



# Strategic Asset Management Plan

December 2014

# Strategic Asset Management Plan

## Executive Summary

Knox City Council (Council) manages more than \$1.5 billion in property, infrastructure, and plant and equipment assets on behalf of the community. It is generally accepted that these assets exist to directly, and indirectly, support the services that Council delivers to the community. A significant proportion of Council operational and capital budgets are directed to managing Council's assets.

Over the last ten years, Council has embraced the importance of asset management. It developed and endorsed the original *Strategic Asset Management Plan* in 2003 which was the basis of the asset management framework, from which specific asset management plans were subsequently developed. The implementation of these plans over the years, the development of an overarching *Asset Management Policy*, the commitment to asset renewal funding, the regular condition auditing of assets, the integration of asset management systems, regular performance measurement, and a significant number of changes to management practices, have consolidated the importance placed by Council on the management of the community's assets.

Asset management is critical to the overall performance of Council, in delivering services to the Knox community, and provides the key link between a number of processes, strategies and systems. The diagram below reflects the intrinsic relationships between asset management and these processes, strategies and systems.



This *Strategic Asset Management Plan* recognises the strong foundations already in place at Knox, with respect to asset management, but it also looks further ahead to ensure Council has a well-planned and achievable approach to city development, through responsible asset planning and delivery.

# Strategic Asset Management Plan

The growing recognition of service planning, as key to Council's integrated planning framework, is significant – which moves from the traditional approach to asset management, to an approach that recognises that a wider service lens needs to be applied to the allocation of funding. While Council has been on a progressive journey with its asset renewal practices, in recent times, the lack of funding to support new initiatives related to service delivery has generated a growing demand.

This Plan aims to guide Council in:

- Supporting the implementation of Council's *Asset Management Policy*.
- Supporting the integration of service planning and asset management.
- Aligning with external guidelines.

The Plan has been structured in a manner to highlight five key areas of improvement:

1. Service Planning Integration.
2. Sustainable Asset Funding.
3. Asset Management Plans.
4. Asset Management Information System Upgrade or Replacement.
5. Beyond Core Asset Management Maturity.

In essence, these recommendations will assist Council in:

- Reaching a sustainable level of renewal funding.
- Having regard to the long term asset requirements of Council, to deliver desirable service outcomes.
- Advancing asset decision tools and information systems, to facilitate service planning integration, data management and efficient work practices.

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1. Victorian Auditor-General's Office Recommendations 2014
2. Asset Condition Summaries
3. Condition Audit and Asset Management Plan Programs
4. Strategic Asset Management Plan 2003 – Status of Recommendations 2014
5. MAV Integrated and Financial Planning Frameworks
6. Asset Management Steering Group Terms of Reference
7. National Asset Management Assessment Framework MAV Core Report, November 2013

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# Strategic Asset Management Plan



# Chapter 1. Introduction

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.1 Role and Purpose of Assets at Knox City Council

Knox City Council (Council) manages more than \$1.5 billion in property, infrastructure, plant and equipment assets (written down value June 2014) on behalf of the community, across an area of 114 square kilometres. It is generally accepted that these assets exist to directly, and indirectly, support the services that Council delivers to the community, and include:

- Road and footpath networks.
- Stormwater drainage systems.
- Active and passive open space.
- Community facilities such as pre-schools, pavilions and senior citizens centres.

Council's *Asset Management Policy* notes that:

*Assets enable the provision of services to the community [...] Sustainable service outcomes for the community are very much dependent on the performance of the assets that support those services (Knox City Council 2013, p. 2).*

Therefore, in order to support the provision of services, Council has invested in an extensive asset portfolio over a long period of time. Assets typically have a long lifecycle, with significant costs required at each stage of the lifecycle, to ensure they continue to deliver the required level of service. It is for these reasons, among others, that assets need to be managed strategically.

The Victorian Auditor-General's Report, *Asset Management and Maintenance by Councils*, elaborates further, in 2014, on the purpose of assets.

*How councils manage assets has direct implications for their communities. The primary aim of council asset management is to maintain an asset portfolio that allows councils to effectively meet current and future demand for services [...] Poor asset management can lead to deteriorating levels of service by councils, higher council rates and an increased financial burden on future generations (VAGO 2014, p. ix).*

### 1.2 Definition of Asset Management

Council's *Asset Management Policy* defines asset management as:

*The process applied to manage assets over each stage of their service life, from asset needs analysis, creation, operation, maintenance, renewal and disposal. The objective of asset management is to meet a required level of service in the most cost effective manner, through the management of assets for present and future customers (Knox City Council 2013, p. 3).*

This definition aligns with that of the *International Infrastructure Management Manual (IIMM)*. This publication is recognised worldwide as best practice guidelines for asset management planning.

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.3 Purpose of the Strategic Asset Management Plan

In 2003, Council's original *Strategic Asset Management Plan* was developed. Around the same time, the High Court decision to abolish non-feasance became a catalyst in driving councils to take a proactive approach to road management. Council recognised the prudence of adopting the same philosophy for all of its infrastructure, and prepared a strategy to represent all assets. The development of that initial strategy was also endorsed by participation in the early stages of the Municipal Association of Victoria's (MAV) STEP program. Foundations for asset management principles, at Council, were effectively articulated in that strategy:

*A vision for the future management of assets is to formulate a strategic plan to improve Council's approach, allowing Council to move from a reactive, funding based approach, to a proactive strategy built around agreed service levels and risk management (Knox City Council 2003, p. 2).*

The original 2003 *Strategic Asset Management Plan* provided a snapshot of performance of each asset class, and an overall assessment of renewal backlog. Furthermore, key strategic improvement opportunities, that were documented in that strategy, have been progressively realised through the development of separate Asset Management Plans, and in changes to operating practices.

The review and update of the *Strategic Asset Management Plan* will allow Council to:

- Review its progress over the last ten years.
  - Refine its broad objectives and actions regarding asset management
  - Set the direction for the next ten year period.
  - Ensure that Council continues to comply with the core requirements of the National Asset Management Assessment Framework (NAMAF). In accordance with the NAMAF core competency assessment, an Asset Management Strategy:
    - *Shows how the asset portfolio can meet the service delivery needs of the community, and defines the future vision of asset management practices within Council.*
    - *Is linked to Council's Asset Management Policy, and integrated into Council's Strategic Longer Term planning and annual budgeting processes.*
    - *Documents the current status of asset management practices, within the Council, and what actions Council must take to implement the Asset Management Policy, including resource requirements, timeframes and accountabilities.*
- (MAV 2010)

# Strategic Asset Management Plan

## Chapter 1. Introduction

Based on the recommendations from the 2014 VAGO Report, substantial improvements are required in order that councils more efficiently and effectively manage their physical assets. Most of these can be addressed through an effective Strategic Asset Management Plan (or Asset Management Strategy):

- *Better asset renewal planning and practice.*
- *Higher quality asset management plans, more effective implementation of these plans, and better linking of service levels and standards to these plans.*
- *Further developing asset management information systems, that are integrated with other corporate information management systems.*
- *Recruiting and developing skilled and competent staff to manage assets.*
- *Improving the monitoring, evaluation and reporting on asset management.*

(VAGO 2014, p. x)

The 2014 VAGO Report expands further by outlining what it believes to be key components of better practice asset management strategies. In accordance with the Report such strategies:

- *Provide current details of infrastructure assets and their management, including current and future forecast needs and the adequacy of funding.*
- *Demonstrate how the asset portfolio can meet the service needs of the community in the short, medium and long term, with available resources.*
- *Are linked to the asset management policy, and integrated into strategic long-term financial planning, and the annual budget process.*
- *Incorporate actions required to implement the policy, including developing asset data information systems, identifying resource requirements, and establishing time frames and performance measures for implementing the strategy.*

(VAGO 2014, p. 13)

While this updated *Strategic Asset Management Plan* ensures Council complies with the provisions of the NAMAF core competencies, and meets the expectations of the VAGO Report, it also gives Council a platform to commence transition into a more advanced level of asset management.

In addition to this, the new ISO 55000 International Asset Management Standards advocate for a Strategic Asset Management Plan to be a key component of an organisational asset management framework, in supporting achievement of asset management objectives (ISO 2014a).

**The purpose of this Plan, therefore, is:**

- 1. To support the implementation of Council's Asset Management Policy, and guide continuous improvement in Council's asset management practices.**
- 2. To support the integration of service planning principles with asset management.**
- 3. To align with external guidelines, and expectations, regarding asset management frameworks and documentation (e.g. VAGO, NAMAF, ISO 55000)**

Improvement actions, listed in Chapter 8, outline how Council intends to improve asset management capabilities across the organisation over the next ten years, and how it plans to address recommendations of the Victorian Auditor-General's Office.

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.4 Link to Council's Strategic Planning Framework

#### 1.4.1 Knox Integrated Planning Framework

While the focus of this Plan is on asset management planning processes, it is crucial to appreciate that such planning can never be successfully treated in isolation.

*An effective asset management organisation recognises that asset management isn't something that 'is done by the asset managers'. Successful implementation requires consistent direction, focus and attention over time. Asset management should be an accepted 'way of doing business', in order to achieve its full potential in delivering long term benefits. There needs to be strong coordination vertically through the organisation, from the strategic to the operational level.*

(NAMS and IPWEA 2011, p. 1/8)

The Knox Integrated Planning Framework is documented in the *Knox City Plan 2013-17*. This planning framework provides a reference to the relationships between Council's key planning approaches, and provides a line of sight between operational practices, and the Council's strategic objectives.

