Sorell Council



Asset Management Strategy



Version 2 August 2018

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Asset Management Strategy

1. EXECUTIVE SUMMARY

This asset management strategy was prepared to assist council to improve the way it delivers services from its major infrastructure including Transport (roads), bridges, footpaths, stormwater drainage, buildings and land improvements, these infrastructure assets have a total replacement value of \$351m as of 30 June 2018.

The asset management system is to enable Council to show -

- How its asset portfolio will meet the service delivery needs of its community into the future;
- Enable Council's asset management policies to be achieved, and
- Ensure the integration of Councils asset management with its long-term strategic plan.

Adopting this asset management strategy will assist council in meeting the requirements of national sustainability frameworks, *State Local government Act 1993* and providing services needed by the community in a financially sustainable manner.

The asset management strategy is prepared following a review of the council's service delivery practices, financial sustainability indicators, asset management maturity and fit with council's vision for the future outlined in the Sorell Council's Strategic Plan. The strategy outlines an asset management improvement plan detailing a program of tasks to be completed and resources required to bring council to a required 'core' level of asset maturity and competence.

2. STRATEGY OUTLOOK

- 1. Sorell Council is in a good position to maintain assets at current service level in the next 10 years as many of the long-lived assets are well below their useful life and in reasonable condition. The only proviso is the implications of the development of the stormwater catchment models and the associated proposed 10-year capital program, which is currently under development and will done by 30 June 2019.
- 2. When examining the life cycle expenditure projected over the next 10-year period council has set aside sufficient funding to maintain the assets at current levels of service within council's available revenue stream based on current knowledge. There is minimal available funding for new or upgraded assets.
- 3. Our current asset and financial management maturity is well on its way to being above the core level required.

What we will do

Our aim is to provide the services needed by the community in a financially sustainable manner. Achieving financial sustainability requires balancing service levels and performance with cost and risk.

What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. The major activities and projects not to be undertaken include –

- Any significant capital intensive new and upgrade asset improvement programs,
- Bring all roads within the network up to Municipal Standard whether sealed or unsealed,
- Seal Councils unsealed network,
- Extend the SW reticulation into current un-serviced rural areas,
- Ensure all council buildings are completely DDA compliant,
- Upgrade the concrete stormwater manhole lids to a more effective and WHS compliant, aluminium lids for ease of handling and entry,
- Upgrade all road side guardrails to latest Australian standard,
- Road signage will not be fully compliant with the Australian Standards,
- It is unknown whether council will be able to completely fund the stormwater capital upgrade program, which will be known once catchment plans are developed.

3. INTRODUCTION

A key issue facing local governments throughout Australia is the management of ageing assets in need of renewal and replacement.

Infrastructure assets such as roads, stormwater pipe network, drains, bridges and public buildings present particular challenges. Their condition and longevity can be difficult to determine. Financing needs can be large, requiring planning for large peaks and troughs in expenditure for renewing and replacing such assets. The demand for new and improved services adds to the planning and financing complexity.

The national frameworks on asset planning and management and financial planning and reporting endorsed by the Local Government and Planning Ministers' Council (LGPMC) require councils to adopt a longer-term approach to service delivery and funding comprising:

- A strategic longer-term plan covering, as a minimum, the term of the Council's current Strategic Plan (2014-2018) and:
 - $\circ~$ bringing together asset management and long term financial plans,
 - $\circ~$ demonstrating how council intends to resource the plan, and
 - o consulting with communities on the plan
- Annual budget showing the connection to the strategic objectives, and
- Annual report with:
 - $\circ~$ explanation to the community on variations between the budget and actual results ,
 - $\circ~$ any impact of such variances on the strategic longer-term plan,
 - report of operations with review on the performance of the council against strategic objectives.

4. CURRENT SITUATION

be renewed/upgraded.

Sorell Council approved the inaugural Asset Strategy in June 2014. There were a number of actions documented in the strategy. Process against those is shown below -

4.1 Action Plan

Transport

• A detailed Transport Network Condition Assessment on all the wearing surfaces is to be undertaken in the 2014-15 financial year.	V
 Implement asset hierarchy for the Transport Network as per Tasmanian Audit Office Road Depreciation report. 	V
 Re-segment Transport assets to ensure GIS and Asset Register are synchronised. 	۷ *
 Determine and implement transport network Levels of Service and Intelligent numbering system. 	V
 Continue to report on Councils assets utilising the IPEWA (Institute of Public Engineering Works Australasia) NAMS.PLUS3 network, ensuring delivery of Council's asset management processes to tested model. 	V
 Council will change asset and finance systems (scheduled for October 2014) to ensure required functionality is available. This also supports Council's Common Services strategy and allows the sharing of system expectise 	V
 expertise. Re-valuation of all assets to be undertaken once all data has been transferred into new systems. 	V
Stormwater Drainage	
 Determine and implement stormwater Levels of Service and Intelligent numbering system. 	v *
 Asset management and operations staff to assess the current stormwater network identifying areas where stormwater infrastructure is below the capacity outlined in the determined levels of service/design standards. 	?
 Asset useful lives within areas of deficiency will require an adjustment to ensure that remaining useful lives reflect when assets are projected to be renewed/upgraded. 	٧
 Asset management and operations staff to assess the current stormwater network identifying areas where stormwater infrastructure exposes the community to safety/risk issues. 	?
 Assets identified for replacement due to safety/ risk issues will require remaining useful lives adjustment to reflect when assets are projected to 	٧

- Council will change asset and finance systems (scheduled for October 2014) to ensure required functionality is available. This also supports Council's Common Services strategy and allows the sharing of system expertise.
- Re-valuation of all assets to be undertaken once all data has been v transferred into new systems.
- Stormwater asset condition assessment based on risk and criticality, to ? more accurately predict asset renewal based upon physical condition and assign well informed asset useful lives.

Buildings, Reserves and Open Spaces

- A detailed Asset Data Collection Survey undertaken concurrently with a detailed Asset Condition Assessment on all buildings, open spaces and reserves is to be undertaken in the 2014-15 financial year.
- Continue to report on Councils assets utilising the IPEWA (Institute of Public Engineering Works Australasia) NAMS.PLUS3 network, ensuring delivery of Council's asset management processes to tested model.
- Council will change asset and finance systems (scheduled for October √ 2014) to ensure required functionality is available. This also supports Council's Common Services strategy and allows the sharing of system expertise.
- Council will change asset and finance systems (scheduled for October √ 2014) to ensure required functionality is available. This also supports Council's Common Services strategy and allows the sharing of system expertise.
- Re-valuation of all assets to be undertaken once all data has been v transferred into new systems.

✓ Complete

- * Due to the asset creation process required in the new cloud base Assetic System, asset numbering is now sequential and non-intelligent.
- ? Awaiting the development of Stormwater network models for Sorell, Midway Point and Southern Beaches by the end of financial year 2018/19.

