provided by Council,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how we will manage our existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting the organisation's objectives,
- Asset management improvement plan.

A road map for preparing an AMP is shown on the following page.

2.4 Core and Advanced Asset Management

This AMP plan has generally been prepared using advanced condition data collected at the individual asset level. Remaining lives have been estimated from this condition data and unit rates applied to the individual assets peculiar to the environment in which they are located.

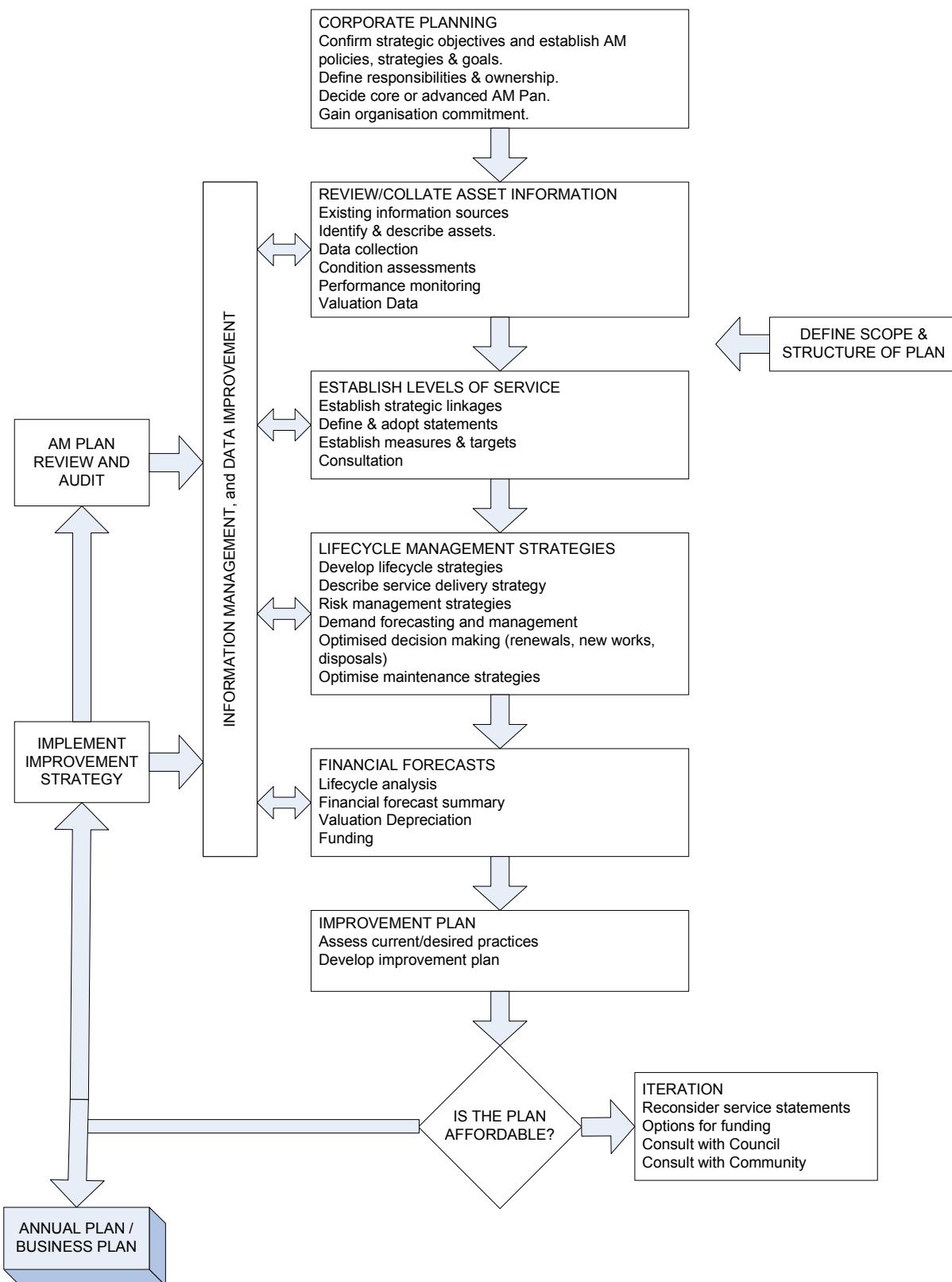
2.5 Community Consultation

Future revisions of the AMP will incorporate community consultation on desired / preferred service levels and provide clarity on the costs of providing the service. This will assist the Council and the community in aligning the level of service desired by the community, service risks and consequences with the community's ability and willingness to pay for the service.

⁴ Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council participated in the Local Government Association of South Australia Comparative Performance Assessment Measures in Local Government Customer Satisfaction survey. This telephone survey, last undertaken in 2012, polled a sample of residents on their level of satisfaction with Council's services. This most recent customer satisfaction survey reported above average satisfaction levels with Council's management of assets.

Table 3.1: Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Community satisfaction with asset management	✓				

Source: LGA Customer Satisfaction Survey

While this plan largely represents existing levels of service, a community engagement approach is planned for the next iteration which will support Council to better understand customer expectations with respect to its assets. In addition, consultation will occur as part of Council's review of its Open Space and Playspace strategies (planned throughout 2015/16) and ongoing service review program, as well as on a project-by-project basis.

3.2 Strategic and Corporate Goals

This AMP is prepared under the direction of the organisation's Community Plan – Towards 2040.

Our vision is:

Wellbeing

The six themes of the Community Plan are:

- Liveable
- Biophilic
- Engaged
- Prosperous
- Innovative
- Connected

The Council is currently working on a Council Plan, which will detail how we aim to turn the community's aspirations into reality. The AMP will be updated accordingly to align with Council's strategic directions.

3.3 Legislative Requirements

Council is required to meet many requirements including Australian and State legislation and State regulations, and various standards, rules and codes, as set out in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
<i>Aboriginal Heritage Act 1988 (SA)</i>	Provides for the protection and preservation of aboriginal heritage and includes legislation for the discovery, acquisition, damage or sale of sites, objects or remains of aboriginal significance.
<i>Civil Liability Act 1936 (SA)</i>	Liability of road authorities
<i>Coastal Protection Act 1972 (SA)</i>	Council responsible for the day to day maintenance of beach and coastal facilities.
<i>Dangerous Substances Act 1979 (SA)</i>	An Act to regulate the keeping, handling, transporting, conveyance, use and disposal, and the quality, of dangerous substances.
<i>Development Act 1993 (SA)</i>	An Act to provide for planning and regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate.
<i>Disability Discrimination Act 1992 (Cth)</i>	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure
<i>Environmental Protection Act 1993 (SA)</i>	To provide for the protection of the environment and related areas. Sets out the role, purpose, responsibilities and powers of Council relating to protection and preservation of the environment; policies include Water Quality Policy
<i>Heritage Act 1993 (SA)</i>	To conserve places of heritage value, and for other purposes.
<i>Highways Act 1926 (SA)</i>	An Act to....."make further and better provision for the construction and maintenance of roads and works, and for other purposes"
<i>Local Government Act 1999 (SA)</i>	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a LTFP supported by AMPs for sustainable service delivery.
<i>Native Title Act 1993 (Cth)</i> <i>Native Title (South Australia) Act 1994 (SA)</i>	Protects native title and ensures that it cannot be extinguished contrary to the Act.
<i>Natural Resource Management Act 2004 (SA)</i>	Sets out the role, purpose, responsibilities and powers of Council relating to managing natural resources.
<i>Road Traffic Act 1961 (SA)</i>	Defines layout and format of roads within the city. Defines control requirements including use of traffic control, traffic calming, crossings, speed setting and general limitations of use
<i>South Australian Public Health Act 2011 (SA)</i>	An Act dealing with public and environmental health.
<i>Work, Health and Safety Act 2012 (SA)</i>	Proactive in occupational health, safety and welfare practices in all undertakings of Council.
Standards, Rules and Codes	Requirement
AS 1742	Manual of uniform traffic control devices
Australian Accounting Standards	Sets out the financial reporting standards relating to the (re)valuation and depreciation of infrastructure assets.
Australian Road Rules	Contain the basic rules of the road for motorists, motorcyclists, cyclists, pedestrians, passengers and others
Australian Standards AS/NZS4422 – 1996 Playground Surfacing AS4685-2004 Playground Equipment AS4486-1-1997 Playground Inspection & Maintenance	Sets out the general requirements for surfacing to be used in children's playgrounds A general standard in 6 parts that deals with playground equipment Sets out the requirements for the development, installation, inspection and maintenance of playgrounds and playground equipment
Building Code of Australia (status of building regulation in all States and Territories)	Enables the achievement of nationally consistent, minimum necessary standards of relevant safety (including structural safety and safety from fire), health, amenity and sustainability objectives efficiently.

3.4 Current Levels of Service

We have defined service levels in two terms.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the AMP include:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under utilised?

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing frequency, mowing frequency, etc.
- Maintenance – the activities necessary to retain an assets as near as practicable to an appropriate service condition (e.g. road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide an higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library). In accordance with Councils asset management policy, upgrade has not been considered in the preparation of this plan.

Asset managers plan, implement and control technical service levels to influence the customer service levels.⁵ These technical levels of service inform annual works programs and budgets.

Our current service levels are detailed in Appendix A.

In some cases current and/or optimal levels of service have not been defined. However, it is proposed that this will be the subject of community engagement in preparation for the next iteration of the plan.

⁵ IPWEA, 2011, IIMM, p 2.22

4. FUTURE DEMAND

4.1 Demand Drivers

Over recent years The City of Marion has upgraded assets to a much higher standard than what existed before. One example is the practice of upgrading playgrounds in response to community expectations for a higher level of service, being driven by the following objectives:

- Design of quality and accessible play spaces that meet both child and parent/ carer needs
- A hierarchy of play spaces based on the Open Space & Recreation Strategy 2006-2016
- Improving the play value in the various levels of play spaces
- An equitable distribution of play spaces throughout the Council area

Following the adoption of Council's Asset Management Policy in August 2014, such upgrades will in future require prioritisation and approval of Council, with full knowledge of the whole of life costs and subsequent impacts on Council's LTFP. Funding for upgrades will be in addition to that required under this AMP.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of the assets are identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of Council assets are shown in Table 4.3.

4.4 Demand Management Plan

Demand for services may be managed through innovative renewal practices, non-asset solutions, insuring against risks and managing failures.

In accordance with Council's current asset management policy, no new or upgraded assets are included in this plan, apart from stormwater, minor building works and signage already approved by Council.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this AMP.

4.5 Asset Programs to meet Demand

In the preparation of this AMP it has been assumed that no new assets will be constructed or no substantial upgrades will be undertaken, other than stormwater, some immediate building works and signage already approved by Council. The cumulative value of upgrade / new asset construction over the 10 years of this plan is \$30.7 million. Any further upgrades or new asset construction will need to be prioritised by Council, with consideration of the whole of life costs and subsequent impacts on the LTFP. Each subsequent review of the AMP will include any new / upgraded assets constructed since the previous version of the plan.

In preparing the 2013 version of the Stormwater Asset Management Plan, \$35.375 million of drainage projects (2012 values) were identified to be constructed over 20 years. The LTFP budget projections provide sufficient funds each financial year for these works.

The new / upgrade assets relating to buildings include \$4.5 million in 2015 for the depot upgrade and \$700k between 2015 and 2017 for sustainability upgrades to buildings.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services	Demand Management Plan
Population	<ul style="list-style-type: none"> The current population of Marion Council is estimated to be 88,304⁶ in 2015. 	<ul style="list-style-type: none"> It is estimated that the population will grow to 99,396⁷ by 2036. This equates to a growth of 12.6% between 2015 and 2036. 	<ul style="list-style-type: none"> Increased population will likely result in increased use of the asset which may result in higher maintenance costs. 	<ul style="list-style-type: none"> Prioritise maintenance activities
Seal: Expectation that roads will be sealed with 'hotmix' rather than any other treatment.	<ul style="list-style-type: none"> Approximately 99% of the network has a 'hotmix' seal with only a few segments having a spray seal treatment. 	<ul style="list-style-type: none"> Options for different treatments including rejuvenation may result in lower lifecycle network cost. 	<ul style="list-style-type: none"> If different treatments are considered then lower lifecycle costs may result. 	<ul style="list-style-type: none"> Monitor availability of treatments
Pavement: Increase in traffic loading	<ul style="list-style-type: none"> Over the last 50 years Council's road pavements have seen increased axle loadings from commercial vehicles 	<ul style="list-style-type: none"> It is likely that commercial vehicle loadings will continue to increase 	<ul style="list-style-type: none"> Accelerated deterioration of road pavements 	<ul style="list-style-type: none"> Communicate options and capacity to fund Transport Infrastructure with community. Monitor community expectations re service levels and communicate financial capacity to balance priorities with what the community is prepared to pay. Fund priority works. Continue to seek grant funding for identified projects. Improve understanding of costs and capacity to maintain current service levels. Continue to analyse cost of providing services and capacity to fund at current level of service.
Kerb:	<ul style="list-style-type: none"> Replacement of short 'failed' kerb sections precedes the resealing of a road. 	<ul style="list-style-type: none"> If different resealing treatments are used there may not be the necessity to replace sections of kerb. 	<ul style="list-style-type: none"> Increased works programming opportunities may exist where kerb does not need to be replaced prior to reseal. 	
Footpath:	<ul style="list-style-type: none"> Council's footpaths are largely 1.2m wide 	<ul style="list-style-type: none"> Current Council standards require a width of 1.5m 	<ul style="list-style-type: none"> Increase in width of entire footpath network to meet standards comes at a substantial unfunded cost. 	
Footpath: New	<ul style="list-style-type: none"> There are still streets in Council's network that are not serviced by a footpath on either side of the road. 	<ul style="list-style-type: none"> Some residents demand footpaths on low traffic streets whilst property owners to the frontage to the path may not want it. 	<ul style="list-style-type: none"> Demand for footpath needs to be balanced against available funds, substantiated risks and resident requests. 	
Bus shelters: provision of shelters to bus stops not currently serviced by shelters	<ul style="list-style-type: none"> There are a number of bus stops not currently serviced by a shelter 	<ul style="list-style-type: none"> Council is required to complete DDA compliant bus shelters by December 2020 	<ul style="list-style-type: none"> Additional shelters require funding to establish and maintain Currently there is no provision for new shelters within Council LTFP and approval mechanisms 	
Traffic Control Devices	<ul style="list-style-type: none"> Council's installation of traffic control devices has growth in response to community requests and traffic investigations 	<ul style="list-style-type: none"> Further requests from the community may continue. 	<ul style="list-style-type: none"> Demand for the installation of traffic calming measures. 	