## knox's integrated planning framework

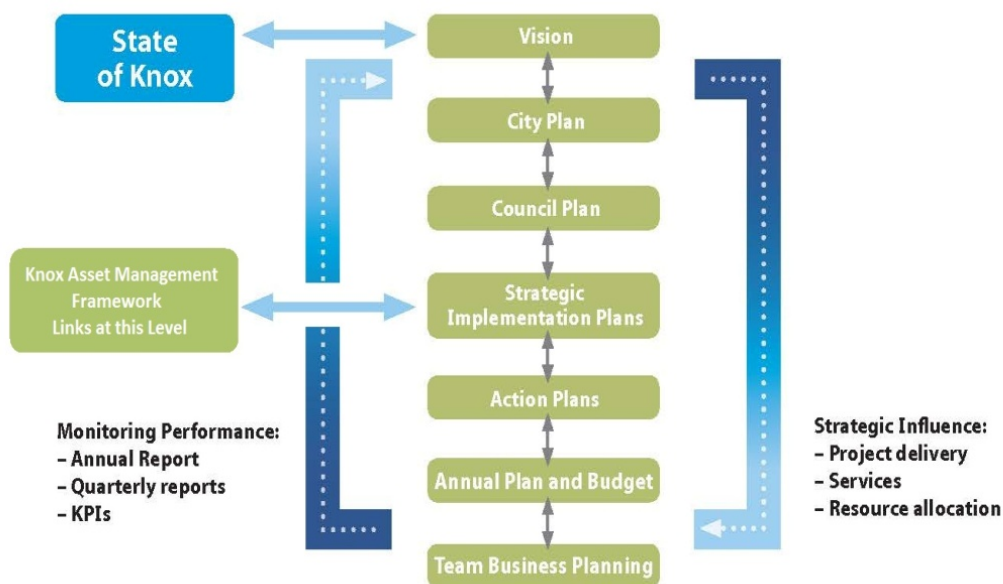


Figure 1 – Knox Integrated Planning Framework (amended from the Knox City Plan)

It is important, therefore, that the principles of asset management form part of this framework, and that there is a link to the objectives contained therein.

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.4.2 Asset Management Relevance to Council's Strategic Objectives

In essence, this Plan is a collection of asset management objectives that support organisational strategic objectives, service planning, and the *Asset Management Policy*. One of the aims of this Plan is that it is integrated into Council's strategic long term planning. The ISO 55000 Standards recommend that a Strategic Asset Management Plan specifies how organisational objectives are to be converted into asset management objectives.

As a result of this, there are a number of corporate objectives that are relevant to asset management, and these are summarised in the following table. Improvement actions in Chapter 8 are aligned to these objectives.

# Strategic Asset Management Plan

## Chapter 1. Introduction

Knox Vision	City Plan	Council Plan
<p><b>•THEME 3: Vibrant and Sustainable Built and Natural Environments</b></p> <ul style="list-style-type: none"> <li>•...access to a full range of urban facilities and services</li> <li>•...strong functioning network of bicycle and walking paths</li> </ul>	<p><b>•THEME 3: Vibrant and Sustainable Built and Natural Environments</b></p> <ul style="list-style-type: none"> <li>•<b>Objective 3.1:</b> <i>The changing needs of a diverse community are supported through planned growth and change in housing and infrastructure that respects both built form and natural systems, as well as resource availability.</i></li> <li>•<b>Strategy:</b> <i>Public infrastructure and open space is maintained and improved to support a vibrant community life in Knox.</i></li> <li>•<b>Objective 3.3:</b> <i>Infrastructure networks provide transport choice, affordability and connectivity.</i></li> <li>•<b>Strategy:</b> <i>Significantly improved integrated and sustainable transport systems and infrastructure are provided to improve opportunity, choice and access for all.</i></li> </ul>	<p><b>•THEME 3: Vibrant and Sustainable Built and Natural Environments</b></p> <ul style="list-style-type: none"> <li>•<b>Ongoing Service Delivery: Asset Management –</b> <i>provide strategic direction for asset management incorporating the development of processes and systems to maintain and regularly update Council’s asset register and management system, collection of asset condition data and the development and implementation of strategic asset management plans for all asset categories.</i></li> <li>•<b>Council Plan Objective:</b> <i>Reduce the funding gap for renewal of infrastructure under the stewardship of Council.</i></li> </ul>
<p><b>•THEME 4: Culturally Rich and Active Communities</b></p> <ul style="list-style-type: none"> <li>•...public open space is accessible and plentiful</li> <li>•...access to shared open spaces and facilities</li> </ul>	<p><b>•THEME 4: Culturally Rich and Active Communities</b></p> <ul style="list-style-type: none"> <li>•<b>Objective 4.2:</b> <i>Increase use of public spaces and infrastructure for the purposes of cultural expression and physical activity.</i></li> <li>•<b>Strategy:</b> <i>Promote accessible opportunities to participate in leisure and recreation activities, through provision of public infrastructure and support to sporting and leisure groups in Knox.</i></li> </ul>	
<p><b>•THEME 5: Democratic and Engaged Communities</b></p> <ul style="list-style-type: none"> <li>•...processes that are transparent and accountable</li> <li>•...exercises sound financial management</li> </ul>	<p><b>•THEME 5: Democratic and Engaged Communities</b></p> <ul style="list-style-type: none"> <li>•<b>Objective5.3:</b> <i>Ensure Council is well governed and demonstrates effective leadership.</i></li> <li>•<b>Strategy:</b> <i>Maintain accountable and transparent governance practices, and Council’s sound stewardship of the community’s finances and assets.</i></li> </ul>	

Table 1 – Council Strategic Objectives directly relevant to the Strategic Asset Management Plan

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.4.3 Knox Asset Management Framework

The Knox Asset Management Framework integrates, predominantly, at the tactical level of the Knox Integrated Planning Framework in Figure 1 – by supporting strategic implementation plans and service plans. It is important that the asset management framework aligns with the overarching organisation planning framework, if asset management is to truly support the organisation's strategies.

In accordance with the 2014 VAGO Report:

*Better practice asset management requires councils to develop and apply a sound asset management framework that includes a policy, strategy, plans and governance arrangements for the effective management of all infrastructure assets.*

*The key components of a sound asset management framework include:*

- **Governance** arrangements incorporating an accountability structure that identifies roles and responsibilities.
- An agreed **policy** that establishes the principles and requirements for asset management.
- A **strategy** that sets out the actions needed to implement the policy and links the asset portfolio to service delivery needs.
- Asset management **plans** that link to the policy, strategy, long-term financial plans and intended levels of service.
- Current and planned **levels of service** established in asset management plans, prepared in consultation with the community.

(VAGO 2014, p. 9)

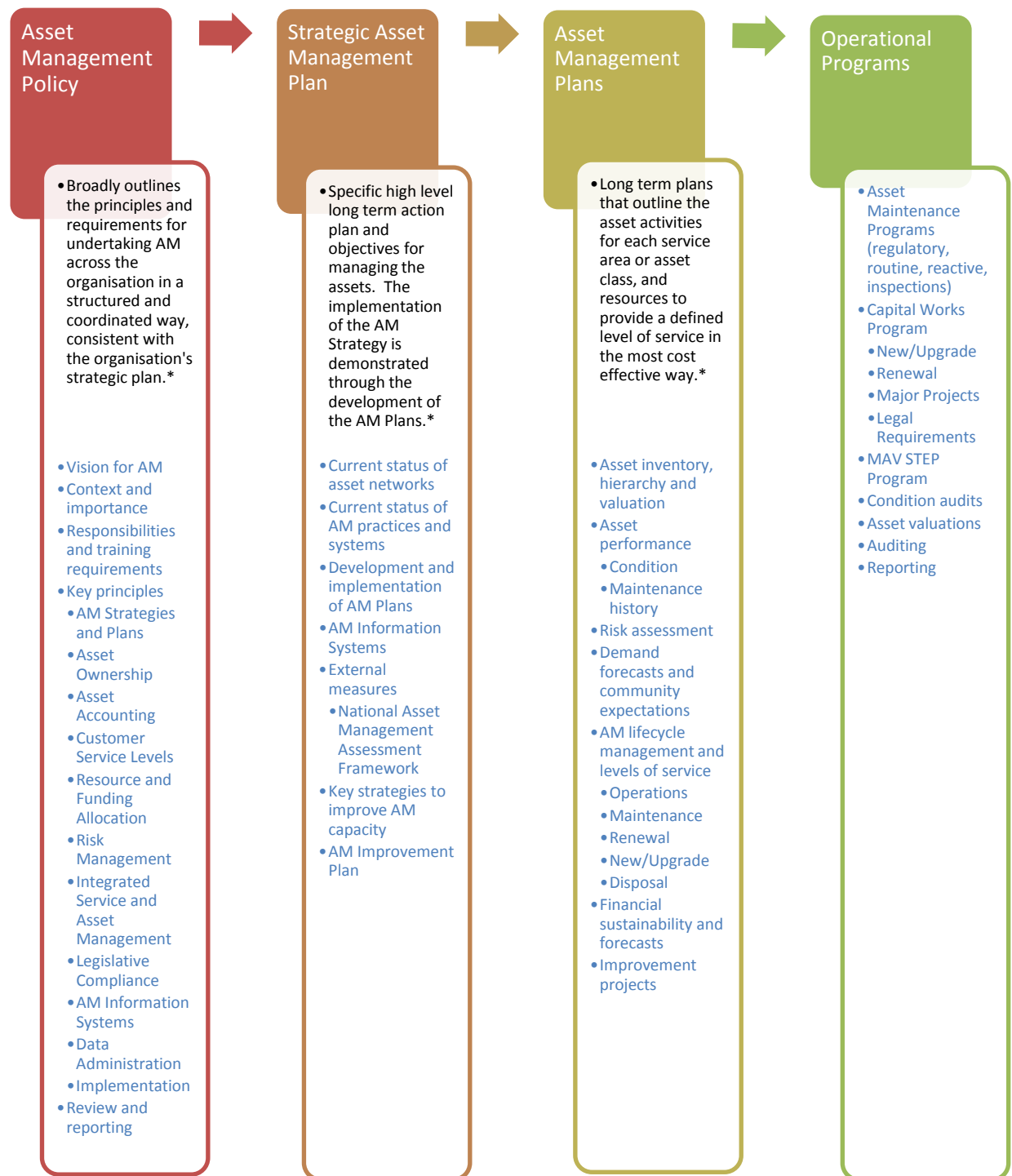
The new ISO 55000 International Standards on Asset Management refer to an Asset Management System as being a set of tools – policies, plans and business processes. In this case, the term Asset Management System equates to an Asset Management Framework (ISO 2014a).