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Fixed Assets & Valuation –	Infrastructure – Classes as listed above
 Generally not able to be substantiated – indexed by set percentage yearly 	All assets have largely been independently valued at the component level as specified by the Auditor General
Did not comply with Auditor Generals requirements to recognise components with different pro	
and lives	Municipal Road Map approval by Council and available via public website
Donated Assets not been recognised	Footpath and Kerb Asset Condition Survey
No published Municipal Road Map (legislated requirement)	Stormwater Asset Data Capture Survey
	 Stormwater System Management Plan – (in progress)
	Provision of valuation for land under roads
No Asset Validation or Condition Assessments undertaken	Asset validation largely completed as part of the data collection program. Both Depot and Project Managers have
 As Constructed documentation not captured or maintained 	responsibilities on an ongoing basis
	Level 1 condition assessment on all Assets
	 Level 2 condition assessment on all sealed road surfaces, footpaths & kerbs, all stormwater pits and playground equipment
	As Constructed documentation is mandatory for all projects and donated assets
No Maintenance/Asset Management System	Implemented a contemporary Cloud-based Asset Management System, which includes a maintenance management
No Preventative or routine maintenance program existed	module for reactive and preventative works and a field based mobile application for opening and closing work orders
Excel Road Inspection sheet existed and being utilised	ONLY Council in Australia using Assetic, capturing actual activity based costing for maintenance tasks, this is possible via
No relationship between Asset Register and Finance software	integration between the finance and asset management systems
No Register of land and buildings Council owned and lease status confused – not defined	Council has a complete Land Register and has begun disposing of surplus land
Non-compliance with Fire Safety and Essential Health and Safety requirements(legislated require	
Basic Safe Work Method Statement (SWMS) in place, but no effective contractor safety manager	Comprehensive Safe Work Method Statement (SWMS) in place and reviewed annually
system in place	Online Induction Program developed and implemented for all contractors and staff
No Asset Management Plans, policies or strategies developed (legislated requirement).	 1st Generation Asset management Plans completed and approved by Council, started drafting 2nd Generation Plan along
	with Asset Management Strategy and Asset Capitalisation Policy.
No culture or process documentation supporting Project management	Project Managers clearly identified in every years capital works program
No culture or process documentation supporting project design and implementation	Costs on each project signed off on monthly basis
Non-consistent procurement process. A portion of jobs were only being quoted by one supplier	Signed project plans required for any project either >\$50k or considered high risk to the business
 Running of project from a purchase order with no terms and conditions 	Purchase Order template for Capital Works has been developed to aid in converting project costings to fixed assets
	following work completion
	Full compliance with Department of Treasury Procurement and Local Government Act regulations
	Purchasing – standard conditions developed and automatically attached to all purchase orders
• Depot effectiveness and structure that has been unquestioned for a long period – reluctance to o	• Modern Depot restructure has been completed which accounts for absences and succession. The whole process of how
change and team displayed poor overall leadership from supervisors	work is planned and carried out has been changed via consultation and training with affected staff. The leadership team is
	committed and actively supporting all of the required change management processes need for a successful
	implementation
GIS System –	New Web Based GIS viewer developed, along with associated staff training
Inaccurate in places, not validated	• Exponare has reached a point of no further development and would not support the new field based mobility application
Un-documented and poorly maintained	 Processes and coding developed to ensure GIS and Asset Management systems stay in sync
 Used principally to produce maps – only available via desktop 	All asset locations are now spatially accurate
	Acquired and developed a new asset data collection software which can be used by all staff
Capital Works funds reallocated regularly based on whether individual projects were running un	der or All project costs are recorded and reported monthly. Project budget changes are submitted for Council approval as part
over budget	of the mid-year budget review
No Stormwater management plans or associated stormwater hydraulic models	Consultants engaged to develop Stormwater Network Models by 2019
	Overland flow model and maps completed for Southern Beaches

Table 1





5. ASSET MANAGEMENT SYSTEM

Asset management enables an organisation to value service from assets in the achievement of organisational objectives, while balancing financial, environmental and social costs, risk, quality of service and performance related to assets.¹

An asset management system is a set of interrelated and interacting elements of an organisation to establish the asset management policy and asset management objectives and the processes needed to achieve those objectives. An asset management system is more than a 'management information system'. The asset management system provides a means for coordinating contributions from and interactions between functional units within an organisation.²

The asset management system includes:

- The asset management policy
- The asset management objectives
- The strategic asset management plan
- The asset management plans, which are implemented in
 - Operational planning and control
 - Supporting activities
 - Control activities
 - Other relevant processes.³

Asset Management Policy

The asset management policy sets out the principles by which the organisation intends applying asset management to achieve its organisational objectives.⁴ Organisational objectives are the results of the organisation plans to achieve, as documented in its Strategic Plan. Our adopted asset management policy is attached as Appendix 1.

Asset Management Objectives

The asset management objectives, developed in this strategic asset management plan provide the essential link between the organisational objectives and the asset management plans that describe how those objectives are going to be achieved. The asset management objectives transform the required outcomes (product or service) to be provided by the assets, into activities typically described in the asset management plans. Asset management objectives should be specific, measureable, achievable, realistic and time bound (i.e. SMART objectives).⁵

Strategic Asset Management Plan

This strategic asset management plan is to document the relationship between the organisational objectives set out in the Sorell Council Long Term Strategic Plan and the asset management (or service) objectives and define the strategic framework required to achieve the asset management objectives.⁶

This strategic asset management plan encompasses the following services -

- Transport Services
- Buildings
- Stormwater Drainage
- Land Improvements

The strategic asset management framework incorporates strategies to achieve the asset management objectives. The strategies are developed in 4 steps -

- What assets do we have?
- Our assets and their management
- Where do we want to be?
- How will we get there?⁷

Asset Management Plans

Supporting the strategic asset management plan are asset management plans for major service/asset categories. The asset management plans document the activities to be implemented and resources to be applied to meet the asset management objectives. The strategic asset management plan summarises the key issues from following asset management plans:

- Transport Services Asset Management Plan
- Buildings Asset Management Plan
- Stormwater Drainage Asset Management Plan
- Land Improvement Asset Management Plan

5.1 What Assets do we have?

We manage a lot of assets to provide services to our community. These assets provide the foundation for the community to carry out its everyday activities, while contributing overall quality of life.