⁶ Australian Bureau of Statistics, Catalog 3218.0 Regional Population Growth, Australia Released 31 March 2015, Table 4: Estimated Resident Population, Local Government Areas, South Australia

⁷ Estimate based on Population Forecast provided by .id Informed Decisions <http://www.id.com.au/>

Demand drivers	Present position	Projection	Impact on services	Demand Management Plan
Stormwater: Development Trends - urban infill and regeneration	<ul style="list-style-type: none"> 39,243 dwellings as at June 2015 Dwelling growth historic trend is 4% over 5 years Allotment impervious area from 50% towards 90% 	<ul style="list-style-type: none"> 30-year projection of 12,000 additional dwellings which equates to a total of 51,243 Increase urban infill and regeneration and TODs. Dramatic increase in allotment impervious area ie towards 90% - resulting in a significant increase in allotment stormwater runoff. 	<ul style="list-style-type: none"> Existing stormwater infrastructure has insufficient design capacity to cope with increase runoff from development – increase frequency of property flooding and damages. 	<ul style="list-style-type: none"> Implement strategies, actions and programs contained in Stormwater Management Plans. Design drainage works to ensure flooding is not increased downstream of the works. Developers required to treat and reduce peak flows and volume of water entering Council's drainage system. Stormwater inlets, outlets, trash racks, GPTs are to be regularly cleaned, repaired and emptied to ensure flows are not obstructed. Watercourses and channels are to be maintained to ensure flows are not obstructed. Develop WSUD schemes and guidelines. Rehabilitate and restore watercourses, improve biodiversity and rectify erosion problems as they occur. Develop and manage harvest/reuse schemes on Council buildings and land, encourage other property owners/users to harvest/reuse water.
Stormwater: Catchment Management	<ul style="list-style-type: none"> Direct stormwater discharge into river and marine environment with some pollution control measures and limited stormwater reuse. 	<ul style="list-style-type: none"> Regulated controls on quality of stormwater discharging into river and marine environment and stormwater reuse. 	<ul style="list-style-type: none"> Increase in infrastructure to control pollutants, capture and reuse stormwater. 	
Stormwater: Climate Change	<ul style="list-style-type: none"> Awareness that climate change is occurring and its impact on water supply and usage, increase sea levels, changes in rainfall intensities and storm events. 	<ul style="list-style-type: none"> Rising sea levels, decreasing water supply and increasing water demand. Onsite and catchment stormwater reuse and change to parks and gardens plantings due to water restrictions. 	<ul style="list-style-type: none"> Impacts on coastal environment, reduction in stormwater outfall capacity, stormwater capture and reuse infrastructure. 	
Open Space: Playspace (playground) upgrades	<ul style="list-style-type: none"> One third of Councils existing playgrounds have been upgraded to the higher standard originally proposed for all playgrounds in the playspace strategy 	<ul style="list-style-type: none"> Current proposal is replacement of playgrounds on a like for like basis, essentially duplicating the existing level of service 	<ul style="list-style-type: none"> Nil if current proposal is realised 	<ul style="list-style-type: none"> Further playspace upgrades to be prioritised by Council.
Open Space: Reserve irrigation	<ul style="list-style-type: none"> Irrigation systems in many reserves are currently not active following being 'turned off' during a recent drought 	<ul style="list-style-type: none"> Community demand for a higher level of amenity during summer months 	<ul style="list-style-type: none"> Renewal of irrigation systems required 	<ul style="list-style-type: none"> Fund priority works Stormwater harvested from Sturt River channel to be treated, stored and distributed for water specified open space areas.

Demand drivers	Present position	Projection	Impact on services	Demand Management Plan
Open Space: Ageing population	<ul style="list-style-type: none"> Status Quo 	<ul style="list-style-type: none"> General aging of the population 	<ul style="list-style-type: none"> Demand for open spaces with appropriate amenities within walking distance of residences 	<ul style="list-style-type: none"> Prioritise maintenance of existing infrastructure. New or upgrade work to be prioritised by Council.
Open Space: Increase living density	<ul style="list-style-type: none"> Status Quo 	<ul style="list-style-type: none"> Urban consolidation through housing renewal 	<ul style="list-style-type: none"> Demand for increased environmental, recreational, cultural and environmental value of open spaces 	
Open Space: Community expectation of open spaces	<ul style="list-style-type: none"> Status Quo 	<ul style="list-style-type: none"> Higher level of service expected 	<ul style="list-style-type: none"> Demand for equitably distributed, accessible, safe, high quality and provide diverse settings to meet the needs of user groups 	
Open Space: Awareness of natural environment	<ul style="list-style-type: none"> Status Quo 	<ul style="list-style-type: none"> Community expecting to see action on behalf of Council 	<ul style="list-style-type: none"> Greater need to protect and enhance the natural environment 	
Buildings: Sustainability and climate change	<ul style="list-style-type: none"> The Strategic Plan lists issues that must be addressed for climate change and water and energy efficiency. 	<ul style="list-style-type: none"> Changes might be required in renewals to bring to minimum future standards, and new buildings might have to meet higher standards. 	<ul style="list-style-type: none"> Possible increases to initial/renewal costs of assets to meet minimum required standards. 	<ul style="list-style-type: none"> Develop building renewal plans to understand potential impacts.
Buildings: Legislation	<ul style="list-style-type: none"> Any existing asbestos conditions will have to be managed and planned for. Health and safety issues in e.g. aquatic centres being met. Disabled access provisions at present might reflect standards when buildings were created. 	<ul style="list-style-type: none"> Renewals might encounter complications if asbestos present. Future requirements might increase Council obligations. Renewals will have to address disability issues. 	<ul style="list-style-type: none"> Planning required to manage any existing asbestos issues. Possible increases future costs of services. Possible programs requiring capital upgrades. Possible increased renewal costs. 	<ul style="list-style-type: none"> Possible additional lifecycle costs for enhanced services.
Buildings: Technology	<ul style="list-style-type: none"> Current community needs being met, though customer request are an indication of preferences. 	<ul style="list-style-type: none"> Community needs for wireless internet technology in libraries etc. likely to increase. 		

Demand drivers	Present position	Projection	Impact on services	Demand Management Plan
Coastal Walking Trail: Accessibility Requirements for disabled and elderly users	<p>At present the walking trails contain large sections that are inappropriate for some trail users including:</p> <ul style="list-style-type: none"> • Extensive sections of steps and landings that do not meet current Australian Design Standards for access. • Some sections of trail are excessively steep and inappropriate for wider community use. • Some sections of trail are experiencing significant erosion problems due to poor and dilapidated surface treatments and unsustainable trail grades. 	• Increased demand to provide services to broader group of users.	• Requirement to upgrade assets to provide greater access. Swanbury Penglase Architects have identified 18 potential sites for upgrades.	• Council to prioritise upgrades or, where possible, undertake improvements as part of planned maintenance/ renewal if budget allows.
Coastal Walking Trail: Improve the recreational value of the trail for walking, jogging sight seeing and cycling.	• Presently limited facilities for cyclists.	• Increased demand for a “shared path” trail suitable for pedestrians and cyclists.	• Potential demand to upgrade path assets to replace structures such as stairs (upgrades are presently unfunded in this plan in accordance with Councils asset management policy)	
Coastal Walking Trail: Links to surrounding urban environment.	• Series of formal and informal links to the adjacent suburbs.	• Increased demand to link trail in to surrounding suburbs.	• Creation of additional links and formalising existing informal links.	

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service while optimising life cycle costs.

This section considers risk management approaches, routine operation, maintenance and renewal strategies. The data sources used to inform this section are contained at Appendix B.

5.1 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available.

Known deficiencies in service performance are summarised in Table 5.1. Where it is consistent with Council's Asset Management Policy, these service deficiencies will be addressed in operating, maintenance and renewal programs, however some would be considered upgrade or new works, therefore requiring prioritisation by Council, with consideration of the whole of life costs and subsequent impacts on the LTFP.

Table 5.1: Known Service Performance Deficiencies

Asset Portfolio	Location	Service Deficiency
Transport	Road Pavements	There are some road pavements in poor condition which require reconstruction rather than reseal as has previously been the practice of Council
Stormwater	Stormwater drainage network	Under capacity pipe and pit drainage, lack of drainage system and property flooding.
	Stormwater quality improvements	Not all stormwater outlets have pollution control devices. Limited use of WSUD devices
	Stormwater harvesting and reuse	Limited infrastructure installed
Open Space	Playgrounds	Restricted access e.g. no paths, physical barriers such as high concrete edges Limited parent/carer facilities such as seating Predominantly equipment based play provision and therefore limited creative or quiet play opportunities Many are poorly located in terms of casual surveillance and access Very limited natural elements such as sand, boulders, plantings etc. Limited diversity Limited graduated challenge – most play spaces only provide for one particular age group
Buildings	City wide	Adequately supplied in some areas; shortages in others. Refer to Draft Community Facility Strategy 2010. Environmental, asbestos and DDA concerns.
Coastal Walking Trail	Multiple locations	Environmental Defects – Erosion, vegetation encroachment, water ponding etc. Safety – trip hazards, slippery paths Structural – corroded steel, split timber

5.2 Infrastructure Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. 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.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2.

Table 5.2: Critical Risks and Treatment Plans

Risk	Risk Cause/Source	Current Controls	Likeli-hood	Conse-quence	Risk Rating	Risk Treatment Plan	Likeli-hood	Conse-quence	Risk Rating
Major asset failure	<ul style="list-style-type: none"> • Lack of funding to operate, maintain and renew assets (buildings, playspaces, sporting facilities, roads, drainage, footpaths etc) • Inadequate asset management planning • Under estimated or unknown condition and life cycle performance of asset resulting in structural failure • Under design of asset • Changing environmental condition • Maintenance level below Technical Level of Service/Standard 	<ul style="list-style-type: none"> • Asset Management Policy • AMP • Planned maintenance • Condition audits • Review and updating of asset related information • Stormwater master plan prepared for the Glenelg to Marion catchment and the Hallett Creek catchment • Insurance coverage for some assets only • Capital Works Plan 	L	Ma	High	<ul style="list-style-type: none"> • Rigorously apply Asset Management Policy, eg "maintain before renew and renew before new" • Review the lease/licence methodology and maintenance of community of assets • Work has commenced on the Marion / Mitcham stormwater master plan • CCTV inspection and condition rating of stormwater assets. • Further integration of the AMP into LTFP 	U	Ma	Medium
Loss of opportunity to address required transport asset upgrades i.e. bus shelters, kerb ramps and new footpaths	<ul style="list-style-type: none"> • Failure to budget appropriately for the required asset upgrades 	<ul style="list-style-type: none"> • Annual Business Plan and Budget 	AC	Mo	High	<ul style="list-style-type: none"> • Transport asset upgrades to be prioritised by Council • Works undertaken 	R	Mo	Low

Risk	Risk Cause/Source	Current Controls	Likeli-hood	Conse-quence	Risk Rating	Risk Treatment Plan	Likeli-hood	Conse-quence	Risk Rating
Asset service is below Technical Level of Service/Community expectations	<ul style="list-style-type: none"> Design of assets does not meet demand/capacity Insufficient funding to operate, maintain and renew assets Deficient routine/cyclic maintenance and renewal of assets 	<ul style="list-style-type: none"> Asset Management Policy AMP & LTFP Planned maintenance Condition audits Review and updating of asset related information in relation to demand and capacity of our networks 	L	Ma	High	<ul style="list-style-type: none"> Rigorously apply Asset Management Policy, eg “maintain before renew and renew before new” Further integration of the AMP into LTFP 	U	Ma	Medium
Excessive service cuts and/or excessive rates rises to meet asset commitments	<ul style="list-style-type: none"> Inappropriate decisions made on services/assets operations, maintenance or renewal which leave an unmanageable legacy in the future 	<ul style="list-style-type: none"> Asset Management Policy AMP & LTFP Planned maintenance Condition audits Continual improvement in understanding the lifecycle and whole of life costs by decision makers 	L	Ma	High	<ul style="list-style-type: none"> Rigorously apply Asset Management Policy, eg “maintain before renew and renew before new” Further integration of the AMP into LTFP Review the lease/licence methodology and maintenance of community of assets Development of documented Maintenance Plans 	U	Ma	Medium

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as cleaning, provision of utilities, etc.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. replacement of corroded fasteners, isolated 'topping up' of gravel but excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned and specific maintenance work activities.

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

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Tables 5.3.

Table 5.3: Maintenance Expenditure Trends

Asset type	2012/13	2013/14	2014/15
Seal	480,761	517,410	513,807
Pavement	139,555	141,608	143,560
Kerb	445,799	683,993	560,926
Footpath	657,412	1,163,422	1,201,326
Traffic Control Device	3,037	3,433	3,937
Signs	268,966	220,404	252,769
Bus Shelters	433	166,939	181,123
Bridges	1,324	5,470	4,457
Stormwater – Planned and specific	597,600	596,400	661,367
Stormwater – Unplanned	398,400	397,500	342,317
Coastal Walking Trail	72,775	25,530	221,250
Open Space	2,938,430	3,030,728	3,074,616
Buildings – Planned and specific	N/A	N/A	N/A
Buildings - Unplanned	N/A	N/A	1,138,601

N/A = not available

Council will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities aim to include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review operations and maintenance activities to ensure Council is obtaining best value for resources used.

5.3.1 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, Council can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical asset failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical asset failure modes and required operations and maintenance activities are detailed in Table 5.3.1.