The Knox Asset Management Framework is represented in the following figure.



# Strategic Asset Management Plan

## Chapter 1. Introduction



**Figure 2 – Knox Asset Management Framework**

Source: \* Definitions - IIMM

# Strategic Asset Management Plan

## Chapter 1. Introduction

This Plan, therefore, provides a link between the *Asset Management Policy*, and the more detailed Asset Management Plans. However, aside from supporting the *Asset Management Policy*, it is also clear how this Plan has direct relevance to some key overarching corporate objectives.

### 1.5 Stakeholders

The stakeholders for asset management range across the organisation, from service planners to asset planners, to maintenance crews.

Asset management roles and responsibilities are outlined, at a broad level, in the *Asset Management Policy*.

Responsibilities for the different lifecycle phases of assets are documented in the specific Asset Management Plans.

#### 1.5.1 Asset Management Steering Group

Council's *Asset Management Policy* articulates Council's commitment to asset management, as a whole of organisation approach. Infrastructure asset management needs to be integral with the overall corporate planning process, aligned with the strategic business planning of Council, and needs commitment from across the whole organisation to be successful.

The *International Infrastructure Management Manual* (IIMM) acknowledges the importance of having an asset management team, with representatives from a cross-section of departments, to ensure that asset management is an integrated part of the corporate process, rather than an isolated activity, as well as to broaden best practice.

In order to fulfil these goals, Council's Asset Management Steering Group was formed in 2011. Members include:

- Director – Engineering & Infrastructure
- Manager – Sustainable Infrastructure
- Manager – Operations
- Manager – Finance
- Manager – Corporate Planning & Performance
- Executive Engineer – Business Improvements
- Coordinator – Asset Strategy
- Coordinator – Service Planning

The Terms of Reference for the Asset Management Steering Group (refer Attachment 6) outline the objectives, role and membership of this group. This information is reproduced in the following table.

# Strategic Asset Management Plan

## Chapter 1. Introduction

Objectives	Role
<ul style="list-style-type: none"><li>•To drive and implement sustainable asset and service management across Council.</li><li>•To increase awareness of the importance of integrated service planning and asset management across the organisation.</li><li>•To audit and report progress on a regular basis to EMT, Council’s Audit Committee, Council and the Municipal Association of Victoria (MAV).</li><li>•To comply with the National Asset Management Assessment Framework.</li><li>•To work in unison with the Service Planning Steering Group, to create and implement integration opportunities for asset management and service planning.</li></ul>	<ul style="list-style-type: none"><li>•To monitor and assess progress and determine responsibility for implementation projects arising from the Asset Management Strategy, Asset Management Plans, and the Asset Management Systems Review (Improvement Recommendations)</li><li>•To assist in the self assessment of Council’s asset management improvement program, as part of the National Asset Management Assessment Framework.</li><li>•To assist in the preparation of progress reports for the Audit Committee and Council.</li><li>•To complement the work undertaken by the Service Planning Steering Group, with a view to realise integration opportunities for sustainable asset management, and service planning.</li></ul>

**Table 2 – Asset Management Steering Group Objectives and Role**

Source: Terms of Reference, Asset Management Steering Group

### 1.5.2 Sustainable Infrastructure Department

Although asset management is recognised in the *Asset Management Policy* as an organisational responsibility, the Sustainable Infrastructure Department and the Asset Strategy team have a key role in driving the principles, and integrating the various facets of asset management, as well as providing a leadership role. The role of this department could be summarised as:

- Provide a responsive role to enhance asset knowledge and awareness.
- Provide leadership to the organisation, to better align asset planning decisions with service planning objectives.
- Support the development of the Long Term Financial Forecast, by informing discussion around both the renewals, and the new/upgrade asset requirements.
- Guide the organisation in transitioning asset management as a corporate responsibility.

# Strategic Asset Management Plan

## Chapter 1. Introduction

### 1.5.3 Consultation for this Plan

A number of internal and external stakeholders provided input and feedback into the development of this *Strategic Asset Management Plan*.

- Councillors
- Asset Management Steering Group members
- Sustainable Infrastructure Department
- Council's MAV STEP provider – CT Management
- Community Services Senior Management Team
- Executive Management Team
- Knox Community (available for public feedback October, 2014)

# **Chapter 2.**

## **Relationship to Service Planning**

# Strategic Asset Management Plan

## Chapter 2. Relationship to Service Planning

### 2.1 Service Planning

In the past, service planning at Council has been achieved, with limited coordination by departments undertaking activities, such as community engagement and benchmarking, to develop plans and strategies for the future. In 2012, Council determined that service planning was an essential way to plan for the long term future of services across Council.

The service planning process aims to ensure:

- The ongoing sustainability of Council, and its services and programs.
- Better management and use of Council's resources – assets, workforce, and finances.
- Relevance to the community's needs and expectations.
- Clarification of priorities for the organisation and teams.
- Provision of contemporary services to the community.
- Improved integration between service planning, and planning for future facility requirements.

All services within Council will be reviewed across a four-year period, in line with the Council term, and then reviewed periodically, as determined by each new Council.

Considering Council's assets have a significant relationship with the delivery of services, it is important that future asset planning takes into consideration the asset related outcomes of service planning, and that data outputs from service planning are consistent. This relationship is demonstrated in the following diagram from the *Asset Management Policy*.