Table 2

Transport Assets							
Asset Category	Asset Class	Number of Assets	Length of Network	Total Replacement Value			
Transport	Bridges / Major Culverts	81		\$14.1 M			
Transport	Roads - Sealed	1476	245km	\$134.7 M			
Transport	Roads - Unsealed	502	151km	\$65.2 M			
Transport	Footpaths	1171	83km	\$7.3 M			
Transport	Kerbs	1028	74km	\$4.7 M			
Transport	Streetlighting	No Inventory		Not valued			
Transport	Line Marking	No Inventory		Not valued			
Transport	Roadside Furniture / Traffic Barriers	No Inventory		Not valued			
	Land Improve	ement Assets					
Asset Category	Asset Class	Number of Assets	Length of Network	Total Replacement Value			
Land Improvements	Active Areas	38	90km ²	\$2.3 M			
Land Improvements	Passive Areas	288	870km ²	\$6.2 M			
Land Improvements	Car Parks	236		\$3.0 M			
Land Improvements	Playgrounds	29		\$0.06 M			
Land Improvements	Formal Areas	17		\$0.2 M			
Land Improvements	Play / Exercise Equipment	86		\$0.5 M			
Land Improvements	Park Infrastructure	113		\$0.4 M			
Land Improvements	Fences		21km	\$1.7 M			
Land Improvements	Irrigation Systems		71km ²	\$0.6 M			
Land Improvements	Lighting	87		\$0.8 M			
Land Improvements	Retaining Walls	27	574m	\$0.2 M			
Land Improvements	Open Space Furniture	331		\$0.4 M			
Land Improvements	Signs	236		\$0.2 M			
	Building Assets						

Building Assets

Asset Category	Asset Class	Number of Assets	Length of Network	Total Replacement Value
Buildings	Amenitites Buildings	19		\$3.6 M
Buildings	Administration Buildings	10		\$6.5 M
Buildings	Community Halls	6		\$4.6 M
Buildings	Recreation Buildings	13		\$4.2 M
Buildings	Facility Buildings	20		\$2.7 M
Buildings	Marine Structures	22		\$2.0 M
Buildings	Other Structures	15		\$0.4 M

Stormwater Assets

Asset Category	Asset Class	Number of Assets	Length of Network	Total Replacement Value
Stormwater	Stormwater Pipes	3685	81km	\$30.2 M
Stormwater	Stormwater Pits / Manholes	2452		\$7.5 M
Stormwater	Stormwater Open Drains		2.7km	\$0.5 M
Stormwater	Pre-Treatment Devices (GPT's)	22		\$1.4 M
Stormwater	Oufalls	253		\$0.2 M
Stormwater	Culverts	No Inventory		Not valued
Stormwater	Roadside Drains	No Inventory		Not valued

Transport Unit Rates and Useful Lives

Asset Category: Footpaths				
Data Source: Assetic Land Improvements Valuation - 2017				
Material		Unit Rate (URR \$)	Useful Life (UL)	
Concrete	\$	97.37	80	
Premium Concrete	\$	137.81	100	
Pavers	\$	125.69	80	
Spray Seal	\$	30.20	20	
Asphalt	\$	55.16	40	
Timber	\$	78.30	60	
Gravel	\$	11.97	20	

Note: New URR and UL have been derived from Assetic Land Improvement Valuation

Refer Ming Import file: MING's Park Assets Amended Import V1.0a.xlsx & MING's Park Assets Amendeed IMPORT V1.0b.xlsx

Asset Category: Kerbs				
Data Source: Assetic Land Improvements Valuation - 2017				
Material		Unit Rate (URR \$)	Useful Life (UL)	
Concrete	\$	70.20	80	

Asset Category: Roads - Sealed				
Data Source: Assetic Land Improvements Valuation - 2017 & IIMM 2011				
Material		Unit Rate (URR \$)	Useful Life (UL)	
Surface – 2 Coat Spray Urban	\$	11.50	15	
Surface – 2 Coat Spray Rural	\$	10.00	20	
Surface – Asphalt Urban	\$	25.30	15	
Surface – Asphalt Rural	\$	22.00	20	
Pavement Subbase - Sealed Urban	\$	18.40	240	
Pavement Subbase - Sealed Rural	\$	16.00	240	
Base - Sealed Urban	\$	28.75	60	
Base –Sealed Rural	\$	25.00	80	

Note:

Condition Rating / Valuation Matrix 0-6

Condition Rating / Valuation Matrix changed to reflect improved AM practice.

Improved 0-6 scale recognises "brand new" assets and those assets beyond repair.

Asset Category: Roads - Unsealed				
Data Source: Assetic Land Improvements Valuation - 2017				
Material Unit Rate (URR \$) Useful Life (U				
Gravel (surface) - Class 1	\$	6.50	5	
Gravel (surface) - Class 2	\$	6.50	10	
Pavement Subbase – Unsealed Rural	\$	16.00	240	
Pavement Base – Unsealed Rural	.\$	25.00	100	

Note:

Class 1: Nugent, Fulham, Kellevie, Gillingbrook, Pawleena and Wattle Hill Roads

Class 2: All other unsealed roads.

URR determined by monitoring 'actual' Council costs on these road types

Pavement Subbase new UL based on a 1:4 ratio of the UL components - as recommended by Assetic

Non-Financial Changes

Surface SPI - Major Roads Zone (25% of network) amended. SPI updated to reflect condition SPI Update to Major Roads was done by sorell Council based upon Level 2 data collected on site and a calculated SPI

6. ASSET MANAGEMENT POLICY

The asset management policy sets out the principles by which the organisation intends applying asset management to achieve its organisational objectives.⁴ Organisational objectives are the results of the organisation plans to achieve, as documented in its Strategic Plan. Our adopted asset management policy is attached as Appendix 1.

7. ASSET MANAGEMENT OBJECTIVE

The asset management objectives, developed in this strategic asset management plan provide the essential link between the organisational objectives and the asset management plans that describe how those objectives are going to be achieved. The asset management objectives transform the required outcomes (product or service) to be provided by the assets, into activities typically described in the asset management plans. Asset management objectives should be specific, measureable, achievable, realistic and time bound (i.e. SMART objectives).⁵

8. STRATEGIC ASSET MANAGEMENT PLAN

This strategic asset management plan is to document the relationship between the organisational objectives set out in the Sorell Council Long Term Strategic Plan and the asset management (or service) objectives and define the strategic framework required to achieve the asset management objectives.⁶

¹ ISO, 2014, ISO 55000, Sec 2.2, p 2

² ISO, 2014, ISO 55000, Sec 2.5.1, p 5

³ ISO, 2014, ISO 55002, Sec 4.1.1, p 2.

⁴ ISO, 2014, ISO 55002, Sec 5.2, p 7.

⁵ ISO, 2014, ISO 55002, Sec 6.2.1, p 9.

⁶ ISO, 2014, ISO 55002, Sec 4.1.1, p 2



The purpose of this strategic asset management plan is to develop the strategies to achieve the asset management objectives through balancing of asset service performance, cost and risk.

9. **OPPORTUNITIES**

We have identified improvement opportunities relevant to the services included in this strategic asset management plan for the future including:

- Align the Annual Plan against the strategic objectives on a continual basis and ensure consistency between the budget and the long term financial plan (LTFP).
- Additional operating and maintenance costs are added to the budget when new or additional assets are added. (part of LTFP model)
- Include a process to review and update the Asset Management Plans within 12 months of the cyclical asset class re-valuation process
- Commence community consultation process to determine community service levels and align to needs and wants and commit to measure community satisfaction on an ongoing basis.