Table 5.3.1: Critical Assets and Service Level Objectives

Asset Portfolio	Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Transport	Road Pavements	Reconstruction required	Undertake reseals only on roads with a sound pavement base Identify roads requiring reconstruction at project planning phase Develop proactive deep lift patching maintenance program to treat 'pavement failures' on roads not requiring a reseal.
	Footpaths	Injury to walking public	Develop proactive costed program of maintenance / renewal works
Stormwater	Side entry pits, drain inlets and outlets	Blockage cause localised street and property flooding. Scouring downstream of drain outlets – erosion and watercourse bank collapse.	Regular cleaning of pits, inlets and outlets. More frequent cleaning of known 'hot spots' Regular street sweeping to minimise amount of pollutants entering the drainage system.
	Box Culverts and pipes	Collapse of asset	CCTV monitoring of drain lines. Repair/replace high risk defects.
	Gross Pollutant Traps (GPTs) and Trash Racks	Asset blocked by excessive pollutants causing localised flooding.	Regular cleaning and monitor and additional clean prior to heavy rain event.
Open Space	Playgrounds	Poor maintenance practices may lead to injury of users	Regular proactive inspection of playground assets
Buildings	High profile buildings offering services in demand with whole community, e.g. administration offices, libraries, depot .	Services cannot be provided because of failure of mechanical services such as air conditioners or filtration plant.	Regular inspection and servicing of plant and equipment.
Coastal Walking Trail	Bridges and Elevated Walkways	Component failure	Periodic inspection to locate and treat areas of timber rot or metal corrosion.
	Balustrade	Component failure	Periodic Inspection
	Path	Trip Hazards and uneven surface	Periodic inspections and replacement of gravel

5.3.2 Standards and specifications

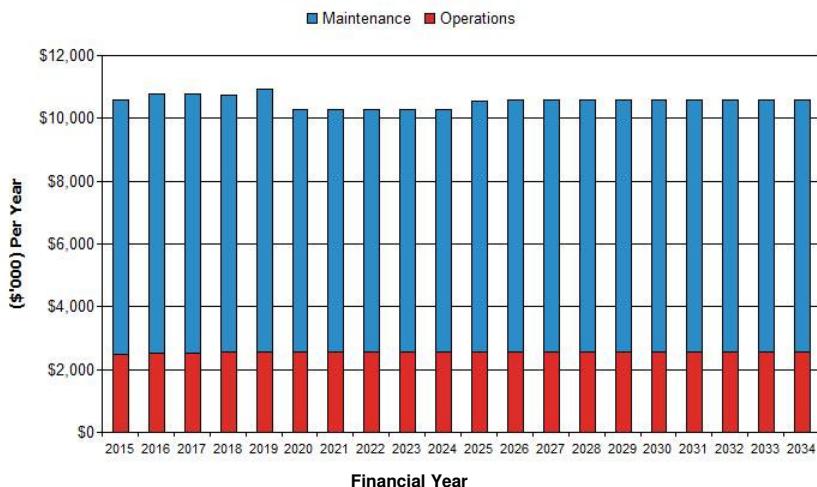
Maintenance work for Infrastructure contained within this plan is generally carried out by Council Staff using practices developed over many years, and in accordance with the legislative requirements, standards, rules and codes set out in 3.3 of this plan.

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend as demonstrated in Figure 5.3.3 in line with the value of the asset stock. Note that all costs are shown in current 2014/2015 dollar values (i.e. real values).

Figure 5.3.3: Projected Operations and Maintenance Expenditure

Marion City - Projected Operations & Maintenance Expenditure (Strategy)



Maintenance is funded from the operating budget where available.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified using asset register data to project the renewal costs using acquisition year and useful life to determine the renewal year.

Useful lives of assets are detailed in the annual valuation documents prepared by independent valuers and are reviewed by the Finance Department on an annual basis.

5.4.2 Renewal and Replacement Strategies

The City of Marion aims to plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
 - the service delivery ‘deficiency’, present risk and optimum time for renewal/replacement,
 - the project objectives to rectify the deficiency,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - and evaluate the options against evaluation criteria adopted by Council, and
 - select the best option to be included in capital renewal programs,
- Using ‘low cost’ renewal methods (cost of renewal is less than replacement) wherever possible,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

5.4.3 Renewal ranking criteria

As part of its Asset Management Policy (2014), the City of Marion has adopted a Strategic Asset Management Decision Making Matrix that guides the process by which decisions are made as to whether an asset is maintained, renewed or upgraded.

5.4.4 Renewal and replacement standards

Renewal work is carried out in accordance with the legislative requirements, standards, rules and codes set out in 3.3 of this plan. In addition, reference is made to the following:

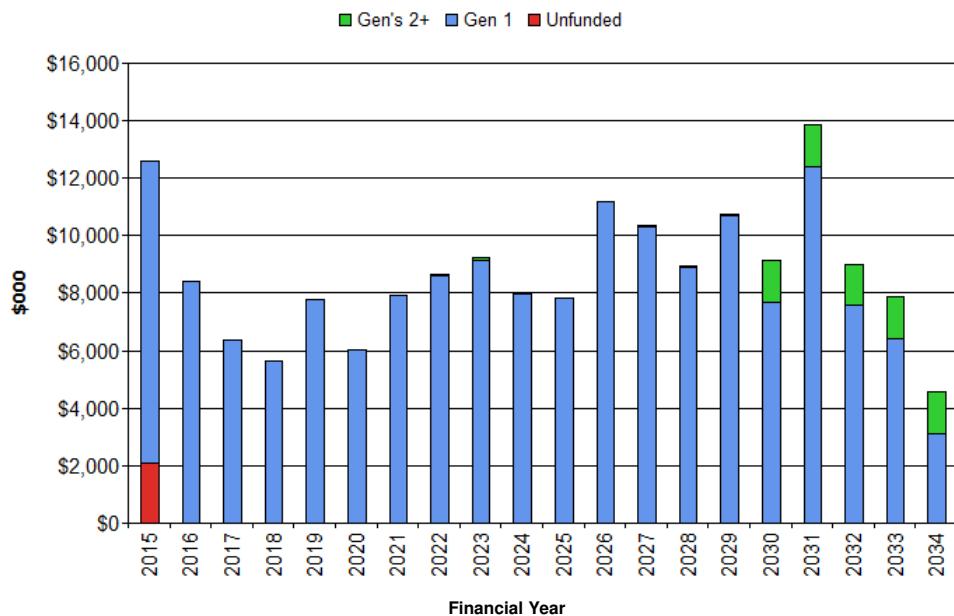
- Annual contracts & associated specifications for resealing, footpath paving and kerb laying
- Australian Rainfall and Runoff, Institution of Engineers Australia
- Australian Runoff Quality, Engineers Australia, 2006
- Australian Standards
- Council environmental and sustainability policies
- Council policies
- Council Standards and Specifications for works (developed on a project basis specific to capital asset being renewed)
- Council Standards and Specifications for works.
- Relevant Austroads publications
- Special one off contracts for bridge construction and pavement reconstruction

5.4.5 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock ages. The expenditure is summarised in Figure 5.4.5. Note that all amounts are shown in real values. Refer Appendix B for renewal cost sources.

Figure 5.4.5: Projected Capital Renewal and Replacement Expenditure

Marion City - Projected Capital Renewal Expenditure (Strategy)



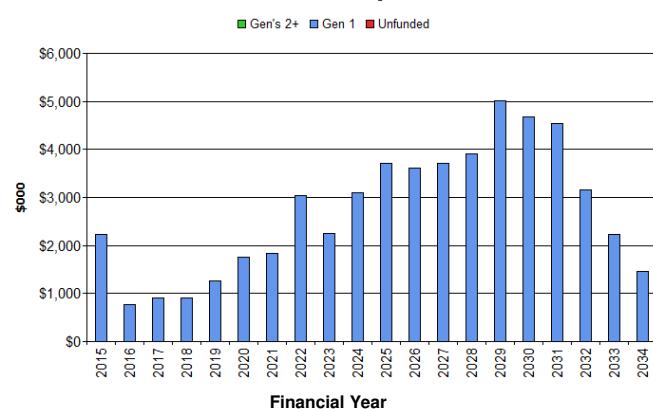
Gen 2+ renewals indicate assets that are being renewed for the second time (or more) over the 20 year forecast period. These will be assets with short useful lives such as gravel paths.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the LTFP.

The following graphs indicate the renewal expenditure required to support sub categories of assets within the portfolio that make up the total in Figure 5.4.5.

Seals

Marion City - Projected Capital Renewal Expenditure (Seals 2015 V1_S1_V1)



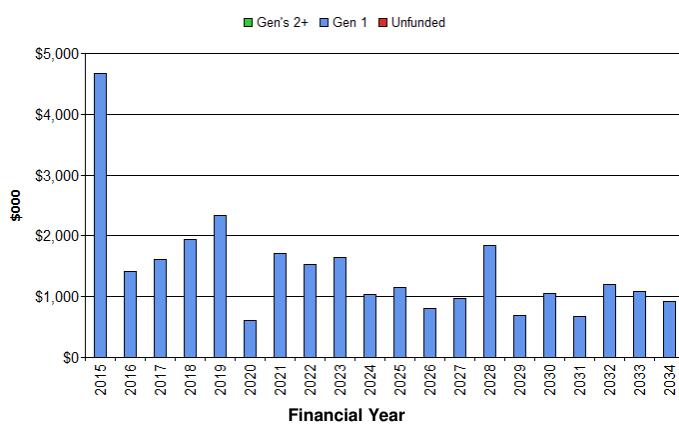
The analysis of seals undertaken in the preparation of this plan indicates that there is an opportunity to reduce existing expenditure (currently \$4.3 million pa) through a more rigorous prioritisation of works including:

- Implementation of a rejuvenation program
- For local roads (>80% of Councils network) delay of a reseal until environmental conditions (aging of the binder) dictate a reseal is required.
- Less emphasis given to cracking in determination of the remaining life
- Not undertaking a reseal on a road that requires pavement reconstruction
- Prioritisation given to roads that have programmed for resealing via the analysis conducted under this plan
- Implementation of a regime of rigorous onsite inspections and verification prior to a treatment being programmed

An average annual capital renewal of \$1.8 million pa is required over 10 years (2015/16 – 2024/25) and \$2.7 million over 20 years (2015/16 – 2034/35) to support the defined levels of service of the assets.

Pavements

**Marion City - Projected Capital Renewal Expenditure (Pavements
2015 V1_S1_V1)**



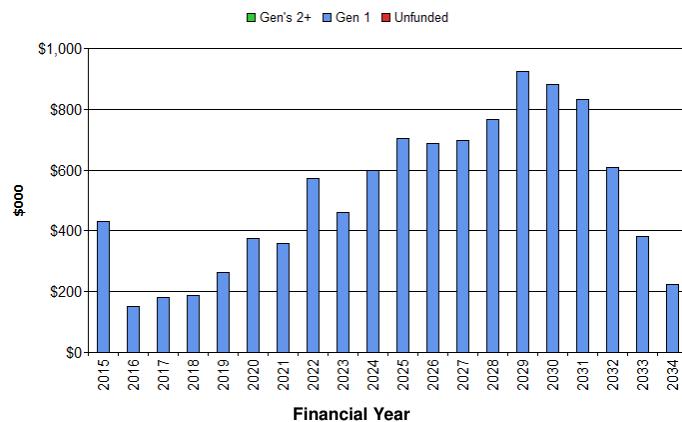
For a period of more than 10 years Council has not had a defined pavement reconstruction program. Instead, in many cases, roads have been resealed often with little rehabilitative pavement works. This has resulted in some cases in premature failure of the seal.

The analysis of pavements undertaken in the preparation of this plan indicates that pavement reconstruction is required and it will be necessary for Council to adopt a pavement reconstruction program. The graph above has been developed from a preliminary project planning perspective. It should be noted that where the required funding is shown as being high in 2015 actual projects can be delayed several years pending further detailed investigations.

An average annual capital renewal of \$1.8 million pa is required over 10 years (2015/16 – 2024/25) and \$1.4 million over 20 years (2015/16 – 2034/35) to support the defined levels of service of the assets. It is considered that the 20 year figure may be conservative since during the next 5-10 years it is expected that more pavements may show signs of structural failure due to the recent resealing practices.

Kerb

Marion City - Projected Capital Renewal Expenditure (Kerb 2015 V1_S1_V1)

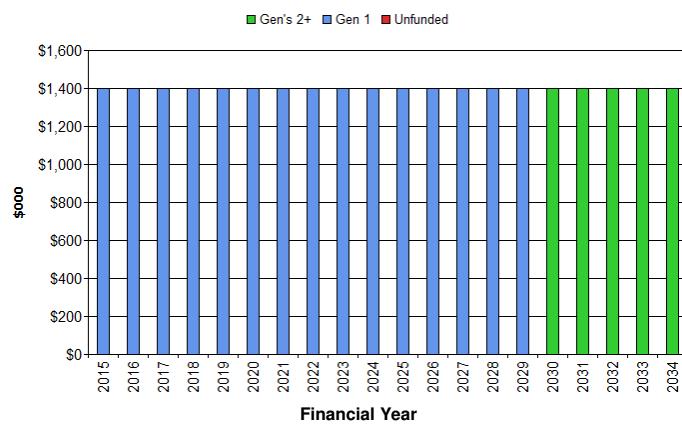


The projected renewals for kerbs can be seen to trend in line with the Seal graph. This is a result of the renewals being developed for the assumption that 5% of the kerb will be replaced on each segment of road before it is resealed.

An average annual capital renewal of \$357k pa is required over 10 years (2015/16 – 2024/25) and \$514k over 20 years (2015/16- 2034/35) to support the defined levels of service of the assets.

Footpaths

Marion City - Projected Capital Renewal Expenditure (Footpaths 2015 V1_S1_V1)

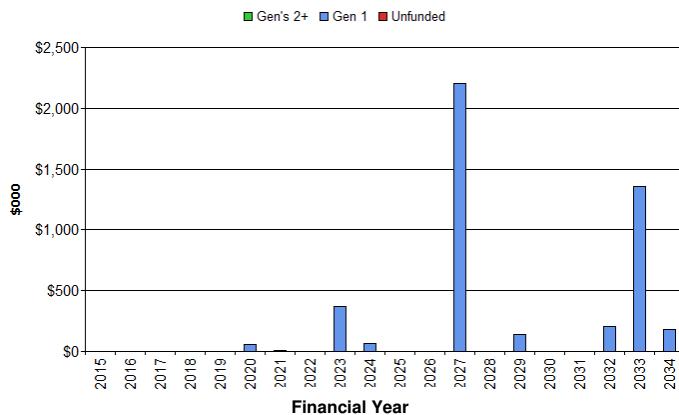


The footpath projected renewal expenditure has been derived from lifting the current service level of defect repair over the entire network from an estimated 18 years to 15 years - Refer Appendix B.

An average annual capital renewal of \$1.4 million pa is required over 10 years (2015/16 – 2024/25) and 20 years (2015/16 – 2034/35) to support the defined levels of service of the assets.

Traffic Control Devices

**Marion City - Projected Capital Renewal Expenditure (TCD 2015
V1_S1_V1)**

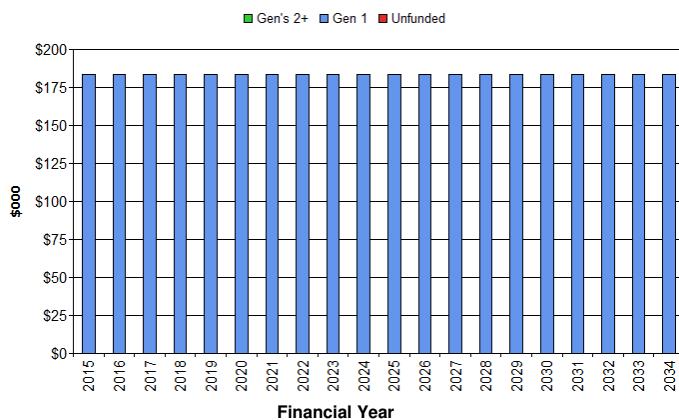


The traffic control device renewals have been estimated from valuation data.