# Strategic Asset Management Plan

## Chapter 2. Relationship to Service Planning

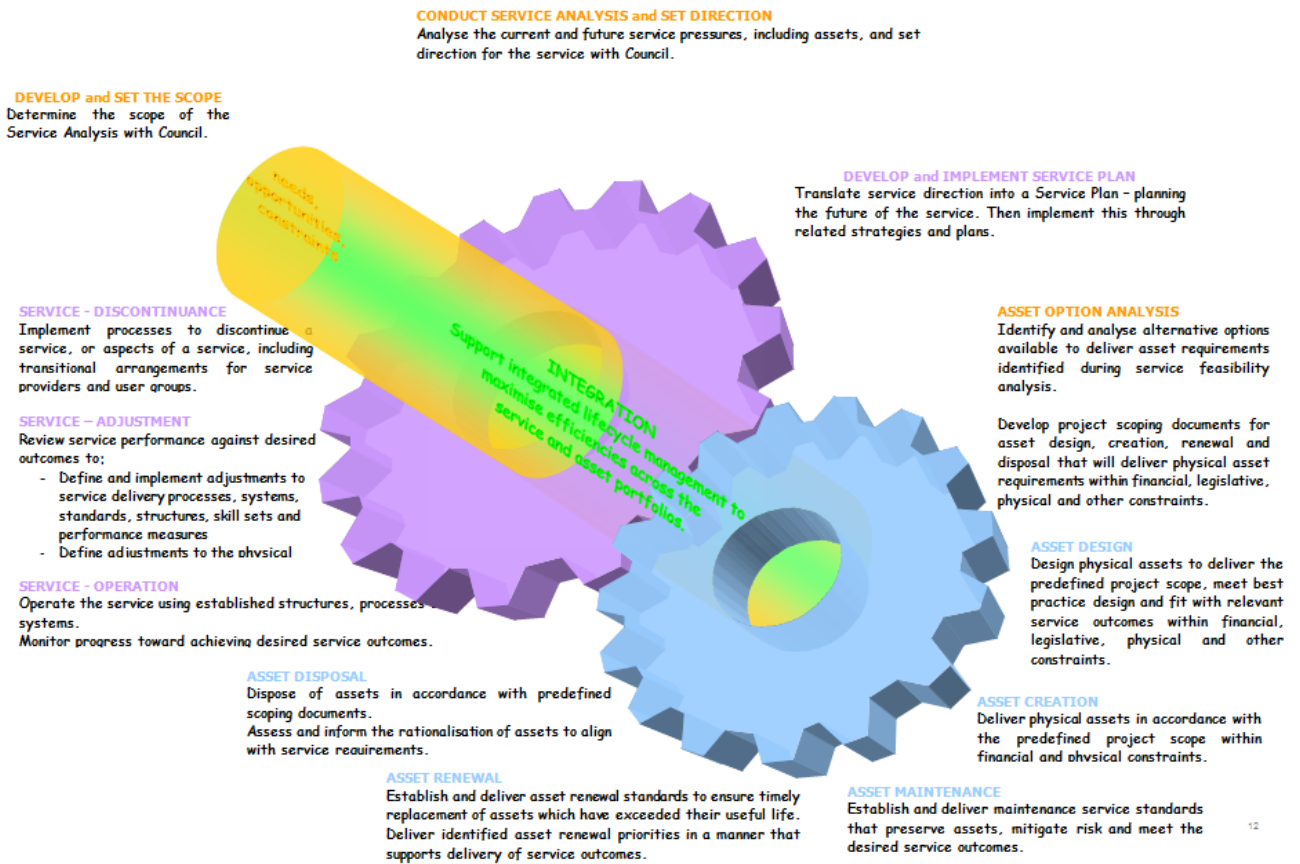


Figure 3 – Relationship between Service Planning and Asset Management

Source: Asset Management Policy 2013

One of the objectives of Council’s *Service Planning Policy* is to “inform new and upgrade capital works planning, and renewal demand, maintenance and operation costs relative to the assets, and resources required to support Council’s service provision” (Knox City Council 2014, p. 5).

Along with new asset requirements identified within discrete master planning processes, and identified community needs, service planning creates an asset challenge for Council, as it attempts to allocate scarce resources most efficiently.

Integration with service planning, therefore, will prove to be a major focus of asset management efforts in the future. A number of recommendations are outlined, in Chapter 8, to guide Council in developing integrated processes to recognise that a wider service lens needs to be applied to the allocation of funding. There is a growing understanding, within Council, that a coordinated approach is required, given that these principles transcend most departments.

# Strategic Asset Management Plan

## Chapter 2. Relationship to Service Planning

### CHAPTER 2 RECOMMENDATION

#### Service Planning Integration

Support and provide leadership in the development and integration of service planning with asset management.

**Why?** Need to understand the requirements, levels of service, and long term provision needs of assets to meet community service goals.

**How?** Define goals, consistently quantify infrastructure requirements/implications, and levels of service, to achieve goals and incorporate into future reviews of Asset Management Plans. Develop tools to allow municipal-wide planning.



# **Chapter 3.**

# **Implementation of Strategic Asset Management Plan 2003**

# Strategic Asset Management Plan

## Chapter 3. Implementation of Strategic Asset Management Plan 2003

### 3.1 Introduction

In the absence of an Asset Management Framework, an *Asset Management Policy*, or any Asset Management Plans, the original *Strategic Asset Management Plan* was both a strategic and operational document. It laid the foundation for the development of asset specific Asset Management Plans in subsequent years, and the establishment of asset management capabilities within the organisation.

### 3.2 Progress on implementation of actions

The 2003 *Strategic Asset Management Plan* documented nineteen (19) broad recommendations as follows:

ID	Recommendation
R1	That condition surveys be undertaken for all asset categories, including safety and risk assessments, identification of remaining useful life and determination of appropriate treatments
R2	That implementation plans are developed to progress high risks identified in condition surveys
R3	That service levels are established for each asset category for unscheduled and routine maintenance and renewal programs, including optimum funding levels required to match desired service levels and minimise risk exposure
R4	That an analysis of economic life distribution is undertaken to improve the confidence in life-cycle analysis for Capital Renewal requirements
R5	That an assessment of optimum maintenance and renewal treatments, intervention levels and construction/design standards is undertaken to maximise service life and reduce life-cycle peaks
R6	That valuation of Council's identified assets is completed
R7	That a financial strategy is developed to address the financial gap in asset management and the identified backlog determined from condition audits
R8	That future demand plans are developed for the provision of services and assets, including opportunities for disposal and rationalisation of existing assets
R9	That forward planning and implementation programs are developed for each asset category for consideration in future capital works programs
R10	That the long-term funding implications for future asset upgrade and expansion works are assessed, including ongoing maintenance and end of life renewal needs
R11	That Council's Claims Management System is advanced to enable identification and assessment of claims per asset category
R12	That risks associated with each asset category are identified and assessed, including determination of rectification costs
R13	That processes and procedures are developed for continual risk and safety assessments, including relevant documentation
R14	Development of an integrated asset management knowledge database
R15	That financial assessments are incorporated for all new capital upgrade and expansion projects
R16	That the 5-year Capital Works Program is restructured to reflect Council's obligation to effectively manage its existing infrastructure asset stock

# Strategic Asset Management Plan

## Chapter 3. Implementation of Strategic Asset Management Plan 2003

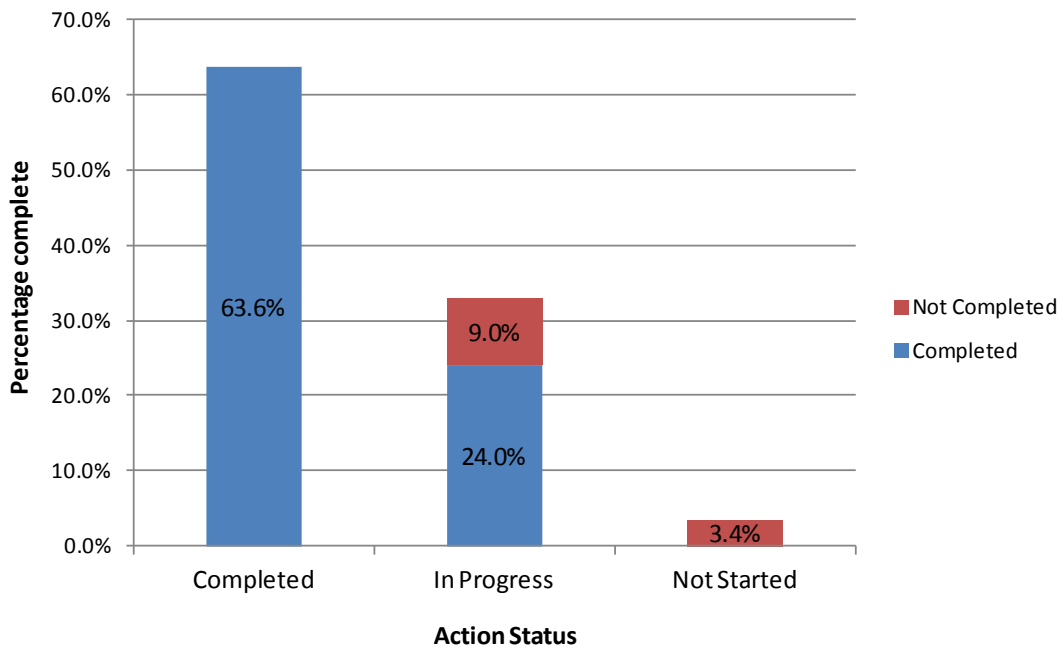
ID	Recommendation
R17	That financial budgets are tailored to match desired service levels
R18	That individual Asset Management Plans for each asset category are developed
R19	That community understanding about the nature and seriousness of infrastructure deterioration is increased

**Table 3 – Recommendations from Strategic Asset Management Plan 2003**

In order to account for different asset classes, and to further clarify the recommendations, these were broken down one further level into eighty-eight separate recommendations, to constitute the action plan. The full list of recommendations, and their level of progress, is documented in Attachment 4.

Since 2003, these recommendations have been incorporated into various teams' business plans and actioned formally, or have been addressed, informally, through evolving practices within the organisation.

As at June 2014, implementation of the 2003 *Strategic Asset Management Plan* was at 87.6 percent complete – refer chart below.



Number of recommendations			
Completed	In Progress	Not Started	TOTAL
56	29	3	88

**Figure 4 – Strategic Asset Management Plan implementation status – June 2014**

# Strategic Asset Management Plan

## Chapter 3. Implementation of Strategic Asset Management Plan 2003

Figure 5 below demonstrates the progress of implementation over the years. The monitoring and formal recording of implementation has only occurred since 2010. The achievement of almost 90 percent implementation of the *Strategic Asset Management Plan* over a ten year period demonstrates an ongoing commitment by Council to embed some of the key asset management principles outlined in that Plan.