10. Risks

- Relevant risks to the strategic asset management plan in the future are:
- Reduction in current Australian and Tasmanian Government Funding levels.
- Industrial/Commercial revenue does not increase its proportion of the rate base Southern Tas Regional Land Use Strategy is not revised.
- Additional asset responsibilities shifted to council, currently funded by other authorities.
- Service level upgrades due to public demands or legislative requirements.
- Natural disaster such as bushfire or major flood.
- Inundation of coastal areas due to storm surge or Sea level rise including the effect of climate change.
- Administration costs continue to increase as a result of additional government and compliance requirements.

Infrastructure risk management plans for these and other relevant risks are summarised with risk management activities and resource requirements incorporated in the relevant asset management plans.

11. ASSET AND FINANCE MANAGEMENT MATURITY

We have taken steps to improve our asset and financial management performance including assessing our asset management maturity against the Local Government Financial Sustainability National Consistent Frameworks. Our target is to achieve 'core' maturity with the Frameworks.

11.1. Asset Data Maturity



2013-14

- Low quality data for Transport (roads, footpaths, kerbs), Buildings and Stormwater (stormwater pipes, stormwater manholes, stormwater pits) assets available at commencement of program.
- No data for Land Improvements assets.
- Level 1 Road, Footpath and Kerb detail acquired.
- Separate Bridge asset inventory maintained by AusSpan.
- Geographic Information System (GIS) association created allowing assets to be viewed in GIS.
- Significant internal data cleansing to improve quality Transport and Stormwater.

2015-16

- Level 1 Buildings data acquired.
- Level 1 Marine Structures data acquired.
- Level 1 Road surface condition data for major sealed roads acquired.
- Assetic' MyPredictor used to generate renewal program from Level 1 road condition data major roads only.
- Separate Bridge asset inventory maintained by AusSpan.
- Separate Bridge asset inventory maintained by AusSpan introduced to MyData with improved detail and maintenance activity programming.

- Level 2 road surface data capture for remaining sealed roads, internally captured.
- Level 2 footpath and kerb asset data collected, including improved GIS relationship, undertaken by Consultant.
- Level 2 asset data capture for stormwater assets, including capture of raingardens, gross pollutant traps and major open drains undertaken by Consultant.
- Level 1 Stormwater culvert data capture, internally captured.
- Level 2 Land Improvement asset data capture, undertaken by Consultant.
- Assetic' MyPredictor used to generate renewal program from Level 2 road condition data all sealed roads.

11.2. Organisational Asset Maturity



2013-14

• Minimal understanding of Asset Management within SMT.

• No relationship between asset register and financial system to assets owned and operated.

- Asset Management Plans, policy or strategy did not exist.
- Bridge valuation and maintenance programming managed by AusSpan.

2015-16

- Implementation of formal Asset Register software (MyData) assets now managed to component level.
- Improved asset management understanding in new SMT members.
- Implementation of Strategic Maintenance Planning (SMP) module to manage Depot maintenance activities.
- Project Managers begin producing Project Plans for capital works, improving asset capitalisation process and understanding.

- Integration of MyData SMP module and Navision (finance software) to capture real-time maintenance activity costing, initially for Transport assets at component level.
- Implementation of Assetic cloud based replacement of MyData asset register.
- Integration of Assetic and Navision to capture real-time maintenance activity costing across all asset categories, to component level.



2013-14

- Finance Department maintained asset financials.
- Financial figures had no relationship to assets contained within Asset Register.
- Capitalisation to asset category/job number, not component.

2015-16

- Level 1 Transport assets valuation acquired from Consultant.
- Level 1 Building assets valuation acquired from Consultant.
- Asset Capitalisation Policy developed.
- Transfer of responsibility for Transport and Building asset financials to Asset Coordinator finances reported to component level.
- Successful financial audit without recommendation.
- Internal valuation of land under roads utilising Valuer General' Land Valuation information.
- Internal valuation of stormwater assets, benchmarked across 3 Tasmanian Councils.

- Transfer of responsibility Stormwater and Land Improvement asset financials finances reported to component level.
- Successful financial audit without recommendation.
- Internal revaluation of Road, Footpath and Kerb assets.
- Internal revaluation of Stormwater assets Sorell area only.
- Formal Level 2 Land Improvement assets valuation acquired from Consultant.



2013-14

- No formal asset management or GIS skills existed at commencement of asset program.
- Significant skills in Civil and Structural design provided base knowledge.
- Consulting advice to cover areas of uncertainty.
- Utilisation of National Asset Management Strategy Committee (NAMS) framework to gain understanding of Asset Management and produce associated documentation.
- Skills acquired in Geographic Information Systems (GIS).
- Developed mobile application for Level 1 asset data collection.

2015-16

- Asset Data / GIS Officer commenced.
- Asset Coordinator completed the Professional Certificate in Asset Management Planning delivered by Institute Public Works Engineers Australasia (IPWEA).
- Development of procedures to support the management of depot maintenance activities.
- Formalised inspection and maintenance priorities across all asset classes.

- Improved field asset data capture with introduction of internally developed GIS software.
- I-pads introduced as the mobile method of opening and closing of maintenance work orders in the field.

12. FUTURE DEMANDS

12.1. Demand Drivers

Drivers affecting demand include population change, change in demographics, seasonal factors, climate change, vehicle ownership rates, consumer preferences and expectations, government decisions, technological changes, economic factors, agricultural practices, environmental awareness, etc.

12.2. Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 2.

12.3. Demand Impact on Assets

The impact of demand drivers that <u>may</u> affect future service delivery and utilisation of assets are shown in Table 3.