An average annual capital renewal of \$49.6k pa is required over 10 years (2015/16 – 2024/25) and \$229.3k (2015/16 – 2034/35) over 20 years to support the defined levels of service of the assets.

Signs

**Marion City - Projected Capital Renewal Expenditure (Signs 2015
V1_S1_V1)**

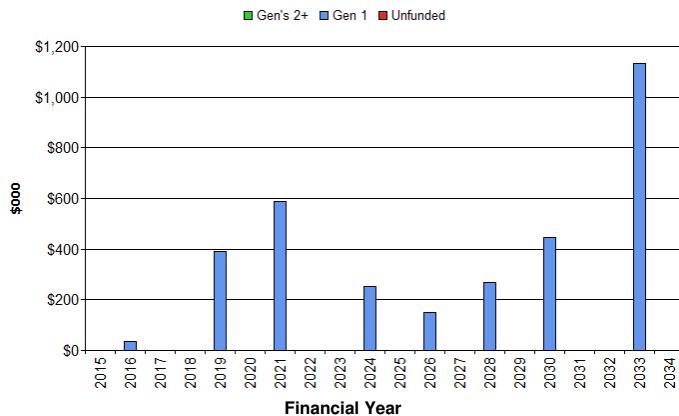


The signage renewals have been estimated from valuation data using an annual depreciation figure calculated without residuals and using straight line depreciation. This is considered satisfactory for renewal planning purposes since Council has many thousand signs all in different condition (and age) states.

An average annual capital renewal of \$184k pa is required over 10 years (2015/16 – 2024/25) and 20 years (2015/16 – 2034/35) to support the defined levels of service of the assets.

Bus Shelters

**Marion City - Projected Capital Renewal Expenditure (Bus Shelters
2015 V1_S1_V1)**

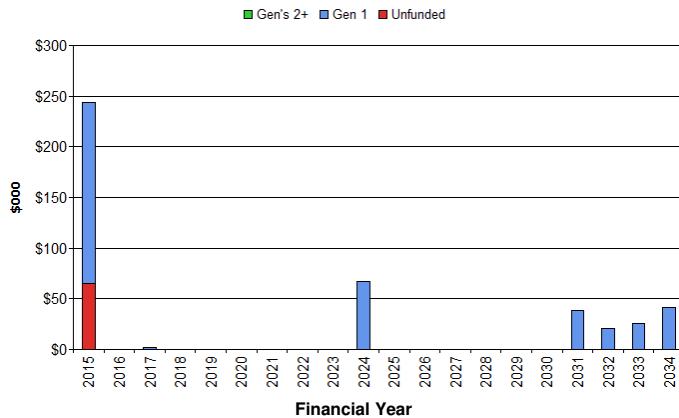


The bus shelter renewals have been estimated from valuation data.

An average annual capital renewal of \$127k pa is required over 10 years (2015/16 – 2024/25) and \$163k pa over 20 years (2015/16 – 2034/35) to support the defined levels of service of the assets.

Bridges

**Marion City - Projected Capital Renewal Expenditure (Bridges
2015 V1_S1_V1)**



The data used to generate the renewal profile for bridges has been drawn for valuations and a condition audit undertaken by the state road authority.

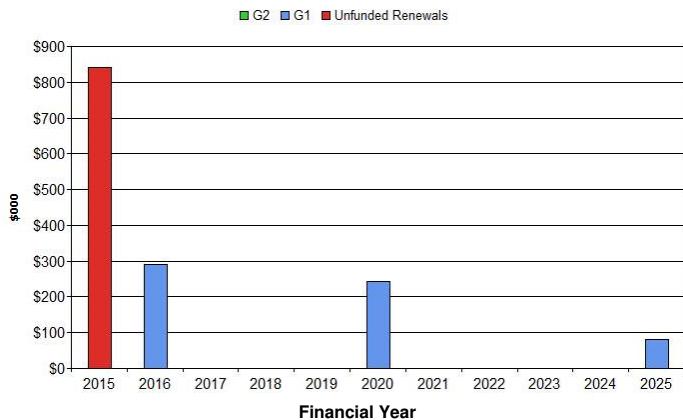
An average annual capital renewal of \$31k pa is required over 10 years (2015/16 – 2024/25) and \$22k pa over 20 years (2015/16 – 2034/35).

Stormwater assets

Due to the long life nature of the stormwater assets no renewals are predicted over the 20 year term of this plan (2015/16 – 2034/35).

Irrigation

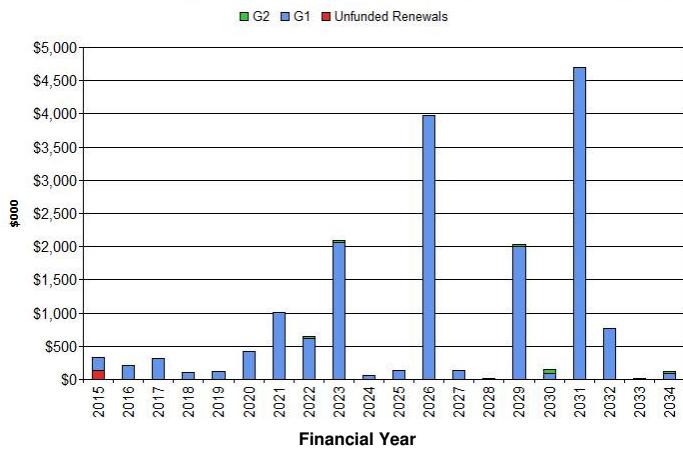
Marion City - (Open Space 2015 V10 Hub_S1_V8 - IPOS Irrigation)



Irrigation relates to optimised irrigation renewals (not including Oaklands ASR reserves) i.e. only portions of existing irrigated areas will be renewed. Only systems that are currently active are included for renewals.

Ancillary assets

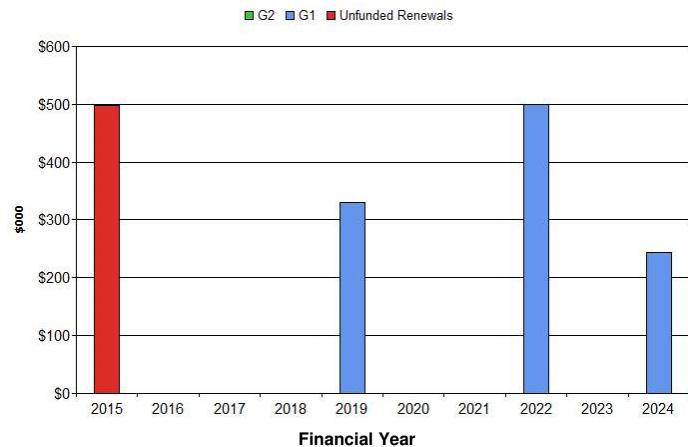
Marion City - (Open Space 2015 V10 Hub_S1_V8 - Maloney All)



The 'Maloney All' asset group relates to ancillary assets on reserves such as BBQ's, fences and seats.

Oaklands Irrigation

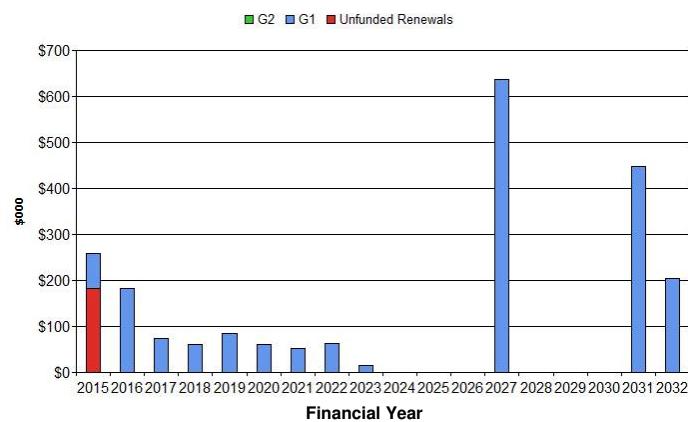
Marion City - (Open Space 2015 V10 Hub_S1_V8 - Oak IPOS Irr)



This asset group references optimised irrigation renewals on reserves proposed to be irrigated through the Oaklands Wetlands ASR scheme.

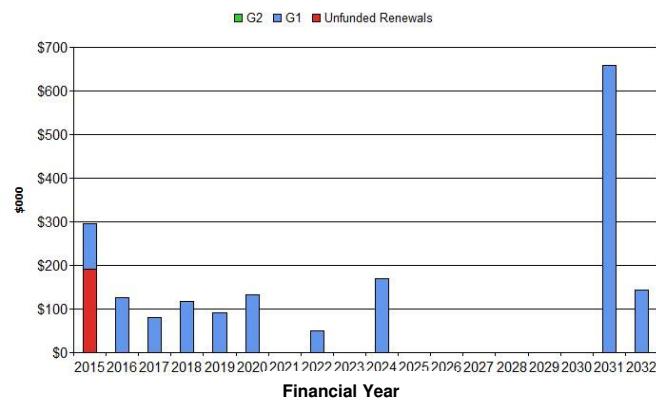
Playspace local

Marion City - (Open Space 2015 V10 Hub_S1_V8 - Playspace Local)



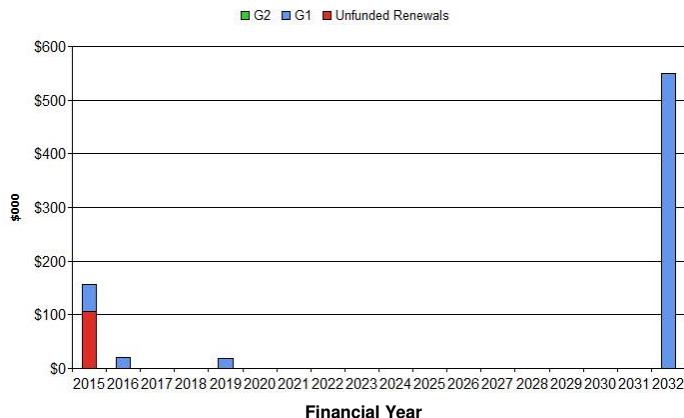
Playspace neighbourhood

Marion City - (Open Space 2015 V10 Hub_S1_V8 - Playspace Nhood)



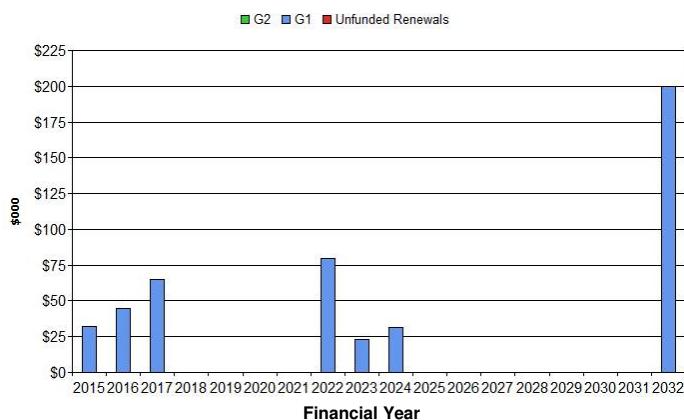
Playspace precinct

Marion City - (Open Space 2015 V10 Hub_S1_V8 - Playspace Precinct)



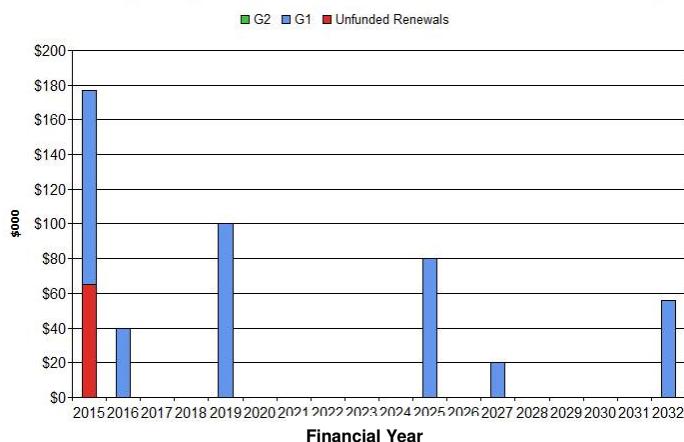
Playspace regional

Marion City - (Open Space 2015 V10 Hub_S1_V8 - Playspace Regional)



Tennis court AC surface

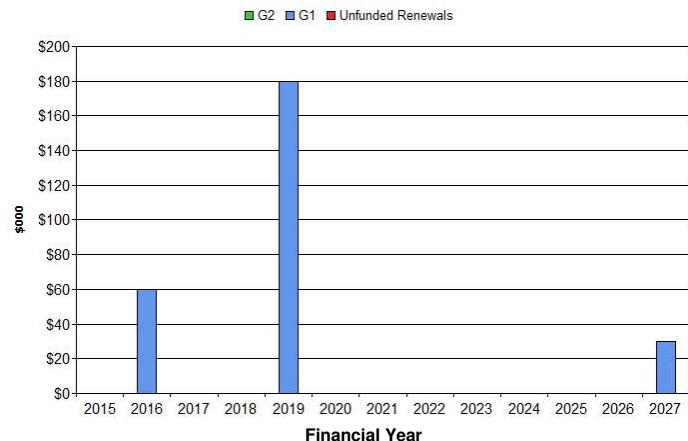
Marion City - (Open Space 2015 V10 Hub_S1_V8 - T Court AC)



This graph refers to the asphaltic concrete component of a tennis court asset.

Tennis court base

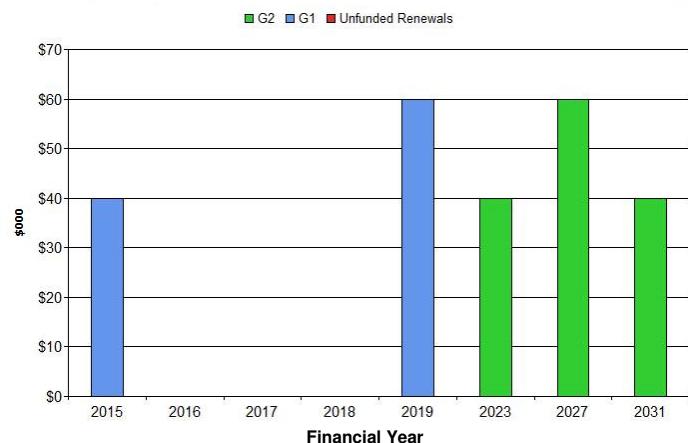
Marion City - (Open Space 2015 V10 Hub_S1_V8 - T Court Base)



This graph refers to the crushed rock base component of a tennis court asset.