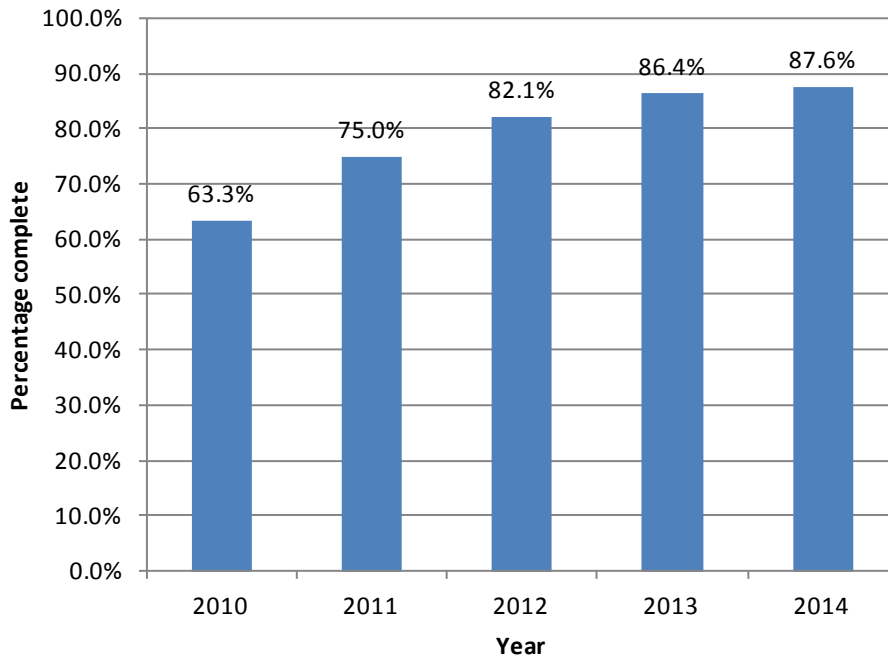


Figure 5 – Strategic Asset Management Plan implementation status – 2010 to 2014

Of those actions not fully addressed, some key themes are:

- The adoption of all Asset Management Plans – the *Street Tree Asset Management Plan* is currently in progress.
- Exploration of future demand to determine infrastructure requirements, to in turn inform a ten year upgrade program – this is planned to be explored further, as an outcome of service planning.
- Community involvement, in establishing desirable service levels and determining future asset demand – this is planned to be addressed in further iterations of Asset Management Plans, and as an outcome of service planning.

# Chapter 4. Council Assets

# Strategic Asset Management Plan

## Chapter 4. Council Assets

### 4.1 Definition of Asset Classes

The following table describes the key infrastructure asset categories that Council is responsible for managing. To demonstrate the link between asset management and service planning, services that are supported by each asset are also listed in the table.

Asset Category	Asset Sub Category	Description of Service the Asset Provides	Council Services that are supported by this Asset
Drainage	Pits	<p>The drainage network assists the community by providing the following services:</p> <ul style="list-style-type: none"> <li>•Flood mitigation and runoff management</li> <li>•Environmental sustainability (stormwater harvest and reuse)</li> <li>•Dissipating stormwater runoff flows and protecting receiving waterways</li> <li>•Improving water quality through various treatment methods</li> </ul>	<p>Integrated Water Management</p> <p>Open Space Management</p> <p>Traffic and Transport</p> <p>Place Management</p>
	Pipes		
	Water Sensitive Urban Design (WSUD)		
	Gross Pollutant Traps		
	Retarding Basins and Dams		
	Open Drains (including Table Drains)		
Road	Surface Pavement	<p>The road network connects different regions of the municipality and provides access to residential, commercial and community services. The road network also provides alternate transport choices, incorporating public transport, bicycle lanes, and shared path networks.</p>	<p>Traffic and Transport</p> <p>Community Transport</p> <p>Community Care Services (HACC Aged Services, In-home Support and Food Services)</p> <p>Waste</p> <p>Place Management</p>
	Kerb and Channel		
	Earthworks		
	LATMs		
Pathways	Footpath	<p>Pathways connect communities within the municipality, whilst providing a robust and safe pedestrian environment.</p> <p>Pathways offer other benefits to the community by:</p> <ul style="list-style-type: none"> <li>•Offering an economic and healthy transport alternative</li> <li>•Promoting community interaction within the municipality</li> <li>•Improving accessibility for people of all abilities</li> <li>•Reducing greenhouse emissions</li> <li>•Promoting features of the city not accessible via motorised vehicles</li> </ul>	<p>Traffic and Transport</p> <p>Open Space Management</p> <p>Leisure Services</p> <p>Place Management</p>
	Shared Path		

# Strategic Asset Management Plan

## Chapter 4. Council Assets

Asset Category	Asset Sub Category	Description of Service the Asset Provides	Council Services that are supported by this Asset
Bridges and Major Culverts	Pedestrian Road/Vehicle	Council's bridge and culvert assets have been constructed to support Council's road and path network, in order to promote connectivity across the municipality for vehicles, cyclists and pedestrians. They also facilitate stormwater management.	Traffic and Transport Community Transport Community Care Services (HACC Aged Services, In-home Support and Food Services) Waste Place Management Integrated Water Management
Carparks	Surface Pavement Kerb and Channel Earthworks	Carparks within the municipality support the use of Council and community services, and support a number of major shopping precincts. They also indirectly assist other sustainable methods of transport – such as trains, buses, bicycles and walking.	Most Council services
Buildings	Amenities Arts Centre Clubrooms Community Centre Community House Depot Education Centre Guide Hall Gymnasium Hall Healthcare Historical Kindergarten Leisure Centre Library Multi Purpose Offices Pavilion Playgroup Rental Commercial Rental Residential Scoreboard Scout Hall Shelter Storage Vacant Workshop	Council buildings support the delivery of community services, and act as focal points for community life. They contribute to the social, cultural and economical development of the local community. Council's building portfolio reflects current services, and the history of development within the City of Knox.	Most Council services

# Strategic Asset Management Plan

## Chapter 4. Council Assets

Asset Category	Asset Sub Category	Description of Service the Asset Provides	Council Services that are supported by this Asset
Playground	Playground Equipment	Playgrounds encourage outdoor play and recreation for children.	Open Space Management Early Years Education and Care Leisure Services
Open Space (Parks and Reserves)	Archery Athletics Track Basketball Court BMX Track Bowling CFA Running Track Dog Park Garden Beds Netball Court Radio Controlled Race Track Rebound Wall Skate Park Sports field(cricket, football, soccer, baseball, softball) Tennis Court Tree Reserve	Open space is critical to the visual character of the municipality, and essential to the health and wellbeing of the local community. It incorporates three major components: Active Open Space, Passive Open Space, Conservation Areas.	Open Space Management Biodiversity Leisure Services Arts and Culture Place Management Integrated Water Management
Public Transport	Bus Shelter	The majority of these assets are now owned and managed by Public Transport Victoria (PTV), or private entities.	Traffic and Transport
Street Trees	Street Trees	Street trees are integral to Knox's green and leafy image, and provide amenity and environmental benefits in a mostly urban setting.	Open Space Management Biodiversity Sustainable Futures

**Table 4 – Council Infrastructure Assets**



# Strategic Asset Management Plan

## Chapter 4. Council Assets

The following table lists all of Council's current thirty-seven (37) services. Whilst buildings are invariably required for most of these services, a significant number of these services also rely directly or indirectly on the provision of other infrastructure assets.

City Development	Community Services	Corporate Development	Engineering & Infrastructure
<ul style="list-style-type: none"> <li>• Building</li> <li>• Economic Development</li> <li>• Emergency Management</li> <li>• Health Services</li> <li>• Local Laws</li> <li>• Place Management</li> <li>• Strategic Planning</li> <li>• Sustainable Futures</li> <li>• Urban Planning</li> </ul>	<ul style="list-style-type: none"> <li>• Active Ageing</li> <li>• Arts and Culture</li> <li>• Community Access and Equity</li> <li>• Community Care Services (HACC Aged Services, In-home Support and Food Services)</li> <li>• Community Safety</li> <li>• Community Transport</li> <li>• Community Strengthening</li> <li>• Early Years Education and Care</li> <li>• Family Health Development and Support (Maternal Child Health)</li> <li>• Family Services Planning, Innovation and Partnerships</li> <li>• Leisure Services</li> <li>• Library Services</li> <li>• Social Policy and Planning</li> <li>• Youth</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• Property Services</li> <li>• Corporate Planning and Performance</li> <li>• Customer Service</li> <li>• Finance</li> <li>• Governance</li> <li>• Information Technology</li> <li>• People Performance</li> </ul>	<ul style="list-style-type: none"> <li>• Assets</li> <li>• Biodiversity</li> <li>• Integrated Water Management</li> <li>• Open Space Management</li> <li>• Traffic and Transport</li> <li>• Waste</li> </ul>

Table 5 – Current Council Services (as per the Knox Service Planning Framework)

## 4.2 Current Asset Inventory

The following table presents a summary of Council's key infrastructure assets.