Table 3

Projection	Impact on services		
Population growth			
Currently at 1% per year – Appendix 3	Rise in traffic volumes and community service infrastructure, therefore increased demands on road infrastructure. Both State and Local plus increase use of parks and reserves		
Increased Tourism	Increased use of Council roads & facilities without any additional revenue		
Changes in demographics			
Aging population	Greater demand on health services, Library services and suitable pedestrian infrastructure		
Consumer preferences			
Building amenities	Some regional halls have lost historical users and relevance		
Sea Changers	Demands for urban infrastructure standards in Southern Beaches area (e.g. footpaths, kerb & channel, street lighting etc.)		
Climate Change			
Predicted greater Frequency of large storm events due to climat change	Upgrades required in stormwater network capacity following edevelopment of catchment models and elevated maintenance regime required for all open drains and waterways. Protection of overland flood paths need attention. Some low lying		
	coastal assets maybe inundated		
Government Funding			
Reduced funds available for roads and other asset classes	Reduced service levels and increased demands on council's budget expenditure as State and Federal Governments engage in cost shifting process.		
	Council needs to prepare 'shovel ready' business cases for community projects		
Technological changes			
More energy efficient street lights	Reduced cost associated with electricity and maintenance charges		
Proliferation of Solar panel use	Less reliance on the electricity grid therefore reducing costs and reducing carbon omissions		
Vehicles	Smaller lighter passenger vehicles reducing wear and tear on the road network		

Increased use of B doubles	Increased road networks capacity required to accommodate the larger trucks	
Increased dependency on field based technology	When operating results in increased efficiency but needs to guard against dependency	
Environmental awareness		
Lifting of current environmental standards/water quality	Greater demand on budget expenditure in way of stormwater and building upgrades.	
Increased dependency on field based technology	When mobile and cloud technology operating in increased efficiencies but needs Council to retain practical knowledge to guard against total dependency	

12.4. Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

<u>Non-asset solutions focus</u> on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures⁹. Examples of non-asset solutions include providing joint services from existing infrastructure such as libraries that may be in another community area or public toilets provided in commercial premises or specific precinct.

Opportunities identified for demand management are shown in Table 3

Service Impact	Demand Management Plan		
Regulatory services	Make more applications available online		
Marine access points	MAST (State Gov) supply and install boat ramps and pontoons and Council are responsible for funding and ongoing maintenance.		
Confirm level of service differentially between urban & non-urban areas	Manages level of service expectations in all locations through the Council region		
Less transport on roads	 Actively advocate for more local employment in agriculture and tourism and associated services and build education facilities and teaching culture which encourages students to study locally. Appendix 7 More regular and efficient bus service, including providing Park & Rides. 		
Adequate funding of	Headworks Developer Contribution Policy to offset some of the		
infrastructure	funding requirements (commence with stormwater).		
Reduced Asset Base	Dispose or divest of assets that are not required.		

Table 4

13. ASSET STRATEGY OUTLOOK

• Sorell Council is in a good position to maintain assets at current service level in the next ten years as many of the long lived assets are well below their useful life and in reasonable condition. The only proviso is the implications of the development of the stormwater catchment models and the associated 10 year capital program which is currently underway.

- When examining the life cycle expenditure projected over the next 10 year period council has set aside sufficient funding to maintain the assets at current levels of service within council's available revenue stream based on current knowledge there is minimal available funding for new or upgraded assets.
- Our current asset and financial management maturity is well on its way to being above the core level required.

14. WHERE DO WE WANT TO BE?

14.1. Community Expectation

We believe, other than some residents in Southern Beaches, that community expectations for service levels to be generally consistent with current levels of service. Community engagement is necessary to ensure that informed decisions are made on future levels of service and costs and that service and risk consequences are known and accepted by stakeholders. Council needs to consider surveying a representative sample of the community which gauges the importance that the community places on services provided by council and the level of satisfaction with the delivery of those services. These surveys would need to be scheduled for trend purposes with a proposed frequency of a survey every two years.

14.2. Organisational Objectives

The organisation objectives are developed in the Strategic Plan under Vision, Mission, Values and Priority Areas as shown below.

14.3. Council 10 year Stategy

Council is due to develop a new 10 year Strategic Plan that will populate this section

Strategic Priority Area	Organisational Objective	
Transport Services	Enable safe and efficient mobility for all people	
Buildings	Provide buildings for public use and amenity and maintain to agree service level. Operational and administration buildings facilities for the organisation to service the community effectively.	
Stormwater Drainage	Dispose of stormwater efficiently and reduce localised flooding with an effective environmental drainage network.	
Land Improvements	Provide access to suitable facilities and active and passive recreational areas for the community.	

Table 5 Strategic Priority Area

14.4. Asset Management Objectives (Strategies)

The asset management objectives (or strategies) translate the organisational objectives into the required service outcomes to be provided by infrastructure assets and activities described in the asset management plans. Actions to achieve the asset management objectives with performance targets and timelines are shown in Tables 5, 6 & 7.

Table 6 – Asset Management Objectives Transport Services

Asset Management Objective	Action	Performance Target & Timeline
Maintain the network at a safe and functional standard	Ensure safety standards are achieved and satisfy community needs	 Local arterial and local collectors are built to municipal standards – 10 years Footpath trip hazards are all less than 25mm – 3 years
Ensure developers provide an appropriate & adequate transport link to service new subdivisions or development.	To ensure all new transport links comply with Council's & regulatory standards	Ongoing
Economic performance of transport network	Maximise economic performance of assets without compromising levels of service. Review costs of maintenance and optimise against renewal costs.	Annually
Environmental protection	Protection of natural environment. Compliance to environmental standards for new construction.	Ongoing
Climate change mitigation	Improve and maintain drainage on road side verges and channels to cater for higher than average rain fall intensity events.	Ongoing

Table 7 – Asset Management Objectives Buildings

Asset Management Objective	Actio n	Performance Target & Timeline
Ensure buildings are maintained to a safe and functional standard.	Ensure safety standards are achieved and building inspections and maintenance meets regulatory requirements.	3 monthly inspections
Ensure that all buildings are accessible to all.	Ensure the whole community has fair and equitable access to all council buildings and amenities. Modify buildings where required to DDA compliance as budget will allow.	Survey users for full DDA compliance to determine whether it is a requirement.
Ensure all principal building users, tenants and lease holders know their obligations and responsibilities.	To ensure that the tenants/clubs know Council's requirements in relation to building occupancy and maintenance.	Hirers and lease agreements are contemporary and signed by relevant parties.

Table 8 – Asset Management Objectives Stormwater Drainage

Asset Management Objective	Action	Performance Target & Timeline
Provide efficient method of collection and disposal of stormwater	Prevent localised flooding events.	ongoing
SW catchment modelling	Continue the catchment modelling process to identify network deficiencies.	30 June 2019
Condition assessment	Determine an inspection regime by prioritise stormwater network into risk categories using location, pipe dia, age and soil conditions.	2015
Priorities upgrade requirements	Upgrade network as required to minimise flooding.	To be accessed once modeling complete
Identify properties connections without a SW or systems	Identify and priorotises properties without SW connections and install connection as per budget allowance where a stormwater system exists.	Ongoing

Table 9 – Asset Management Objectives Land Improvements

Asset Management Objectives	Action	Performance Target & Timeline
Parks are maintained in a safe condition	Inspect parks	Parks inspected at least once on fortnightly cycle by Supervisor.
Playground equipment is fit for purpose	Inspect equipment	Equipment inspected at least once on fortnightly cycle by Supervisor and once yearly via independent audit
Develop a long term Parks & Reserves Strategy	Strategy developed and endorsed by Council	30 June 2020

14.5. Asset Management Vision

To ensure the long term financial sustainability of the organisation, it is essential to balance the community's expectations for services with their ability to pay for the infrastructure assets used to provide the services maintenance of service levels for infrastructure services requires appropriate investment over the whole of the asset life cycle. To assist in achieving this balance, we aspire to:

Develop and maintain asset management governance, skills, process and data in order to provide the level of service the community need at present and in the future, in the most cost effective and fit for purpose manner.