Tennis court acrylic surface

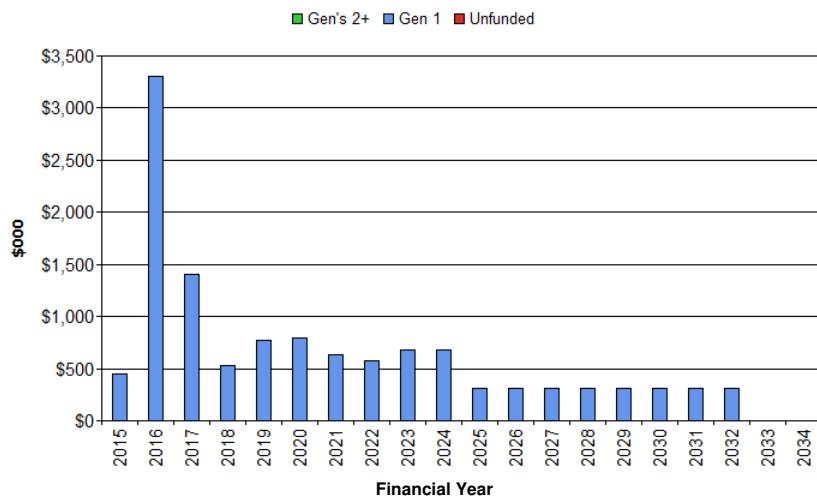
Marion City - (Open Space 2015 V10 Hub_S1_V8 - T Crt Acr Surf)



This graph refers to the coloured acrylic surfacing component of the tennis court where applicable.

Building assets

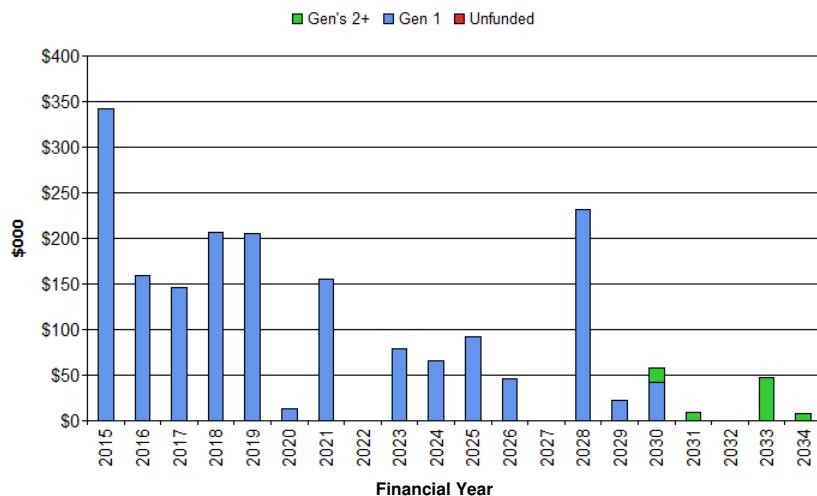
**Marion City - Projected Capital Renewal Expenditure (Buildings
2015 V3_S1_V3)**



Note that building renewal plans are to be developed over the coming 2 years which will more accurately inform forecast building renewal costs.

Coastal Walking Trail

Marion City - Projected Capital Renewal Expenditure (Coastal Walking Trail_S1_V5)



5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

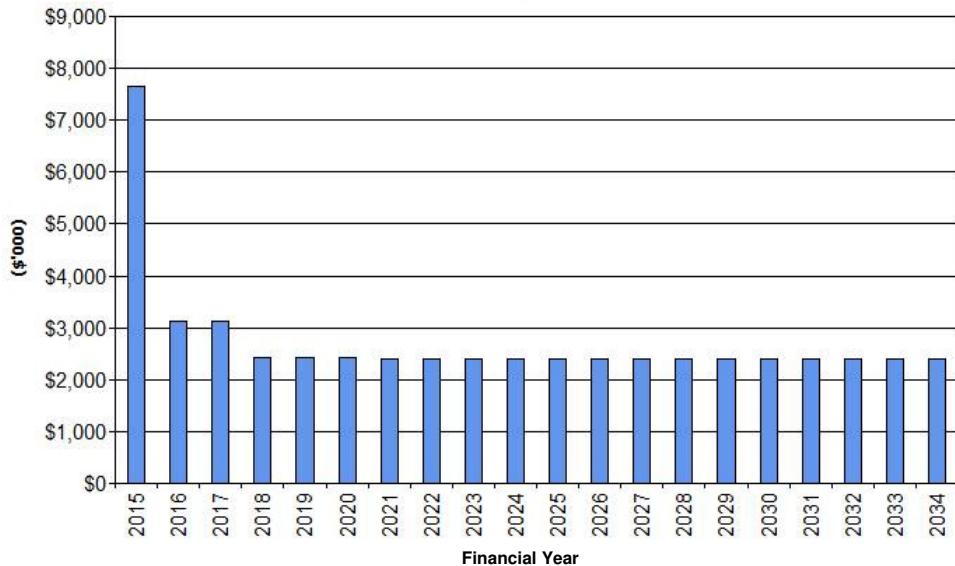
This AMP has been prepared in accordance with Council's Asset Management Policy, essentially requiring new or upgrade works to gain Council approval, having regard to whole of life costs and subsequent impacts on the LTFP.

5.5.2 Summary of future upgrade/new assets expenditure

In accordance with the Strategic Asset Management Decision Making Matrix no new assets are proposed other than Council approved stormwater, buildings and signage as detailed in Figure 5.5.2.

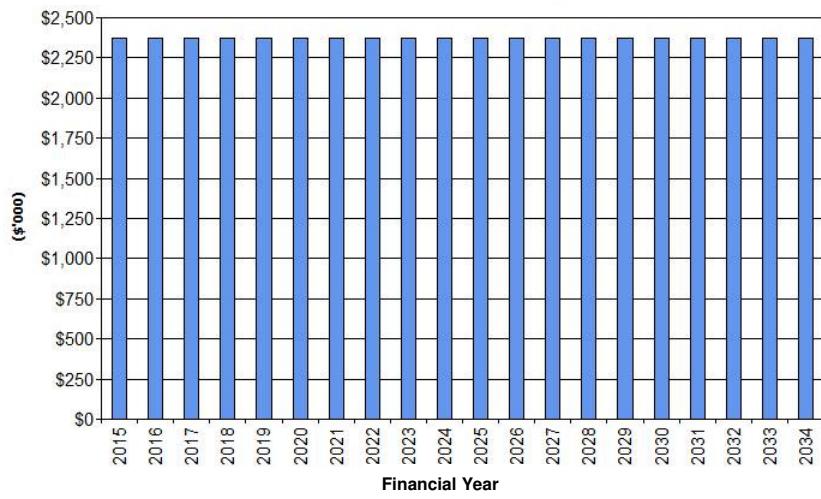
Figure 5.5.2: Projected Capital Upgrade/New Asset Expenditure

Marion City - Projected Capital Upgrade/New Expenditure (Strategy)



Stormwater assets

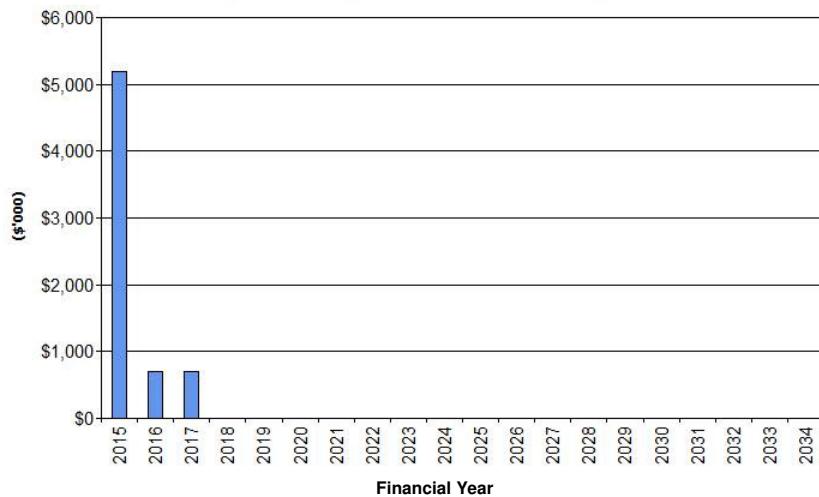
Marion City - Projected Capital Upgrade/New Expenditure (Stormwater_S1_V1)



In preparing the 2013 version of the Stormwater Asset Management Plan \$35.375 million of drainage projects (2012 values) were identified to be constructed over 20 years. The LTFP budget projections provide sufficient funds each financial year for these works.

Building assets

Marion City - Projected Capital Upgrade/New Expenditure (Buildings 2015 V3_S1_V3)



The new / upgrade assets relating to buildings include \$4.5 million in 2015 for the depot upgrade and \$700k between 2015 and 2017 for sustainability upgrades to buildings.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. Once decommissioning has occurred, the renewal forecasts in the AMP and LTFP will be adjusted accordingly.

Playground assets have been identified for disposal as part of the investigation conducted in preparation of the City of Marion Playspace Strategy.

Table 5.6: Assets Identified for Disposal

Playground Asset	Suburb	Reason for Disposal	Renewal Cost (\$)
Ben Pethick Reserve	Marion	Surplus as identified in playspace review	18,000
Cohen Court Reserve	Clovelly Park	Surplus as identified in playspace review	21,600
Cowra Crescent Reserve	Park Holme	Surplus as identified in playspace review	25,200
Everest Avenue Reserve	Morphettville	Surplus as identified in playspace review	30,000
Coorabie (Capella Drive) Reserve	Hallett Cove	Surplus as identified in playspace review	15,000
French Court Reserve	Trott Park	Surplus as identified in playspace review	16,800
Glandore CC - Childcare	Glandore	Surplus as identified in playspace review	20,000
Lapwing Street Reserve	Hallett Cove	Surplus as identified in playspace review	20,000
Louise Avenue Reserve	Warradale	Surplus as identified in playspace review	19,800
Luke Court Reserve	O'Halloran Hill	Surplus as identified in playspace review	19,200
Mitchell Park Oval East	Mitchell Park	Surplus as identified in playspace review	14,000
Oliphant Avenue Reserve (Small)	Oaklands Park	Surplus as identified in playspace review	25,400
Parsons Grove Reserve	Park Holme	Surplus as identified in playspace review	32,400
Ranger Street	Hallett Cove	Surplus as identified in playspace review	16,000
Waratah Square Reserve	Seacombe Gardens	Surplus as identified in playspace review	30,000
Totals			323,400

This table includes only those assets that Council has resolved to dispose of. Other assets may be identified for disposal and included in future iterations of this plan as resolved by Council.

Note that the assets identified for disposal are playspace assets only, due to their age and condition and investment in nearby facilities. Council has not resolved to dispose of the land outlined.

6. FINANCIAL SUMMARY

The preparation of this plan allows for alignment of operating, maintenance and renewal funding requirements in the LTFP to support necessary works.

This section contains the financial requirements resulting from all the information presented in the previous sections of this AMP.

Once adopted, this AMP will inform the next iteration of the LTFP. When compared to the adopted Draft 2015/16 LTFP, available funds for asset operating, maintenance and renewal amount to \$255.4 million while this plan identifies a resource requirement of \$216.6 million, resulting in a surplus of \$38.8 million 2015/16 – 2024/25), before any provision is made for major building renewal. A range of measures have been identified, including :

- A detailed review has been undertaken of the Council's road resealing / reconstruction practices which has found significant potential savings provided that an alternative philosophy and program of works is adopted.
- In accordance with Council's current Asset Management Policy upgrades of transport, open space, buildings and coastal walking trail assets have not been included in the plan unless there is a specific Council resolution to do so. Any new or upgrade works not contained in this plan will require prioritisation and approval by Council, having regard to whole of life costs and subsequent impacts on the LTFP.
- Other than some new stormwater, building and signage assets which Council has resolved to undertake, construction of new assets has not been considered.

It has been recommended that Council provision \$49 million for building renewal, being equivalent to accumulated depreciation on buildings as at 30 June 2014. This would result in a net \$10.2 million deficit in renewal expenditure over the life of the LTFP.

In the following sections of the plan a comparison is made between depreciation (calculated using the valuation depreciable amount) and renewal expenditure (driven by the renewal cost), however depreciation is unlikely to reflect actual renewal costs and therefore should not be used as a method to reliably inform required renewal expenditure.

In the absence of a current AMP, the LTFP has been based on depreciation. The purpose of this iteration of the AMP is to highlight areas for improved alignment of available funding in future iterations of the LTFP, based on more current information than previous versions. Therefore, the most relevant consideration for Council is the total forecast funding available for operating, maintenance and renewal of assets (plus approved new and upgrade works) compared to the total forecast requirement. This is outlined below:

Draft 2015/16 LTFP Projections for operations, maintenance & renewal	\$231.3 million
Draft 2015/16 LTFP Projections for approved new stormwater works	\$24.1 million
Less Draft AMP forecasts for Operations, Maintenance & Renewal (excluding building renewals) + new stormwater works	(\$216.6 million)
Less proposed provision for Building Renewals	(\$49.0 million)
Projected funding shortfall based on currently adopted LTFP & draft AMP, including provision for building renewals	(\$10.2 million)

Current financial ratios are contained in Council's LTFP and will be updated following the adoption of this AMP and subsequent alignment of works budgets.

6.1 Financial Statements and Projections

The financial projections are shown in Figure 6.1 for projected operating (operations and maintenance) and capital expenditure (renewal). Note that all costs are shown in real values.