# Strategic Asset Management Plan

## Chapter 4. Council Assets



### Drainage

- Length of Drainage Pipes: 1,144.9 km
- Number of Drainage Pits: 36,181



### Roads

- Length of all Local Roads: 716.7 km
- Length of sealed Local Roads: 696.9 km
- Length of unsealed Local Roads: 19.8 km



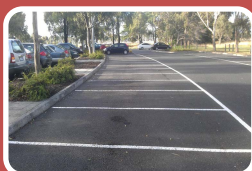
### Pathways

- Length of Footpaths in Road Reserves: 1,151.1 km
- Length of Footpaths in Reserves: 59.6 km
- Length of all Footpaths: 1,210.7 km
- Length of off road Shared Paths: 88.1 km



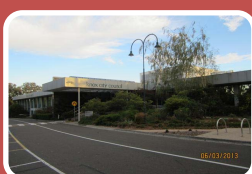
### Bridges and Major Culverts

- Number of vehicle bridges/culverts: 33
- Number of pedestrian bridges/culverts: 37



### Carparks

- Number of carparks/access roads: 228
- Total area of carparks/access roads: 346,053 m<sup>2</sup>



### Buildings

- Number of Council owned buildings: 243
- Number of Council maintained buildings: 264



### Playgrounds

- Number of playgrounds in Knox reserves: 209
- Number of playgrounds in early years facilities: 69



### Open Space

- Number of Open Space Sites (maintained by KCC): 869
- Total Area of Open Space Sites (maintained by KCC): 798.3 ha
- Total Area of Land (owned by KCC): 866 sq km
- Number of Sportsfields and Major Reserves (maintained by KCC): 57

# Strategic Asset Management Plan

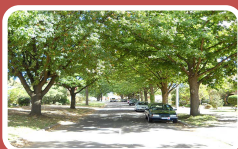
## Chapter 4. Council Assets



### Bus Shelters

- Number of bus shelters (maintained by KCC)

5



### Street Trees

- Total number of street trees (as at 2003)

68,702

**Table 6 – Council Asset Inventory**

Note: This data is current at July 2014 from Council's Asset Register.

## 4.3 Current Asset Financial Information (June 2014)

Council's infrastructure assets represent a significant financial investment and value to Council. The following table outlines the value of Council's infrastructure assets.

Asset Category	Current Replacement Cost	Depreciated Replacement Cost
Drainage	\$ 265,198,176	\$ 151,731,570
Road Surface	\$ 78,745,590	\$ 28,354,915
Road Pavement	\$ 281,163,319	\$ 218,087,831
Road Earthworks	\$ 136,135,975	\$ 136,135,975
Kerb and Channel	\$ 115,482,494	\$ 61,011,612
Footpaths	\$ 117,692,200	\$ 48,242,692
Shared Paths	\$ 14,290,345	\$ 10,653,793
Bridges	\$ 9,680,600	\$ 7,076,686
Carparks	\$ 25,496,123	\$ 20,249,953
Buildings	\$ 220,460,071	\$ 124,567,457
Parks (Inc Playgrounds)	\$ 43,546,705	\$ 31,309,837
Bus Shelters	\$ 37,202	\$ 11,762
Land Category	Current Replacement Cost	Depreciated Replacement Cost
Land (including land, land improvements, and land under roads)	\$ 667,014,014	\$ 667,014,014

**Table 7 – Current Asset Financial Information**

Source: Annual Report 2014. This data is current at June 2014

# Strategic Asset Management Plan

## Chapter 4. Council Assets

### 4.4 Current State of the Assets – Condition

As an outcome of recommendation R1 of the 2003 *Strategic Asset Management Plan*, infrastructure assets have been regularly audited for condition (typically by external contractors). Condition audits are largely managed by the Asset Strategy team, with collaboration from relevant stakeholders, depending on the assets in question. In most cases, condition audits have been combined with a verification/collection of asset inventory. There has also been an opportunity to collect specialist information (e.g. Essential Safety Measures information for buildings and load rating for bridges), as required for particular asset classes. Having accurate, and up-to-date condition information is critical to Council for the following reasons:

- Enables assessment of the overall condition distribution of asset classes, and comparison with previous audits. This, in turn, allows Council to demonstrate progress against renewal objectives.
- Allows Council's asset register and related databases to be updated.
- Provides a baseline, to determine future asset renewal funding requirements.
- Provides key inputs into capital works ranking processes.
- Provides key inputs into external reporting requirements (e.g. STEP program, DPCD survey).
- Assists in the development and review of Asset Management Plans.

Generic condition descriptors, used by Council, are outlined in the table below.

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

**Table 8 – Council Condition Rating Descriptions (Generic)**

Graphs outlining the current condition of assets can be found in Attachment 2.

# Strategic Asset Management Plan

## Chapter 4. Council Assets

### 4.4.1 Program of Future Condition Audits

In order to ensure the long term sustainability of Council assets, individual Asset Management Plans have recommended specific frequencies on which condition audits should be undertaken – typically every four to five years. Attachment 3 summarises the future program of condition audits. Consideration has been given to avoid scheduling the more expensive major audits (roads, buildings, drainage) in the same financial year.

## 4.5 Lifecycle Costs and Financial Sustainability

Costs and forecasts, for each phase of the asset lifecycle, are typically documented in individual Asset Management Plans. Local Government Victoria suggests that only “broad full costs need to be understood in the asset management strategy” (LGV 2004, p. 10).

A key focus of sustainable asset management is the provision of adequate renewal funding, to address ongoing asset deterioration, and a community desire to maintain a minimum level of asset service and performance. As a direct result of the development of the 2003 *Strategic Asset Management Plan*, and subsequent Asset Management Plans, Council has increased its investment in asset renewals, over the last ten years, to a more sustainable level.

Council’s *Long Term Financial Forecast* (LTFF) reflects asset renewal requirements, and there is a mechanism to ensure updated data (as a result of further condition audits or development of Asset Management Plans) is incorporated into the LTFF.

While renewal forecasting is already well embedded in existing Council processes, and a key platform of Asset Management Plans, the review of Asset Management Plans is a good opportunity to further explore the following aspects of financial sustainability:

- Maintenance – the current focus is limited to an assessment of the adequacy of existing maintenance funding levels. An improved analysis would assist in determining optimum maintenance levels, and opportunities for greater efficiencies.
- New/Upgrade – the outputs, from Council’s service planning processes, are likely to assist in being able to better define changed or expanded asset requirements.
- Lifecycle costs – although current processes make allowance for a level of lifecycle cost analysis, these processes could be simplified, and the data accuracy improved for better decision making.

### 4.5.1 Renewal forecasts

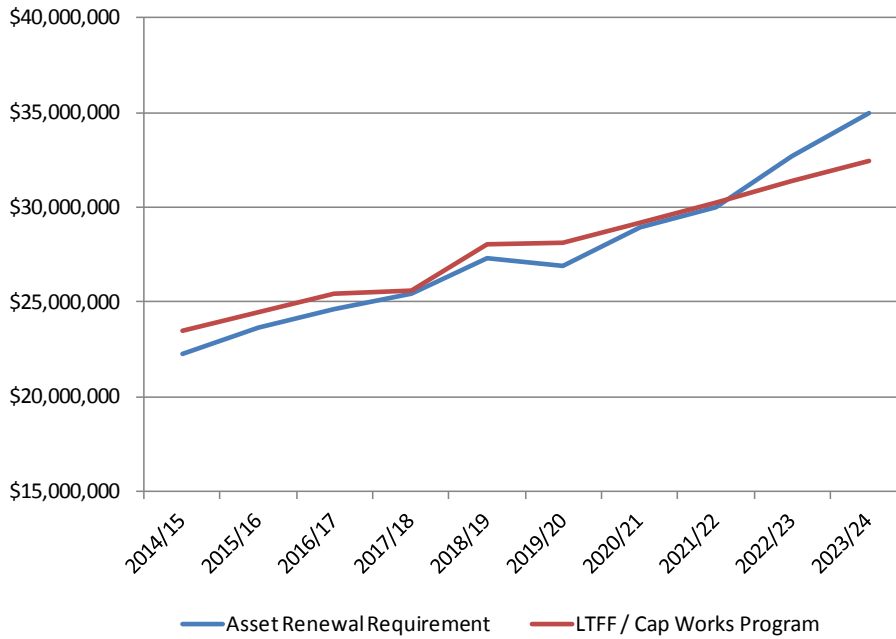
Renewal forecasts have been developed as part of Asset Management Plans. They are driven by condition data, desired service levels, and up-to-date unit rate data. Renewal forecasts are also updated at the time of subsequent condition audits. All renewal information is collated, centrally, by the Sustainable Infrastructure Department.

It is important to note that renewal requirements are calculated to address ongoing deterioration, but also incorporate the need to incrementally address renewal backlogs, in the timeframes outlined in Asset Management Plans.

The following graphs represent Council’s renewal requirements and corresponding commitments in the LTFF. The first graph represents the entire renewal program, which includes non-infrastructure assets such as plant, office and IT equipment.