In line with the vision, the objectives of the strategic asset management plan are to:

- Ensure that our infrastructure services are provided in an economically optimal way, with the appropriate level of service to residents, visitors and the environment determined by reference to our financial sustainability.
- Safeguard our assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets.
- Adopt the long term financial plan as the basis for all service and budget funding decisions.
- Meet legislative requirements for all our operations.
- Ensure resources and operational capabilities are identified and responsibility for asset management is allocated.
- Provide high level oversight of financial and asset management responsibilities through Audit Committee reporting to Council on development and implementation of the Strategic Asset Management Plan, Asset Management Plan and Long Term Financial Plan.

14.6. How will we get there?

The strategic asset management plan proposes strategies to enable the organisational objectives and asset management policies to be achieved.

Table 1	10 — A	Asset M	Mana	gement	Strategies
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Strategy	Desired Outcome
Review asset management plans and strategy for all major asset classes (80% of asset value) within 12 months of cyclical asset class revaluations.	Identification of services needed by the community and required funding to optimise 'whole of life' costs.
Review and update long term financial plans after adoption of annual budgets. Communicate any consequence of funding decisions on service levels and service risks.	We and the community are aware of changes to service levels and costs arising from budget decisions.
Report our financial position at Fair Value in accordance with Australian Accounting Standards, financial sustainability and performance against organisational objectives in Annual Reports.	Financial sustainability information is available for Council/Board and the community.
Ensure council decisions are made from accurate and current information in asset registers, on service level performance and costs and 'whole of life' costs.	Improved decision making and greater value for money.
Report on our resources and operational capability to deliver the services needed by the community in the annual report.	Services delivery is matched to available resources and operational capabilities.
Ensure responsibilities for asset management are identified and incorporated into staff position descriptions.	Responsibility for asset management is defined.

Implement an improvement plan to realise benefits identified.	Improved financial and asset management capacity within the organisation.
Report as required to Council/Board by Audit Committee on development and implementation of strategic asset management plan, AM Plans and long term financial plans.	Oversight of resource allocation and performance.

14.7. Asset Management Vision

To ensure the long-term financial sustainability of the organisation, it is essential to balance the community's expectations for services with their ability to pay for the infrastructure assets used to provide the services. Maintenance of service levels for infrastructure service requires appropriate investment over the whole of the asset life cycle. To assist in achieving this balance, we aspire to:

Develop and maintain asset management governance, skill, process, systems and data in order to provide the level of service the community need at present and in the future, in the most cost effective and fit for purpose manner.

In line with the vision, the objectives of the strategic asset management plan are to:

- Ensure that our infrastructure services are provided in an economically optimal way, with the appropriate level of service to residents, visitors and the environment determined by reference to our financial sustainability.
- Safeguard our assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets.
- Adopt the long-term financial plan as the basis for all service and budget funding decisions.
- Meet legislative requirements for all our operations.
- Ensure resources and operational capabilities are identified and responsibility for asset management is allocated.
- Provide high-level oversight of financial and asset management responsibilities through Audit Committee/CEO reporting to council/board on development and implementation of the Strategic Asset Management Plan, Asset Management Plan and Long Term Financial Plan.

14.8. How will we get there?

The strategic asset management plan proposes strategies to enable the organisational objectives and asset management policies to be achieved.

No	Strategy	Desired Outcome
1	Review asset management plans and strategy for all major asset classes (80% of asset value) within 12 months of cyclical asset class revaluations.	Identification of services needed by the community and required funding to optimise 'whole of life' costs.
2	Review and update long-term financial plans after adoption of annual budgets. Communicate any consequence of funding decisions on service levels and service risks.	Council and the community are aware of changes to service levels and costs arising from budget decisions.
3	Report our financial position at Fair Value in accordance with Australian Accounting Standards, financial sustainability and performance against organisational objectives in Annual Reports.	Financial sustainability information is available for Council/Audit committee and the community.
4	Ensure council/board decisions are made from accurate and current information in asset registers, on service level performance and costs and 'whole of life' costs.	Improved decision making and greater value for money.
5	Report on our resources and operational capability to deliver the services needed by the community in the annual report.	Services delivery is matched to available resources and operational capabilities.

Table 11 – Asset Management Strategies

5	Ensure responsibilities for asset management are identified and incorporated into staff position descriptions.	Responsibility for asset management is defined.
7	Implement an improvement plan to realise benefits identified.	Improved financial and asset management capacity within the organisation.
8	Report as required to Council by Audit Committee on development and implementation of strategic asset management plan, AM Plans and long term financial plans.	Oversight of resource allocation and performance.

14.9. Asset Management Improvement Plan

The tasks required achieving a 'core' financial and asset management maturity are shown in priority order in the asset management improvement plan .

14.10. Consequences if actions are not complete

There are consequences for the Council if the improvement actions are not completed. These include-

- Inability to achieve strategic and organisational objectives
- Inability to achieve financial sustainability for the organisation's operations
- Current risks to infrastructure service delivery are likely to eventuate and response actions may not be appropriately managed
- We may not be able to accommodate and/or manage changes in demand for infrastructure services,

15. LEVEL OF SERVICE

15.1. Consumer Research and Expectations

The expectations and requirements of various stakeholders were considered in the preparation of asset management plans summarised in this strategic asset management plan. Table 11 shows some sample suggested level for these services.

Asset Management Plan	Service	Satisfaction Levels
Transport Services	Street lighting	
Transport Services	Management of road side verges	
Transport Services	Safe sealed roads and bridges	
Transport Services	Safe unsealed road network	
Transport Services	Safe pedestrian area footpaths and walkways	
Buildings	Community Facilities halls and centre	
Buildings	Access for all provided	
Buildings	Standard of public toilets	
Stormwater Drainage	Maintenance of Stormwater	
Land Improvements	Number & quantity of parks and reserves	

Table 12 – Potential Examples of Community Satisfaction Levels for Council Services

15.2. Organisational Objectives

This strategic asset management plan reported the organizational objectives from the Strategic Plan and asset management objectives developed from the organisatonal objectives.

The organizational and asset management objectives provide focus for the community and technical level of service.

15.3. Legislative Requirements

We have to meet many legislative requirements including Australian and State legislation and State regulations and local by-laws. These are detailed in the various asset management plans summarised in this strategic asset management plan.

15.4. Levels of Service

We have defined levels of service in two terms -

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

Community levels of service measures used in the asset management plan are:

- Quality How good is the service?
- Function Does it meet users' needs? Capacity/Utilisation Is the service usage appropriate to capacity?

Our current potential community levels of service for consideration are shown in table 10.