Figure 6.1: Projected Operating and Capital Expenditure

Marion City - Projected Operating and Capital Expenditure ()

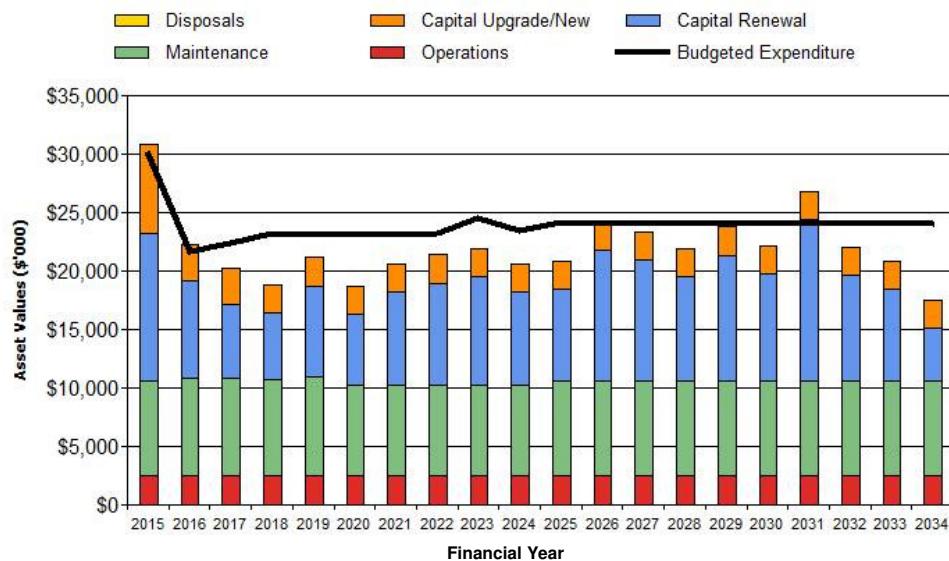


Figure 6.1.1a: Projected and LTFP Budgeted Renewal Expenditure

Marion City - Projected & LTFP Budgeted Renewal Expenditure (Strategy)

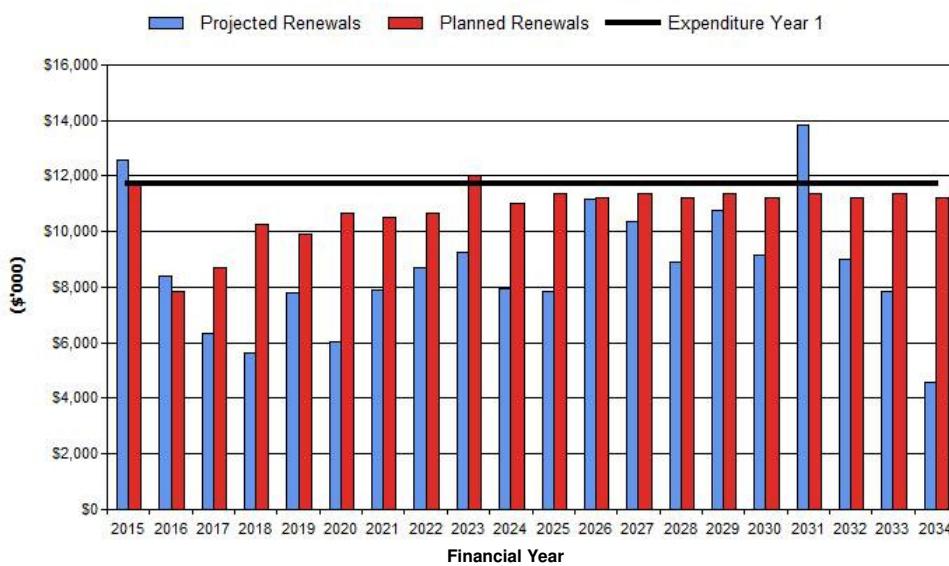


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in the LTFP. This does not include provision for major building renewals.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals (\$000)	2015/16 LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2015/16	\$12,587	\$11,747	-\$839	-\$839
2016/17	\$8,390	\$7,834	-\$556	-\$1,395
2017/18	\$6,356	\$8,681	\$2,325	\$929
2018/19	\$5,637	\$10,276	\$4,639	\$5,568
2019/20	\$7,800	\$9,918	\$2,118	\$7,686
2020/21	\$6,045	\$10,687	\$4,642	\$12,328
2021/22	\$7,921	\$10,534	\$2,613	\$14,940
2022/23	\$8,689	\$10,658	\$1,969	\$16,909
2023/24	\$9,245	\$12,012	\$2,767	\$19,676
2024/25	\$7,955	\$10,998	\$3,043	\$22,719
2025/26	\$7,848	\$11,347	\$3,499	\$26,218
2026/27	\$11,170	\$11,231	\$61	\$26,279
2027/28	\$10,369	\$11,347	\$978	\$27,257
2028/29	\$8,928	\$11,231	\$2,303	\$29,560
2029/30	\$10,789	\$11,347	\$558	\$30,118
2030/31	\$9,157	\$11,231	\$2,074	\$32,192
2031/32	\$13,837	\$11,347	-\$2,490	\$29,702
2032/33	\$9,008	\$11,231	\$2,224	\$31,925
2033/34	\$7,861	\$11,347	\$3,486	\$35,411
2034/35	\$4,554	\$11,231	\$6,677	\$42,088

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with the **corresponding** capital works program accommodated in the LTFP.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year LTFP.

Expenditure projections are in 2015/16 real values, and exclude provision for building renewals.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan (\$000)

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/New (\$000)	Disposals (\$000)
2015/16	\$2,468	\$8,120	\$12,587	\$7,645	\$0
2016/17	\$2,528	\$8,260	\$8,390	\$3,113	\$0
2017/18	\$2,536	\$8,242	\$6,356	\$3,113	\$0
2018/19	\$2,545	\$8,198	\$5,637	\$2,413	\$0
2019/20	\$2,545	\$8,392	\$7,800	\$2,413	\$0
2020/21	\$2,545	\$7,736	\$6,045	\$2,413	\$0
2021/22	\$2,545	\$7,740	\$7,921	\$2,402	\$0
2022/23	\$2,545	\$7,742	\$8,689	\$2,402	\$0
2023/24	\$2,545	\$7,745	\$9,245	\$2,402	\$0
2024/25	\$2,545	\$7,748	\$7,955	\$2,402	\$0

Table 6.1.2 is broken down into renewals by asset portfolio Figure 6.1.3 and Capital Upgrade / New by asset portfolio in Figure 6.1.4.

Table 6.1.3: Projected Capital Renewal Expenditure by Asset Portfolio for Long Term Financial Plan (\$000)

Year	Transport	Stormwater	Open Space	Buildings	Coastal Walking Trail	Projected Capital Renewal (\$000)
2015/16	9,168	0	2,630	446	342	12,587
2016/17	3,950	0	975	3,305	159	8,390
2017/18	4,277	0	530	1,402	146	6,356
2018/19	4,616	0	284	531	205	5,637
2019/20	5,839	0	980	775	205	7,800
2020/21	4,387	0	855	790	13	6,045
2021/22	6,076	0	1,060	630	155	7,921
2022/23	6,726	0	1,391	570	0	8,689
2023/24	6,307	0	2,176	683	79	9,245
2024/25	6,710	0	504	676	65	7,955

Table 6.1.4: Capital Upgrade/ New Expenditure by Asset Portfolio for Long Term Financial Plan (\$000)

Year	Transport	Stormwater	Open Space	Buildings	Coastal Walking Trail	Capital Upgrade/ New (\$000))
2015/16	74	2,371	0	5,200	0	7,645
2016/17	42	2,371	0	700	0	3,113
2017/18	42	2,371	0	700	0	3,113
2018/19	42	2,371	0	0	0	2,413
2019/20	42	2,371	0	0	0	2,413
2020/21	42	2,371	0	0	0	2,413
2021/22	31	2,371	0	0	0	2,402
2022/23	31	2,371	0	0	0	2,402
2023/24	31	2,371	0	0	0	2,402
2024/25	31	2,371	0	0	0	2,402

6.2 Funding Strategy

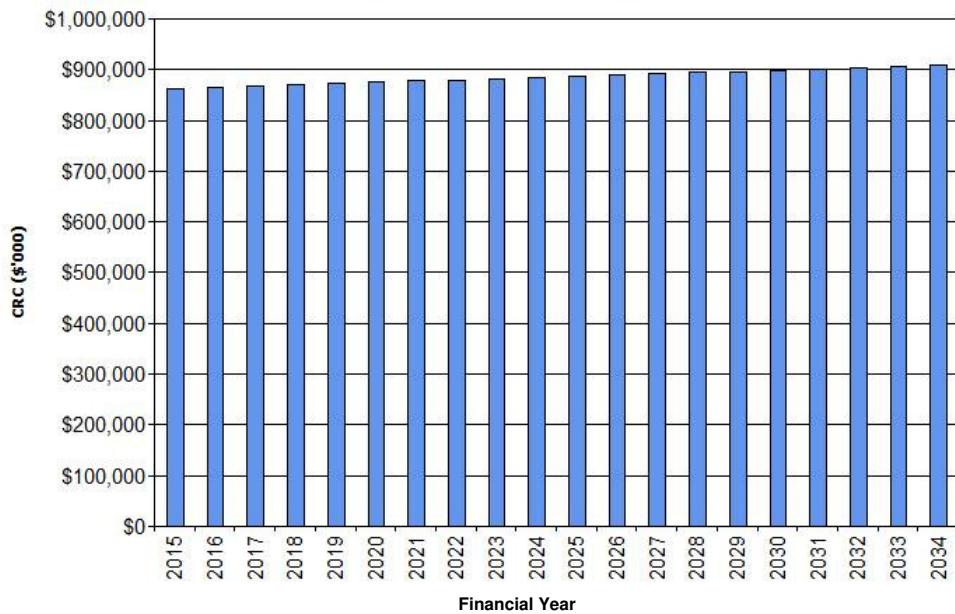
After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year LTFP.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock. Figure 6.3 shows the projected replacement cost asset values over the planning period in real values. The figure shows constant values due to new / upgrades not being considered in the preparation of this plan.

Figure 6.3: Projected Asset Values

Marion City - Projected Asset Values (Strategy)



Depreciation expense values are forecast in line with asset values as shown in Figure 6.3a.

Figure 6.3a: Projected Depreciation Expense

Marion City - Projected Depreciation Expense (Strategy)

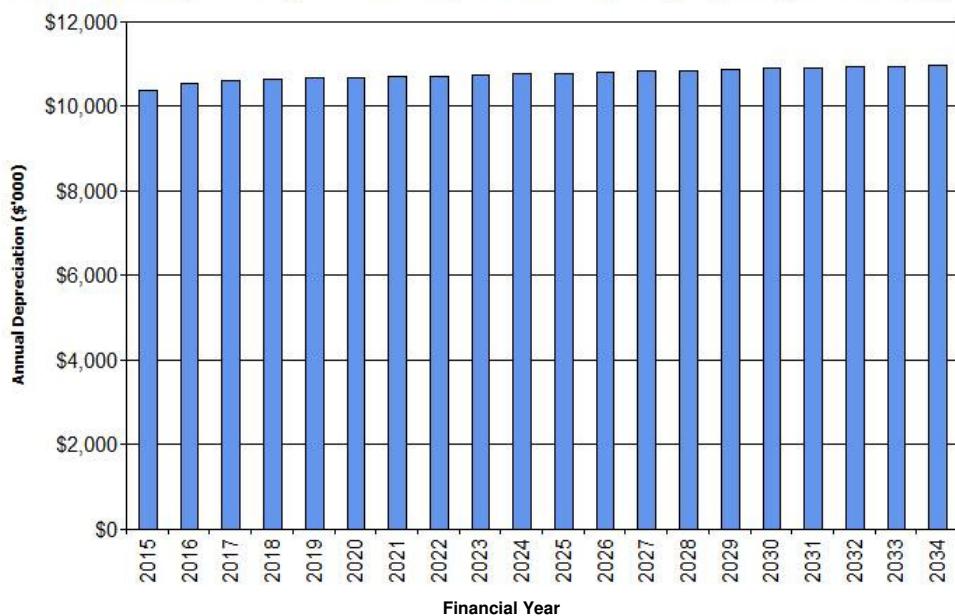
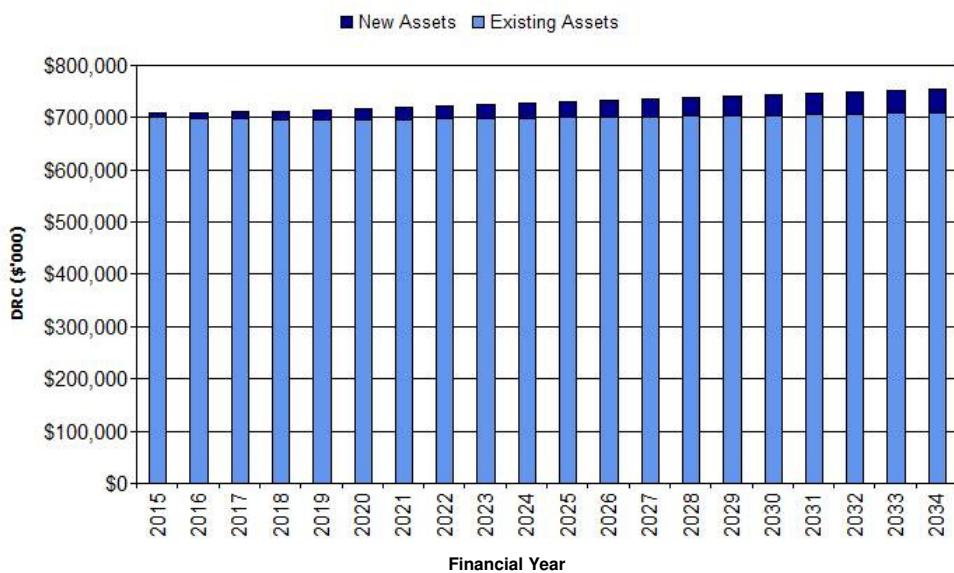


Figure 6.3b: Projected Depreciated Replacement Cost

Marion City - Projected Depreciated Replacement Cost (Strategy)



The marked increase in the depreciated replacement cost is an anomaly associated with low calculation of the CRC and hence DRC (Direct Replacement Cost) through valuations as previously noted. The DRC therefore increases as renewals associated with the higher actual renewal costs are undertaken.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AMP and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this AMP and risks that these may change are shown in Table 6.4

Table 6.4: Key Assumptions made in AMP and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Resealing program developed as part of this plan will be followed	The renewal forecast has been developed around an analysis of data that produces a more sustainable program of works without changes to existing service levels. This program of works will require change to be facilitated by Council in the processes that are currently adopted
Pavement reconstruction program developed as part of this plan will be followed	Analysis of data has shown that Council should develop a program of pavement reconstruction and detailed investigation. Currently in some cases roads are being resealed rather than reconstructed resulting in a short seal life and high lifecycle costs.
Kerb renewal assumptions are correct	It has been assumed that approximately 5% of the kerb length in a street will require renewal at the time of a reseal. This is based on a survey of kerb condition undertaken in 2010. Another survey of kerb condition is planned which will improve estimates on a segment by segment basis.
Assumed unit rates are correct	Unit rates in some cases have been based on valuations and in other cases have been compiled from first principles without reference to actual Council costs. In most cases however it is expected that unit rates will be reasonably accurate, particularly for the large asset groups of seals, pavements, kerb and footpaths. Where valuations have been used as a proxy for unit rates used in establishing renewal costs i.e. stormwater and open space (in some cases) the figures will be less reliable.