# Strategic Asset Management Plan

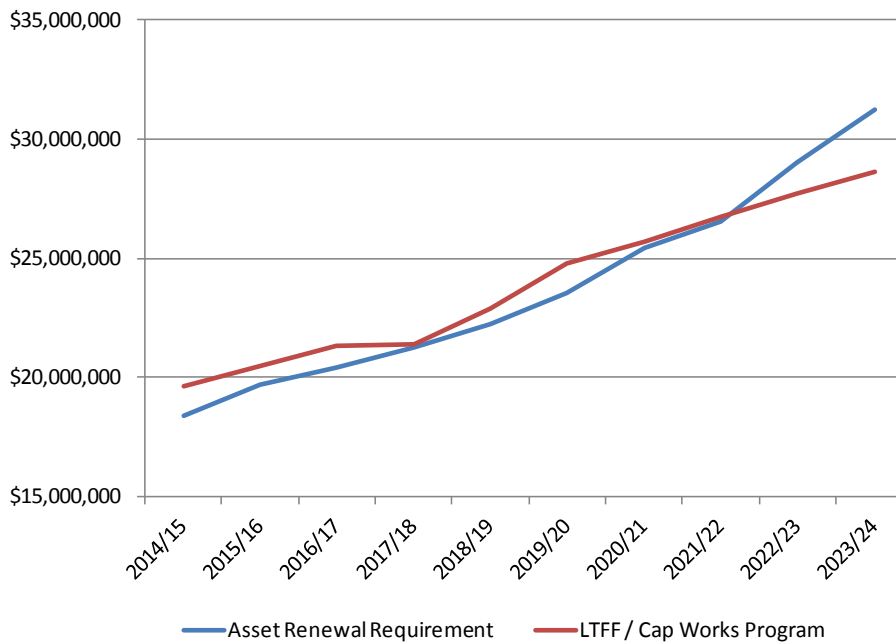
## Chapter 4. Council Assets



**Figure 6 – Asset Renewal Requirements (full renewal program) – as at June 2014**

**Notes:**

1. These figures are nominal (adjusted for inflation)
2. The full renewal program comprises sixteen (16) separate programs



**Figure 7 – Asset Renewal Requirements (infrastructure assets only) – as at June 2014**

**Notes:**

1. These figures are nominal (adjusted for inflation)
2. Non infrastructure asset programs (e.g. IT, plant, office equipment) have been excluded from this data

# Strategic Asset Management Plan

## Chapter 4. Council Assets

As can be seen, Council is currently meeting its renewal requirements. It is expected that subsequent updates of the LTFF will continue to adjust future funding commitments accordingly. There is naturally a lag between the acceptance of updated asset renewal data, and the revision of the LTFF. At this stage, the increased renewal requirements, in ten years' time, are largely attributable to buildings – this data will be verified via future building audits, and through detailed analysis of unit costs, and remaining lives of building components.

More detailed financial forecasts, and explanations, are provided in the individual Asset Management Plans.

### 4.5.2 Renewal gap

In accordance with the 2014 VAGO Report:

*All councils face the problem of ageing assets. As the condition of assets deteriorates, the level of service supported by those assets diminishes. Councils must invest in maintaining and replacing those assets if they wish to maintain the same level of service. The asset 'renewal gap' refers to the difference between the funding that councils need to renew their existing assets and the money they actually allocate to this purpose.*

(VAGO 2014, p. 2)

Knox has made concerted efforts, over the last ten years, to close its renewal gap to the point where it is currently meeting its renewal requirements and addressing its backlog. The current Council Plan has an objective to reduce the renewal funding gap, with the indicator being a budget representing 96 percent of renewal requirements by 2016/17. Based on historic measures, outlined in the figure below and forward projections, Council is already on track to achieve this objective.

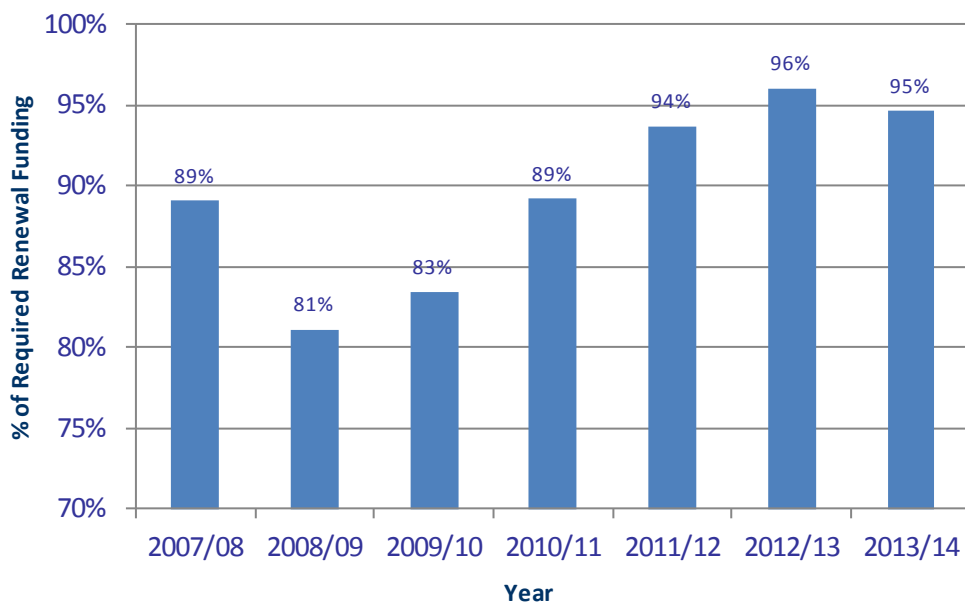


Figure 8 – Percentage of Asset Renewal Requirements met by Annual Capital Renewal Budget

# Strategic Asset Management Plan

## Chapter 4. Council Assets

Although Council has made significant advances in achieving a sustainable level of renewal funding, the information is reliant on ongoing condition audits and, therefore, subject to constant fluctuations. Prudent management is required to ensure Council maintains the condition of its assets, at agreed service levels, and does not revert to a backlog of renewal works. The 2014 VAGO report highlighted concerns, with a number of councils not being able to meet their requirements.

*In most cases, spending on renewing or replacing existing assets is not keeping pace with their rate of deterioration. The audited councils are generally not able to meet existing asset renewal requirements, resulting in cumulative renewal gaps that grow each year. This situation adversely affects the condition of assets, community service levels and councils' long term financial sustainability.*

(VAGO 2014, p. xi)

### CHAPTER 4 RECOMMENDATION

#### Sustainable Asset Funding

Collate and analyse data to provide an accurate forecast of Council's future capital funding requirements.

**Why?** Need to ensure Council has capacity to fund renewal of existing infrastructure, as well as plan for new infrastructure to meet service needs.

**How?** Continue to collect data, undertake financial forecasting, and integrate into LTFF.



# **Chapter 5.**

## **Development and Implementation of Asset Management Plans**

# Strategic Asset Management Plan

## Chapter 5. Development and Implementation of Asset Management Plans

### 5.1 Introduction

As an outcome of recommendation R18 of the 2003 *Strategic Asset Management Plan*, individual Asset Management Plans have been developed for the majority of Council's infrastructure assets. The structure and content of these Plans have evolved, and matured, as Council's asset management capabilities have improved. It has been the intent to ensure Asset Management Plans align with the principles of the *International Infrastructure Management Manual* (IIMM), and meet the requirements of the National Asset Management Assessment Framework.

In accordance with the IIMM, an Asset Management Plan is:

*A written representation of intended asset management programmes for an infrastructure network based on the organisation's understanding of service level requirements and the network's capability to meet those requirements. In some ways, the Asset Management Plan can be considered as the business case for the long term expenditure forecasts (NAMS and IPWEA 2011, p. 4/14).*

### 5.2 Progress of Asset Management Plan development

Council has, progressively, developed its suite of Asset Management Plans since the adoption of the initial *Strategic Asset Management Plan*.

Development of these plans has achieved:

- Improved asset information.
- Improved asset data management practices.
- More transparent financial reporting.
- Prioritisation of capital works, and links to long term financial planning.
- Clearer definitions of responsibilities.
- Discrete improvement projects aimed at improving asset management practices, capabilities and understanding.

Development followed an internal program that prioritised the major asset classes. A summary of progress is documented in the following table.

# Strategic Asset Management Plan

## Chapter 5. Development and Implementation of Asset Management Plans


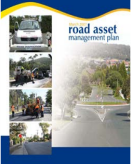



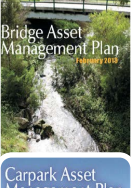
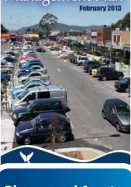


	<b>Footpath &amp; Shared Path Asset Management Plan</b> <ul style="list-style-type: none"><li>• FSAMP - Major</li><li>• 2005 - September</li></ul>
	<b>Road Asset Management Plan</b> <ul style="list-style-type: none"><li>• RAMP - Major</li><li>• 2007 - March</li></ul>
	<b>Building Asset Management Plan</b> <ul style="list-style-type: none"><li>• BAMP - Major</li><li>• 2009 - June</li></ul>
	<b>Drainage Asset Management Plan</b> <ul style="list-style-type: none"><li>• DAMP - Major</li><li>• 2010 - November</li></ul>
	<b>Open Space Asset Management Plan</b> <ul style="list-style-type: none"><li>• OSAMP - Major</li><li>• 2011 - December</li></ul>
	<b>Bridge Asset Management Plan</b> <ul style="list-style-type: none"><li>• BRAMP - Minor</li><li>• 2013 - February</li></ul>
	<b>Carpark Asset Management Plan</b> <ul style="list-style-type: none"><li>• CAMP - Minor</li><li>• 2013 - February</li></ul>
	<b>Playground Asset Management Plan</b> <ul style="list-style-type: none"><li>• PAMP - Minor</li><li>• 2013 - December</li></ul>
	<b>Street Tree Asset Management Plan</b> <ul style="list-style-type: none"><li>• STAMP - Minor</li><li>• In progress 2014</li></ul>

Table 9 – Asset Management Plan development

# Strategic Asset Management Plan

## Chapter 5. Development and Implementation of Asset Management Plans

### 5.3 Progress on implementation of actions

As part of the development of each Asset Management Plan, an Improvement (Action) Plan was identified, with a typical twenty-year delivery timeframe (for both capital and operational aspects). Due to the evolving format of Asset Management Plans, Improvement Plans weren't initially part of the *Footpath and Shared Path Asset Management Plan*, nor the *Road Asset Management Plan*. However, these were retrospectively created when asset management monitoring commenced, in 2010. The Improvement Plans identify prioritised actions, with responsibility for implementation distributed amongst various recommended project leaders across the organisation. Each year, an assessment is undertaken on the status of the improvement actions that were identified, in both the *Strategic Asset Management Plan*, and the various Asset Management Plans.