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 availability, cleansing, mowing, etc.
- Maintenance the activities necessary to retain an asset 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. 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 stormwater system).

Service managers plan, implement and control technical service levels to influence the customer service levels.⁸

Together the community and technical levels of service provide detail on service performance, cost and whether service levels are likely to stay the same, get better or worse.

Our current and projected technical maintenance levels of service for the services covered by this strategic asset management plan are shown in Appendix 11.

16. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

16.1. Background Data

Physical parameters

The assets covered by this strategic asset management plan are shown in Tables 2.

Asset capacity and performance

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

Asset capacity and performance is generally for 3 monitored service measures, condition (quality), function and utilisation/capacity.

Condition data on most asset classes is stored in the asset management system. The quality of the condition data varies. Condition data for bridges, sealed roads, footpaths and kerb and guttering is of a much higher standard than that for unsealed roads and buildings.

Stormwater pits have been all surveyed and condition assessed. Because of the high cost of collecting

condition, data for buried pipelines Council have no condition data on its stormwater pipe network.

Footpath and road networks have been assigned a hierarchy which by definition implies their use/function. Sorell Council has approved a policy which differentiates some function levels of serveice based on locality (refer Infrusatructure Development Standard for Urban – Rural zones within the Sorell Municipality – Appendix 10

The measurement of utilization/capacity for roads is captured via a traffic counter program with frequency of data collection generally based on road hierarchy.

The stormwater network models that are currently under development will clearly identify the capacity issues and constraints within the municipality.

16.2. Infrastructure Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets conducted for each relevant asset management plan 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(s) and the adopted treatment plan are summarised in Table 11 These risks are regularly reported to management, Council and the Audit Committee.

Table 13 - Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan		
Transport services					
Roads impassable	Road surface or pavement failure due to flood damage	Н	Inspect and maintained water drainage networks around culverts rivers and streams etc		
Footpath condition	Trip hazard	Η	Inspection & rectification programs in place		
Bridges	Bridge failure	Н	Biannual Bridge inspections by external experts		
Buildings					
Fire	Uncontrolled bush fire	Н	Keep fuel load low around building sites		
Service faults	Electrical failure coursing fire damage	Н	3 monthly inspections and upgrade as required		
Stormwater drainage					
Network capacity	Localised flooding	Н	Modelling of network to determine capacity and upgrading where required		
Blockage	Upstream flooding	Н	Inspect pipes with history of blockages and establish a culvert cleaning program		
Open drains and rivers	Waterways become overgrown and blocked causing flooding	Н	Ensure a regular maintenance regime is instigated		
Land Impovements					
Parks	Unsafe Park equipment	Н	Ensure regular & independent inspection program is followed		

16.3. Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. cleansing, utility services, street sweeping, grass mowing and street lighting (future consideration for Council).

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Operations and Maintenance Plan

Maintenance activities affect service levels including quality and function, such as cleanliness, appearance, etc., through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

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. road inspection followed by road patching but excluding rehabilitation or renewal.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in the respective AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Operations and Maintenance Strategies

We 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 include:

- Scheduling routine inspections and maintenance 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 and/or practicallity)
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Audit Committee
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options
- Maintain a current hierarchy of critical assets and required operations and maintenance activities
- Develop and regularly review appropriate emergency response capability
- Review management of operations and maintenance activities to ensure we are obtaining best value for resources used.

Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock. See Long Term Financial Plan (LTFP) for future 10 year operations and maintenance forecasts.

The consequences of deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan(s).

16.4. 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.

Renewal and Replacement Strategies

We will 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
 - $\circ\;\;$ the service delivery 'deficiency', present risk and optimum time for renewal/replacement
 - the project objectives to rectify the deficiency
 - $\circ\;$ the range of options, estimated capital and life cycle costs for each options that could address the service deficiency
 - o and evaluate the options against evaluation criteria adopted by Council, and
 - \circ select the best option to be included in capital renewal programs,
- Using optimal renewal methods (cost of renewal is less than replacement) wherever possible
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Audit Committee
- Review current and required skills base and implement workforce training and development to meet required maintenance and renewal needs
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required for risk mitigation
- Review management of capital renewal and replacement activities to ensure we are obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replace a bridge that has reduced load limit due to structural defects), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. roughness of a road).¹⁰

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure
- Have a high utilisation and subsequent impact on users would be greatest
- The total value represents the greatest net value to the organisation
- Have the highest average age relative to their expected lives (not a reliable indicator condition rating is much more relevant)
- Are identified in the AM Plan as key cost factors
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.¹¹

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in the respective asset management plans.

The Assetic Asset management system Council utilises also has a future modeling tool called Assetic Predictor, which Council can access through its support service agreement.

Assetic Predictor is a prediction modeling and decision support tool for long-term renewal planning of infrastructure assets. It enables organisations to optimize service level outcomes and capital and maintenance expenditure. Industry specific algorism accurately predicts the future behavior of assets given available funding levels and enable scenario comparison to aid with decision-making.

The accuracy of the model is totally dependent on the accuracy of the asset data provided. To date only the Level 2 data on sealed road condition is detailed enough to produce a useful 10 year optimized renewal program. The model however also assumes that all roads have been historically constructed to the Municipal standards. This is why past historical knowledge of staff and former staff plays a critical role in reviewing and reprioritising some of the outputs for the modeling. The collection of actual maintenance costs for each and every activity will improve the accuracy of these models over time. The model is able to consider a large range of possible treatments and costs as part of the optimization process. Appendix 9.

Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. An example of the decision making process for sealed roads is shown below –

Sealed Roads Prioritisation Philosophy for Reconstruction and Renewal Decision Making

- 1. Condition (Level2) of all sealed road surfaces should provide defect knowledge on pavement condition as well.
- 2. Traffic counts particularly heavy traffic loading and frequency
- 3. Road hierarchy and maintenance history and whether road has been built to municipal standards including drainage capacity and adequacy.

Once that filter has been applied, the output can be given to road maintenance leadership team for confirmation and verification of assumed inputs and results.

Reseal Renewal Decision Making

Largely based on same factors 1-3 with some considerations of customer complaint trends.

Where renewal projections are based on estimates of asset useful lives, the useful lives are documented in the relevant asset management plan(s).

16.5. 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. These assets from growth are discussed in Section 4.5.

Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programs. The priority ranking criteria is detailed in the respective asset management plans. These new/upgrade projects can only be considered if there is capital money available in the LTFP and that council have committed to fund the ongoing depreciation and maintenance costs.

Capital Investment Strategies

We will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner
- Undertake project scoping for all capital upgrade/new projects to identify
 - $\circ\;$ the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset
 - $\circ\,$ the project objectives to rectify the deficiency including value management for major projects
 - $\circ\;$ the range of options, estimated capital and life cycle costs for each options that could address the service deficiency
 - \circ $\,$ management of risks associated with alternative options $\,$
 - \circ and evaluate the options against evaluation criteria adopted by Council/Board, and
 - select the best option to be included in capital upgrade/new programs
- Review current and required skills base and implement training and development to meet required construction and project management needs
- Review management of capital project management activities to ensure we are obtaining best value for resources used.