Key Assumptions	Risks of Change to Assumptions
Drainage network overall condition is fair to good based on remaining life derived from age profile and current CCTV information (assume 100 year useful life)	If poorer condition drain lines are identified by future CCTV this will change the service life and introduce a renewal program
No significant changes to legislation	WSUD mandatory – changes capital works program
Urban growth has a similar pattern to previous years	Increase growth changes capital works program priorities
Maintenance funds can retain existing levels of service	Additional funds required to meet desirable level of service and community expectations
Actual major storm event does not occur in the next 4 years	Extensive clean up changes maintenance and capital works priorities. Additional funds would be required for storm damage and clean up.
Design and operations staffing needs are adequately resourced staff	Unable to resource planned asset management activities
Unclear open space capitalisation threshold may mean that some renewals are being undertaken using maintenance expenditure	Estimated funds required for renewal may already be met through the maintenance budget
Assumption of 'like for like' replacement of open space assets has been made in the development of this plan, whereas historically significant upgrades have taken place	Underestimation of required budget
The desktop exercise to identify the required minor building renewals was comprehensive and adequate.	It is virtually certain that the desktop exercise undervalued the required renewals, which are estimated to be higher by a simple lifecycle calculation, and which should be modelled from conditions and useful lives of components, based on site inspections which take defects into account.
Existing valuations do not accurately reflect the renewable assets contained within the Coastal Walking Trail corridor that are under the control of Council. Hence sustainability ratios calculated within this plan cannot be considered reasonable.	The sustainability ratios will become more accurate following revaluations undertaken by Council.

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale⁸ in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations 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 is based on unconfirmed verbal reports and/or cursory inspections 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.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Tables 6.5.1. – 6.5.5

⁸ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in AMP - Transport

Data	Confidence Assessment	Comment
Demand drivers	C	Upgrade / new expenditure has been based on Council's recently adopted Asset Management Policy. If Council resolves to increase upgrade/ new expenditure amendments to future funding will be required.
Growth projections	B	Much of the Council has already been developed and a large amount of future growth is not predicted
Operations expenditures	E	Operations expenditure has not been directly considered in this plan but has been included within maintenance expenditure
Maintenance expenditures	A	Based on Council's actual costs
Projected Renewal exps. - Asset values	B	Asset values are generally based on costs to renew the asset
- Asset residual values	C	Residual values have been ignored in renewal planning costs, since they will not be realised
- Asset useful lives	B	Established useful lives have been used
- Condition modelling	B	For seals and pavements a great deal of work has been done on modelling existing condition data, although in some cases the data has been shown to be inaccurate
- Network renewals	B	Network renewals have been used for signage and kerbing
- Defect repairs	N/A	N/A
Upgrade/New expenditures	B - C	Generally no upgrade / new expenditure has been assumed. This will be the subject of future resolutions of Council
Disposal expenditures	N/A	N/A

Table 6.5.2: Data Confidence Assessment for Data used in AMP- Stormwater

Data	Confidence Assessment	Comment
Demand drivers	B	The two Stormwater Management Plans have provided reliable information on demand drivers.
Growth projections	B	Growth projections are based development potential from Housing id Report (2011), Jensen Planning SWMP Report (2011) and 30 year plan for greater Adelaide.
Operations expenditures	C	Work orders have not been implemented for these activities.
Maintenance expenditures	C	Work orders have not been implemented for these activities.
Projected Renewal exps. - Asset values	B	Unit rates are used which are based on current contract rates and Rawlinson handbook.
- Asset residual values	B	Low salvage/reuse value.
- Asset useful lives	D	Insufficient research and testing in useful life predictions.
- Condition modelling	E	Insufficient research and testing on the correlation between useful life and condition of asset.
- Network renewals	C	Condition assessment is based on sample CCTV survey. Further condition inspections are required to improve predictions.
- Defect repairs	C	Work orders have not been implemented for these activities.
Upgrade/New expenditures	B	Decision to upgrade is based on SWMP projects, CCTV assessments, drainage capacity analysis and known flooding and pipe capacity problems.
Disposal expenditures	B	Unit rates for disposal are based on contract rates.

Table 6.5.3: Data Confidence Assessment for Data used in AMP – Open Space

Data	Confidence Assessment	Comment
Demand drivers	A	Open space planning documents detail community demand via consultation mechanisms
Growth projections	B	Growth is based on demand for new assets
Operations expenditures	C	Based on existing budget, growth predicted though increased asset base through upgrades
Maintenance expenditures	C	Based on existing budget, growth predicted though increased asset base through upgrades
Projected Renewal exps. - Asset values	C	Based on valuation data rather than condition based renewals
- Asset residual values	A	No residuals have been assumed
- Asset useful lives	C	Lives will not play a significant role in the assets requiring renewal during the course of the plan
- Condition modelling	C	Based on valuation data
- Network renewals	C	Based on valuation data
- Defect repairs	D	Defect repairs not considered
Upgrade/New expenditures	C	Asset upgrades as appearing in other open space planning documents is not considered in the development of this version of the AMP
Disposal expenditures	C	Disposal of existing playgrounds where they are not renewed is unknown

Table 6.5.4: Data Confidence Assessment for Data used in AM Plan - Buildings

Data	Confidence Assessment	Comment
Demand drivers	C	The recommendations of Councils draft facility review plan have not been allowed for in the development of this plan
Growth projections	B	The assumption of 0% growth is close to the actual situation.
Operations expenditures	B	
Maintenance expenditures	B	
Projected Renewal exps. - Asset values	D	Projected building renewal are not included in this plan. Building renewal plans are to be developed over the next 2 years.
- Asset residual values	NA	Residual values provided by external valuers.
- Asset useful lives	NA	Aged building nearing the end of their useful lives..
- Condition modelling	NA	See comments above.
- Network renewals	NA	See comments above.
- Defect repairs	D	Based on desktop identification.
Upgrade/New expenditures	B	Based on preliminary cost estimates
Disposal expenditures	B	

Table 6.5.5: Data Confidence Assessment for Data used in AM Plan – Coastal Walking Trail

Data	Confidence Assessment	Comment
Demand drivers	B	
Growth projections	A	Data based on historical records and professional opinions
Operations expenditures	A	No operations costs are considered in preparation of the plan
Maintenance expenditures	A	Proactive maintenance program has been developed
Projected Renewal exps. - Asset values	B	Renewal projections based on up to date register of assets
- Asset residual values	D	Valuations based on out of date register
- Asset useful lives	A	No residual value is expected.
- Condition modelling	B	Harsh coastal environment creates uncertainty
- Network renewals	B	Full visual condition audit has been undertaken.
- Defect repairs	E	No network assets currently considered
Upgrade/New expenditures	D	No specific data available
Disposal expenditures	A	No new or upgraded assets unless approved by Council

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

The finance system used by the City of Marion is Authority, a product of Civica Pty Ltd. The financial modules within Authority include the following:

- General Ledger
- Receipting
- Payroll
- Rate Debtors/Property Management
- Purchasing
- Accounts Receivable/Accounts Payable
- Inventory
- Bank Reconciliation
- Estimates
- Contracts
- Loans
- Plant
- Work Orders
- Capital Value Register (CVR)

Within the Work Orders module, there are links to the General Ledger, the Plant Module and the AIM system.

Within the Capital Value Register, the following functions/programs are available:

- Asset capitalisation
- Asset disposal
- Depreciation
- Revaluation

All of the above programs perform automatic updates to the General Ledger via Control Accounts created for each Asset Record.

Depreciation charges are processed monthly according to the useful life (taking into consideration residual values) recorded against each Asset Record.

Infrastructure Assets are comprehensively revalued every 3-5 years and also have annual “desktop” valuations.

The Capital Value Register incorporates the following Asset Classifications:

- Land
- Buildings
- Plant & equipment
- Furniture & fittings
- Other
- Other infrastructure
- Intangibles

Infrastructure Assets including Roads, Drains, Kerb, Footpaths, Bridges and Traffic Devices are held on systems external to Authority, e.g. Pavement Management System, Spreadsheets. External Valuers use this data as a basis for providing valuations which are added to the Balance Sheet Control Accounts via a general journal.

Accountabilities for financial systems

The responsibility for the integrity of the finance system is assigned to the Finance Manager and senior Accounting staff.

Accounting standards and regulations

The accounting standards and guidelines that must be complied with are as follows:

- *Local Government Act 1999*
- Local Government General Regulations 1999
- Local Government (Financial Management) Regulations 2022
- State and Federal Legislation (e.g. taxes)
- Australian Accounting Standards set by the Australian Accounting Standards Board (AASB)
- City of Marion financial policies and procedures

Capital/maintenance threshold

Assets should have a useful life of greater than one year in order for the expenditure to be capitalised and have a value above the Materiality Thresholds described below.

Any expenditure considered to be Capital must also pass a materiality test. Materiality levels are set so as not to misstate Financial Statements and to provide a guide whether it is practical from an Administrative perspective that expenditure is capitalised.

Table 7.1: Materiality Levels

Asset Group	New/Replacement
Infrastructure	\$5,000
Land	\$5,000
Buildings	\$5,000
Furniture & Fittings	\$3,000
Equipment	\$3,000
Other	\$3,000

Networked/Aggregate Assets - Expenditure can still be capitalised on items that fall below materiality thresholds individually but operate together as a cohesive whole to form a substantial/significant total value. Examples are the Computer Network, Library Books, and Reserve Furniture.

7.1.2 Asset management system

An asset management system is a combination of processes, data and software applied to provide the essential outputs for effective AM such as reduced risk and optimum infrastructure investment.

Council utilises a number of asset management systems which contribute to the overall management of the long term planning of infrastructure. These include Stormwater Management Database in the MapInfo Exponare and MapInfo Professional GIS linked to Microsoft spreadsheets, IBM Lotus Notes Customer Request System and Authority financial and asset modules.

The current systems are being reviewed with the aim of integrating asset information into the corporate AM system.

Asset registers

A database of data collected in the field was used to compile this AMP.

Linkage from asset management to financial system

Further integration of the asset management systems and processes and the LTFP are being developed.

Accountabilities for asset management system and data maintenance

The responsibility of asset management planning system and data maintenance is assigned to the Manager Strategic Assets and Strategic Asset Services staff.

Required changes to asset management system arising from this AM Plan

Reviews and improvements to asset management systems are ongoing and part of the organisation process towards best practice. Improvements are implemented as required.

7.2 Improvement Program

The asset management improvement plan generated from this AMP is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Undertake condition assessment of assets	Mgr. Strategic Assets	Recurrent	December 16
2	Develop an optimised program of infrastructure repair / renewal	Mgr. Strategic Assets & Mgr. Infrastructure	Recurrent	December 16
3	Develop a program of bus shelter renewal and compliance upgrade	Mgr. Strategic Assets & Mgr. Infrastructure	\$1.2m	2020
4	Prepare a service level and community consultation plan for assets linking with the Council Plan, LTFP and AMPs	Mgr. Strategic Assets & Mgr. Infrastructure	\$30,000	December 15
5	Implement the two adopted Stormwater Management Plans	Infrastructure	Consultancy and Infrastructure and Strategic Assets staff	2034
6	Prepare Stormwater Management Plans for the remaining catchments in the city ie east of Sturt River and urban area abutting Field River	Infrastructure	Consultancy and Infrastructure and Strategic Assets staff	2016
7	Prepare Operations and Maintenance Management Plan for infrastructure. The plan to include service levels, inspection frequency , maintenance activities and response times	Infrastructure	Infrastructure staff	2016
8	Review asset management and procedural frame work for inter-departmental/work group areas, update asset register, condition rating etc	Strategic Assets	Strategic Assets staff	2016
9	Continue annual CCTV surveys to inspect and assess the performance and condition of the stormwater assets to determine remaining life	Infrastructure and Strategic Assets	Infrastructure and Strategic Assets staff	Annual program

Task No	Task	Responsibility	Resources Required	Timeline
10	Integrate asset and financial systems	Strategic Assets	Strategic Assets staff	2016
11	Prepared long term projection of depreciation expenses on assets based on consumption.	Strategic Assets	Strategic Assets staff	2016
12	Undertake annual review and update the SAM Plan and integrate with LTFP. The capital works selection criteria and decision making process is to be included in the review	Infrastructure and Strategic Assets	Infrastructure and Strategic Assets staff	Annual program
13	Develop a reserve name and numbering system linked to GIS and Asset Management System	Strategic Assets & Open Space	Strategic Assets & Open Space Staff	2018
14	Develop condition rating methodologies for open space assets that will allow informed decision making for asset renewal	Strategic Assets & Open Space	Strategic Assets & Open Space Staff	2016
15	Undertake further research on actual renewal costs of open space assets and develop realistic unit rates for same	Strategic Assets & Open Space	Strategic Assets & Open Space Staff	2016
16	Develop unit rates for open space assets	Strategic Assets & Open Space	Strategic Assets & Open Space Staff	2016
17	Review the LTFP against proposed renewals for assets with a view to matching the funds required or altering the service levels to match sustainable funds available through the LTFP	Strategic Assets & Finance	Strategic Assets & Finance staff	Ongoing post AMP endorsement
18	Review the method of determining required renewals. Adopt forward modelling based on component replacement values, component conditions, and useful lives.	Strategic Assets & Finance	Strategic Assets & Finance Staff	2017
19	Improve asset and financial systems	Strategic Assets & Finance	Strategic Assets & Finance staff	Ongoing
20	Undertake annual review and update the Buildings AM Plan and integrate with LTFP. The capital works selection criteria and decision making process is to be included in the review.	Infrastructure and Strategic Assets	Strategic Assets & Finance staff	Annual program

7.3 Monitoring and Review Procedures

This AMP will be reviewed and updated during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AMP has a life of 4 years, and is due for complete revision within 24 months of each Council election (November 2016) to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the Council's LTFP.

7.4 Performance Measures

The effectiveness of the AMP can be measured in the following ways:

- The degree to which the required projected expenditures identified in this AMP are incorporated into the organisation's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the AMP,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the organisation's Strategic Plan and associated plans,

- Council's Asset Renewal Funding Ratio achieving the target of 1.0.

8. REFERENCES

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM

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City of Marion, 2015 'Asset Management Policy',

City of Marion, 'Annual Plan and Budget'.

Asset Engineering Pty Ltd, 2013, 'Remaining life of road seals and comparison against Councils 14/15 Works Program

Asset Engineering Pty Ltd, 2013, 'DTIMS Works Program Review'

Asset Engineering Pty Ltd, 2014, 'Seal and Pavement, Determination of Remaining Life' (DRAFT)

9. APPENDICES

Appendix A Current and Desired Service Levels

Appendix B Data Sources and assumptions

Appendix A Current and Desired Service Levels

Current and Desired Service Levels - Transport				
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	<u>Seals & pavements</u> Provide a smooth road with no potholes	Customer service requests	293 requests under 'roads, maintenance'	To be reviewed
	<u>Kerb</u> Provide kerb & water table of a standard to provide the transfer of stormwater along a road with minimal pooling.	Customer service requests	94 requests under 'general enquires / inspection required'	To be reviewed
	<u>Traffic Control Devices</u> Provide an effective network of traffic control devices	Customer service requests	51 requests under 'traffic control devices'	To be reviewed
	<u>Bus shelters</u> Provide a functional network of bus shelters at key locations	Customer service requests	34 requests under 'bus shelters'	To be reviewed
Safety	<u>Bridges</u> Provide a safe network of vehicular & pedestrian bridges.	Customer service requests	3 requests under 'bridge'	To be reviewed
	<u>Footpath</u> Provide a safe network of pedestrian paths.	Customer service requests	1252 requests under 'footpaths'	To be reviewed
	<u>Signs</u> Provide an effective, safe network of traffic signs	Customer service requests	355 requests under signs: road traffic, advisory, directional, street names, traffic / school	To be reviewed
TECHNICAL LEVELS OF SERVICE				
Renewal	Seal	Adherence to revised works program	Single treatment only used for renewal (AC10) based on rudimentary intervention levels.	To be reviewed
	Pavement	Budget	\$44.0m (10 years)	
			Council has not undertaken an extensive reconstruction program for some years. \$0	To be reviewed and validated \$18.5m (10 years)

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
Kerb		Budget	LTFP kerb program based on increasing expenditure over that in place at the moment	Revised and optimised our works program
			\$23.7m (10 years)	\$3.6m (10 years), maintaining kerb replacement at current (2015) levels.
Footpath		Enhanced renewals	Current defect repair over entire network (2014 budget of \$1.2m) will take approximately 18 years.	Review the defect repair time
		Budget	\$16.6m (10 years of LTFP)	\$14 million (10 years)
Traffic Control Devices		Enhanced renewals	Provisions within LTFP are not based on detailed analysis	Maintain traffic control devices to meet community needs related to consultation through local area traffic management studies.
		Budget	\$721,000 (10 years of LTFP)	\$496,000 (10 years)
Signs		Enhanced renewals	Budget for signage is based on historic practice.	Proposed budget is based on matching straight line depreciation calculations
		Budget	\$590k (10 years of LTFP)	\$1,840k (10 years)
Bus shelters		Enhanced renewals	Budget for bus shelters is based on historic practice	To be reviewed. DDA compliance by 2020
		Budget	\$504k (10 years of LTFP)	\$1,271k (10 years)
Bridges		Enhanced renewals	Budget for bridges is based on historic practice	Renewals based on replacing some footbridges and significant defect repair
		Budget	\$584k (10 years)	\$313k (10 years)
Upgrade	All apart from signage	No upgrades	Upgrades take place	Impact of upgrades / new assets not modelled in this AMP

Current and Desired Service Levels - Stormwater

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	Provide an efficient method of collection and environmentally friendly disposal of stormwater runoff	Community forum feedback. Number of customer complaints.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Function	Provide a safe and effective stormwater drainage network	Frequency of property flooding.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Capacity/Utilisation	Ensure stormwater drainage network meets capacity requirements	Number of customer requests relating to property/street flooding and pollution discharges into waterways.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
TECHNICAL LEVELS OF SERVICE				
Operations & Maintenance	Programmed maintenance to clean drain and pit, street sweeping and emptying GPTs .	Number of customer requests/complaints.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
		Planned maintenance activities are completed to schedule.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Renewal	Activities that review the existing condition and capacity of the drainage network	Structural assessment of poor condition drains from the annual CCTV condition and defects inspection.	Risk based approach to replace assets identified as being in poor structural condition.	Risk based approach to replace assets identified as being in poor structural condition.
Upgrade/New	Activities that improve/upgrade the existing drainage network to meet 1 in 5 ARI storm design requirements and to reduce hazardous flooding from 1 in 100 ARI storm.	Stormwater Management Plan and Flood Plain Mapping to identify drainage network deficiencies.	Implement capital works program based on Drainage Priority Matrix.	Implement capital works program based on Drainage Priority Matrix.

Current and Desired Service Levels – Open Space

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	Well maintained and suitable Open Space	Customer service requests	Under review	<1,000 requests per annum for trees <500 requests for park infrastructure
Accessibility	Open Space assets will be accessible during normal operating business hours	Customer service requests relating to availability.	Under review	95% compliance. In this instance where an Open Space is closed to users for reasons such as maintenance, upgrading, renewal or a Council related public event or non-Council events, then appropriate notification shall be given to relevant users in accordance with Council's Public Consultation Policy and the requirements of Council's Community Land Management Plans.
Function	Open Space assets meet community need	To be defined	Under review	>60% customer survey satisfaction
Responsiveness	Response time to customer requests	Review of closure times for Customer Service Requests	Under review	>90% of all requests adequately responded to within target
TECHNICAL LEVELS OF SERVICE				
Condition	Condition assessment of Open Space network every 3 years	Assessment of condition data collected for valuation purposes.	Under review	Open Space condition index to be no worse than an average 3 out of a possible 5
Accessibility	Provide all weather access to category 1, 2 and 3 reserves.	Customer service requests relating to access	Under review	<20 requests / complaints relating to access of Open Space (within category 1-3)
Cost Effectiveness	Provide services in cost effective manner	Maintenance / Operational costs in line with industry standards	Under review	To be assessed
Safety	Undertake risk based inspection of Open Space network every three years	Audit of all Open Space undertaken in line with relevant standards	Under review	Reactive and proactive maintenance programs optimised against risk profiling.

Table 3.4.4: Current and Desired Service Levels - Buildings

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	Ensuring that buildings are safe, clean, efficient, and accessible.	Community forum feedback. Number of customer complaints.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Function	Ensuring that the services offered by buildings are relevant and efficient.	Community forum feedback. Number of customer complaints/requests.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Capacity/Utilisation	Ensuring that the buildings provide a useful and viable service to the community.	Community forum feedback. Number of customer complaints/requests	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
TECHNICAL LEVELS OF SERVICE				
Operations and maintenance.	Programmed maintenance to continue the level of services.	Number of customer requests/complaints. Planned maintenance activities are completed to schedule.	Under review – see Improvement Plan (table 7.2)	Under review – see Improvement Plan (table 7.2)
Renewal	Renewal of components at end of life to continue the level of service.	Required works identified by staff in desktop exercise are achieved.	Risk based approach to replace assets identified as being in poor structural condition.	Risk based approach to replace assets identified as being in poor structural condition.
Upgrade/New	Provide new facilities or levels of service as required.	Building Management Plan to identify future needs.	Implement capital works program based on Priority Matrix.	Implement capital works program based on Priority Matrix.

Table 3.4.5: Current and Desired Service Levels – Coastal Walking Trail

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	Desired Level of Service
COMMUNITY LEVELS OF SERVICE				
Quality	Customer satisfaction	Customer Survey	Unknown	To be determined
Function	Meets user requirements	Customer Service Requests	10 Customer Service Requests were logged in the last year.	To be determined
Safety	Does not cause user hazard	Insurance Claims	Unknown	Nil Insurance Claims
TECHNICAL LEVELS OF SERVICE				
Condition	Average Condition of Assets (Average Weighted by CRC of assets)	Condition scores (1, good – 5, bad) at periodic inspections. (% consumption)	1.87, average all assets inspected (47%)	Maintain at current level
Condition	Assets not providing acceptable level of service	Assets past expiry	6 Assets requiring replacements	Nil Assets requiring replacements
Condition	Assets requiring immediate repair/maintenance	Defects recorded at periodic inspections	<p>200 defects recorded at last inspection:</p> <ul style="list-style-type: none"> • Environmental Defects – Erosion, vegetation encroachment, water ponding etc. 74 Locations • Safety Defects – Trip hazard, slippery path 65 Locations • Structural Defects – Corroded steel, split timber etc. 61 Locations 	To be determined

Appendix B Data Sources and assumptions

The following data sources and assumptions have been used in the compilation of this report:

TRANSPORT ASSET PORTFOLIO

Road Seal & Pavement

In 2012 ARRB collected road condition attribute data across the Council network, including:

- Visual data populated via interrogation of images i.e. cracking surface defects etc.
- Surface texture
- Roughness
- Rutting

This data was subsequently analysed to produce a program of works and estimated remaining life of each seal and pavement, in part initially by ARRB and later by Asset Engineering Pty Ltd. Renewal costs have been calculated with reference to council's actual costs in undertaking works, council contracts and Rawlinsons Australian Construction Cost Guide.

Kerbings

In 2010 Council undertook an extensive condition audit of its kerb network, which found approximately 5% of Councils kerb network was below level of service standards mainly due to sections of kerb that were cracked and lifted by trees mostly. Council's kerb replacement program is predominantly developed around the road resealing program with small sections of kerb being replaced prior to a reseal.

For the preparation of the AMP it has been assumed that 5% of the adjacent kerb is replaced in each street prior to a reseal taking place. Renewal costs have been calculated with reference to council's actual costs in undertaking works, council contracts and Rawlinsons Australian Construction Cost Guide.

Footpaths

Council currently (and for some time) has not undertaken renewal of footpaths on a complete segment basis, but rather continually 'repairs' defects (trip steps / cracked slabs) on footpaths through replacement of small sections of path.

Council's 2014/15 budget had a figure of \$1,191k for such works and based on the network coverage undertaken each year, the entire network would likely be expected to be completed over a period of 18 years. This AMP has been based on increasing this funding to \$1.4m per year which will enable Council to complete the entire network over a period of approximately 15 years.

On average over the last 6 years there has been \$211k pa (up to 2014/15) allocated to the construction of new footpaths. It should be noted that this AMP has not included new footpath construction.

Traffic Control Devices

The traffic control device data compiled by APV Valuers (from Council data) has been used in the development of this AMP. The remaining life documented by APV has been used in the development of the projected renewals.

Renewal Costs have been estimated from Councils valuation CRC with no allowance for a residual i.e. renewal cost = depreciable amount + residual. This was found to reflect estimated actual renewal costs.

Signage

The sign data compiled by APV Valuers (from Council data) has been used in the development of this AMP.

An annual renewal cost has been estimated from the valuation register by recalculating the annual depreciation figure assuming no residual value and straight line depreciation. Since there are many thousands of signs, all in varying condition states it is considered that this method establishes a reasonable sustainable renewal estimate.

Bus Shelters

Data relating to bus shelters has been taken from 2014 valuation information and a condition assessment undertaken by Maloney Field Services. A renewal cost of \$9,000 has been defined through the preparation of this AMP to reflect a replacement of existing shelter infrastructure to current service levels and Council construction techniques.

Bridges

The renewal year of bridges has been derived from a 2011 survey of the bridge network undertaken by DPTI's Transport Services. Bridges are classified as either footbridges or road bridges and it is noted that no road bridges are due for complete renewal within the term of the AMP whereas there are several footbridges due for renewal within the term of this AMP.

Also included in the renewal costs is a list of capital partial renewal works identified by DPTI during the 2011 survey. Renewal Costs have been estimated from Councils valuation CRC with no allowance for a residual i.e. renewal cost = depreciable amount + residual. This was found to reflect estimated actual renewal costs.

STORMWATER ASSET PORTFOLIO

Closed circuit television video (CCTV) is the method of inspecting the structural condition and deterioration of underground drainage.

To date 9.3% of the total drainage network has been reviewed by the CCTV survey which represents 49.6% of the replacement value of the total drainage network. Based on this review and that the drainage network has a remaining life greater than 40 years, it is assumed that the majority of the drainage network is in fair to good condition. Further CCTV inspection of drains will be undertaken to validate this assumption and included in the next review of this AM plan.

Stormwater Management Plans have also been developed for Hallett Cove Creeks and Marion-Holdfast which have informed the preparation of this plan and the LTFP.

OPEN SPACE ASSET PORTFOLIO

Playgrounds / Playspace

Consulting Coordination Pty Ltd audit of playgrounds was conducted in 2012 has been used to define the priority (year) for renewal of playgrounds and the cost of that renewal where available.

Maloney Valuations 2011 have been used to define the renewal costs of existing playgrounds where the Consulting Coordination Pty Ltd information was not available.

Tennis Courts

"Marion Tennis Facilities, March 2013" (Tennis SA) has been used as the basis for determining the renewal cost and date for all Council Courts not coming under the jurisdiction of clubs. In addition, courts were broken down into components (acrylic surface, asphalt, and base) and individual unit rates used to predict a renewal program.

It should be noted that tennis courts occupied exclusively by clubs and not available for public use have been removed from this version of the AMP since these are the responsibility of the clubs to maintain and renew under existing lease arrangements.

Irrigation:

This AMP has been developed using an investigation and report entitled "Landscape Irrigation Management Plan", prepared by IPOS Consulting in June 2013. This report has assumed that in line with Council's adopted Irrigation Management Plan, whereby only portions of reserves where activity is centred will be irrigated.

In addition it has assumed that reserves with an irrigation system that is currently inactive will remain that way i.e. no allowance has been made for renewal of the asset. The exception to this is where the reserve is where the reserve is one of the reserves proposed to be irrigated from the Oaklands Park Aquifer Storage and Recovery Scheme.

Ancillary Assets:

Maloney Valuations 2011: The Maloney infrastructure valuations have been used to define the renewal costs and dates of all the other assets contained within the open space asset portfolio such as sports courts, lighting, carparks, artwork, structures, fences, bins, paths etc.

BUILDING PORTFOLIO

At present, the City estimates required renewals by in desktop exercises. A recommendation is that regular condition assessments should be undertaken (e.g. every 3 years) to monitor the deterioration of the asset stock and to provide accurate information for renewal modelling. A recommendation has been included in the Improvements Plan.

COASTAL WALKING TRAIL PORTFOLIO

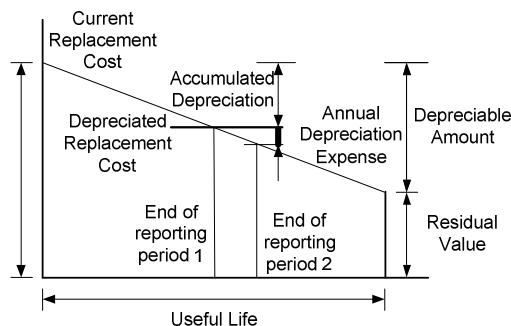
Condition was monitored by undertaking a visual inspection of every asset and logging condition attributes:

- Structural Condition – A score of 1-5 was assigned based on apparent structural adequacy of the section/item in question, identified only via a visual assessment.
- Age – A score of 1 to 5 was determined based on the apparent age of the asset as a proportion of its useful life.
- Visual – A score of 1-5 was assigned based on the visual appearance of an asset. An asset that is visually as new was assigned a 1 with assets subject to graffiti, staining etc given higher scores.

ASSET VALUATIONS

The value of assets as appearing in Councils audited financial statements as 30 June 2014 are shown below.

Current Replacement Cost	\$884.2 m
Depreciable Amount	\$609.5 m
Depreciated Replacement Cost ⁹	\$699.9 m
Annual Depreciation Expense	\$10.4 m



⁹ Also reported as Written Down Current Replacement Cost (WDCRC).