Standards and specifications for maintenance of existing assets and construction of new assets and upgrade/expansion of existing assets are detailed in relevant asset management plans.

Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures and estimated available budget are summarised in the LTFP. The values fluctuate depending on the need to redirect the budget funding as better estimate and project scoping occurs.

16.6 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 the respective asset management plans.

16.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting the asset management plans summarised in this strategic asset management plan to obtain the optimum benefits from its available resources.

The asset management plans are based on balancing service performance, cost and risk to provide an agreed level of service from available resources in our long-term financial plan.

What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. The major activities and projects not to be undertaken include–

- Any significant capital intensive new and upgrade asset improvement programs
- Bring all roads within the network up to Municipal Standard whether sealed or unsealed
- Seal Councils unsealed network
- Extend the SW reticulation into current un-serviced rural areas
- Ensure all council buildings are completely DDA compliant

- Upgrade the concrete stormwater manhole lids to a more effective and OHS compliant aluminium lids for ease of handling and entry
- Upgrade all road side guardrails to latest Australian standard
- Signage will not be fully compliant
- It is unknown whether council will be able to completely fund the stormwater capital program, which will be known once catchment plans are developed

Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. The major service consequences include:

- Reduces level of service for some rural areas
- Reduced level of service in ride quality and speed limits.
- No Stormwater connection available therefore reduced level of service.
- All buildings are not DDA compliant therefore not providing a service for all users.
- Stormwater lid handling and WHS issues exist with the traditional concrete lids design scattered through the Stormwater System.

17. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous section of the asset management plan. The financial projection will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

17.1. Financial Indicators and Projections

Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio indicates whether projected capital renewal and replacement expenditure are able to be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plans by the estimated capital renewal budget provided in the long-term financial plan. Over the next 20 years, we are forecasting that we will have available funds for optimal renewal and replacement of assets, with surplus cash available for investment in new/upgrading of assets.

17.2. Funding Constraints/Limitations

The funding strategy to provide the services covered by this strategic asset management plan and supporting asset management plans is contained within the organisation's 20 year long term financial plan, which is updated annually. Changes in Councils underlying surplus have a direct impact on the availability of funding for capital works, taking into consideration, the whole of life cycle cost of the asset.

17.3. Valuation Forecasts

Asset values are forecast to remain relatively static unless surplus cash is generated to invest in new infrastructure.





The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Independent external revaluation are conducted on a 5 year rolling basis, with desktop revaluations undertaken at regular intervals, unless there is a specific material reason for doing so.

17.4. Key Assumptions mad in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this strategic asset management plan 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 asset management plan and risks that these may change are shown in Table 13

Key Assumptions	Risks of Change to Assumptions
Asset Register is up to date	If asset are not all listed financial estimates will be incorrect
Asset estimated lives and replacement costs are accurate	Could vary the depreciation estimates
Assumed Service Levels meet the community expectations	Funding for asset replacement and or upgrade will need to be increased
Estimated growth remains steady	Increases or decreases in growth will effect estimated depreciation, maintenance and operational levels.
LTFP assumptive as stated in appendix 5	

Table 14 – Key Assumptions made in AM Plan and Risk Changes

17.5. Forecast Reliability and Confidence

The expenditure and valuations projections in this strategic AM Plan are based on best available data. Currency and accuracy is critical to effective asset and financial management.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 13.

- Capital projects estimates are materially accurate
- Condition assessments are conducted on an as needs basis
- No significant changes to availability of external contractors to undertake capital works
- Availability of funds for expenditure on assets remain relatively stable

Table 15 - Data Confidence Assessment for AM Plans summarised in Strategic AM Plan

AM Plan	Confidence Assessment	Comment in Line with Re-Evaluation cycle
Transport Services	High	Well documented and assessed annually
Buildings	Medium	Detailed Condition assessment yet to be completed
Stormwater Drainage	High – pits Low - pipes	Accurately surveyed but conditions assessments are not complete
Land Improvements	High	Well documented and surveyed

Over all data sources, the data confidence is assessed as Medium level for data used in the preparation of this strategic AM Plan.

Actions to mitigate the effects of data quality (in the range of 20% overall) are included within Table 15 Improvement Plan.

18. PLAN IMPROVEMENT AND MONITORING

18.1. Status of Asset Management Practices

The asset management practices at Sorell Council have significantly improved and will continue to improve through the life of this plan. The long term financial plans are alligned to the Asset Strategy and capital expenditure. The major assets class and their associated components and attributes are all stored in the asset management system. Service levels are documented as are the expenditure projections for operations, maintenance, capital renewal, upgrade and new asset. Asset valuation and deprecation projections have been calculated for the next 20 years.

18.2. Improvement Program

The asset management improvement tasks identified from an asset management maturity assessment and preparation of their strategic asset management plan are shown in Table 15.

Task No	Task	Responsibility	Resources Required	Timeline
1	Implement a formal evaluation process for capital projects on annual basis	Assets	Internal Staff resources	2019
2	Continue to embed mobile technology	Depot/Asset	Internal	Ongoing
3	Document & Flow Charting of processes & support tools	Asset	Internal	30 June 2019
4	 Revised Asset Management Plan – Transport Develop Initial Land Improvements Buildings Stormwater 	Asset	Internal	30 Jun 2019 30 Jun 2019 30 Jun 2019 30 Jun 2019
5	Revise Asset Capitalisation Policy			30 Dec 2019
6	Building asset data capture - Level 2 compensation & condition			30 Dec 2019
7	Data collection to enhance Transport asset class – includes roundabouts, line marking, pedestrian crossings, culverts and road drainage where appropriate. Re-segmentation, particularly as it relates to roundabouts and bridges, would need to be undertaken in GIS and Assetic before re- valuation can commence	Consultants for data and re- segmentation & revaluation services		Not Scheduled
8	Recognition of street lights as an asset class – part of LED lighting project			Depends on project timeline
9	Reconciliation of stormwater data for Midway Point and Southern Beaches in GIS and Assetic systems following collection of survey information for the development of the stormwater catchment model		Internal	30 Dec 2019
10	Attaching relevant traffic counter data to correct road location in Assetic		Internal	Not Scheduled

Table 16 - Improvement Plan

18.3. Monitoring and Review Procedures

The strategic AM Plan has a life of 4 years (typical Council election cycle) and is due for complete revision and updating in 4 year's time.

Performance Measures

The effectiveness of the strategic asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this strategic asset management plan are incorporated and continually update 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 summarised asset management plans,
- 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,
- The Asset Renewal Funding Ratio achieving the target of 100%.