Recommendations, from all Asset Management Plans, are compiled into a centralised database. These recommendations are, typically, incorporated into various teams' business plans and actioned formally, or are addressed, informally, through evolving practices within the organisation.

There is an ongoing challenge to ensure key stakeholders in the organisation are cognisant of recommendations that are their responsibility, and that consideration is given to them at the time of business planning.

In terms of the individual Asset Management Plans, there continues to be good progress every year in the implementation of Improvement Plans, with the completion status outlined in Figure 9 below, with data current at June 2014.

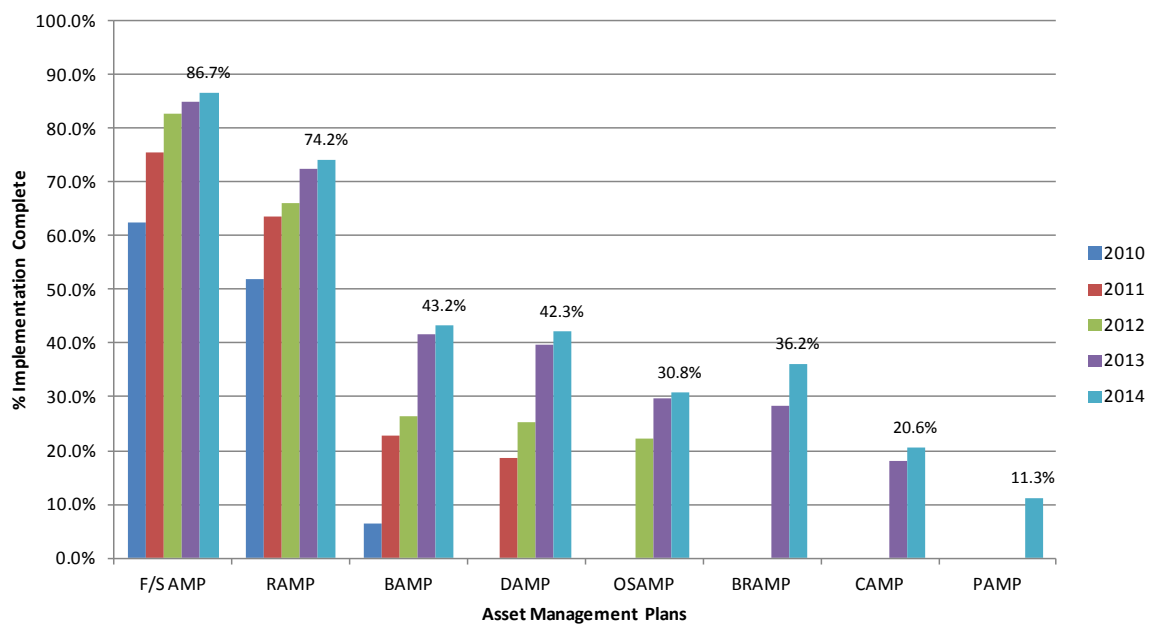


Figure 9 – Asset Management Plan implementation progress

# Strategic Asset Management Plan

## Chapter 5. Development and Implementation of Asset Management Plans

The responsibility of continually reviewing the progress of the implementation of the Asset Management Plans has been allocated to the Asset Management Steering Group (AMSG), with key support from the Sustainable Infrastructure Department. This practice has now been embedded as an ongoing task to monitor Council's progress.

As an outcome of the most recent assessment (October 2013), there are only eleven outstanding high priority actions. Ten of these actions are already in some form of progress. Ongoing monitoring of asset management implementation, is achieved by the inclusion of a standing agenda item for AMSG meetings.

### 5.4 Program of future Asset Management Plan reviews

As Council completes its first generation suite of Asset Management Plans for infrastructure assets, there is a move towards ongoing maintenance and review of these documents, recognising that this is an evolving and dynamic task. Review frequencies are typically documented in the Asset Management Plans, with five years being the common frequency. As Council becomes more sophisticated in its management practices, and its repository of performance data increases, continuous review and adjustments will ensure municipal assets continue to sustainably support the Knox community into the future.

Ongoing Asset Management Plan reviews are critical to the implementation of this strategy. A program is outlined in Attachment 3.

It is critical that Asset Management Plans continue to align with the recommended structure, as outlined in the *International Infrastructure Management Manual*, meet the provisions of the National Asset Management Assessment Framework, and start to better integrate with Council service planning processes.

In this respect, Council's objective is to move from a core level of asset management maturity, to an advanced level of maturity. Such a move needs to be reflected, in part, in the review of Asset Management Plans.

#### CHAPTER 5 RECOMMENDATION

##### **Ongoing Development and Review of Asset Management Plans**

Review and update Asset Management Plans to maintain currency and validity.

**Why?** Need to review status of asset classes and practices, to ensure alignment with service provision and financial sustainability.

**How?** Cyclic review of Plans on adopted program, and continued support for implementation of Plans.

# Strategic Asset Management Plan

# **Chapter 6.**

# **Asset Knowledge and Information Systems**

# Strategic Asset Management Plan

## Chapter 6. Asset Knowledge and Information Systems

### 6.1 Asset Management Information Systems

There are a number of information systems used by Council to support asset management.

As its primary Asset Management Information System, Council currently uses Jeff Roorda and Associates (JRA) Lifecycle Knowledge Management System (Lifecycle KMS). This is a core corporate system.

The system uses a client/server environment. The data is stored in a Microsoft SQL Server database, and user access is provided by a Microsoft 2007 Access database located on client computers. Since its initial implementation, in 2003, the basic core module functionality, provided within Lifecycle KMS, has been highly customised by JRA and Council's internal system developers, under a joint development agreement. In respect of delivering functionality to support an asset's lifecycle, the current system has both strengths and weaknesses. Whilst the system currently provides advanced functionality, in some phases of an asset's life (i.e. works management), significant functionality gaps exist in other asset lifecycle phases, and the system also fails to meet software standards defined for Council's corporate application suite.

There are, also, a number of secondary information systems that support asset management, either as integrated systems with Lifecycle KMS, or as separate systems. The following table outlines the key asset management information systems currently utilised by Council.

System	Module	Details	System Interfaces
Lifecycle KMS	Asset Register	Is the central repository for all asset data. Includes both primary attributes (i.e. dimensional, location, condition and valuation), and secondary attributes (i.e. inventory, defects, work order history)	
	Works Order System	Provides works management of reactive and routine activities, and asset inspections for key civil infrastructure and park assets.	Pathway for CRS requests. GIS for viewing location of works requests.
	Facilities Management System	Provides works management of reactive, regulatory, routine and renewal activities for Council buildings.	Pathway for CRS requests. Computron Financial System for raising purchase orders. Microsoft Excel for data export and import.
	Fleet Management System	Provides functions to enable the lifecycle management of vehicles, plant and minor equipment.	Shellcard for import of fuel card transactions.
	Renewal	Captures renewal and reinstatement details for drainage, footpath, road and shared paths assets.	Microsoft Excel for import of bill of materials



# Strategic Asset Management Plan

## Chapter 6. Asset Knowledge and Information Systems

System	Module	Details	System Interfaces
Lifecycle Mobile	N/A	For data entry of Essential Safety Measures building inspections, using mobile devices.	Lifecycle
Arcpad GIS	N/A	GIS software installed on hazard inspectors Personal Digital Assistants (PDA's), used to capture asset inspections and hazards.	Lifecycle
E-Lifecycle	N/A	Asset Register viewer via a web browser.	Lifecycle
Latitude *	GIS	Council's Geographic Information System (GIS) for capturing, managing, analysing, and displaying all forms of geographically referenced information.	Pathway for property related information. Lifecycle
Pathway	Customer Request System	Is the central repository for customer service requests.	Latitude Lifecycle Dataworks
Dataworks	N/A	Is Council's Electronic Document Management System (EDMS) for storage of corporate documents (i.e. letters, memos, facsimiles, spreadsheets, construction drawings).	

**Table 10 – Asset Management Information Systems currently utilised by Council**

Note: \* At the time of writing this Plan, Latitude was due to be replaced with IntraMaps.

## 6.2 Asset Management Systems Review

In January 2006, Knox engaged Ian Mann and Associates to review Council's asset management needs against:

- (1) The operational appropriateness of Council's asset management systems
- (2) Industry best practice.

The final report, endorsed by the Executive Management Team, in March 2007, provided Council with a prioritised list of seventy-four (74) improvement opportunities, categorised within the three core areas of People, Processes and Systems.

Since March 2007, Council has actioned many of the seventy-four recommendations, either totally or partially. Although the status of these recommendations was last reviewed in 2011, many of the recommendations have since further progressed through the development of Asset Management Plans, through data improvements, as well as through specific system related projects.

# Strategic Asset Management Plan

## Chapter 6. Asset Knowledge and Information Systems

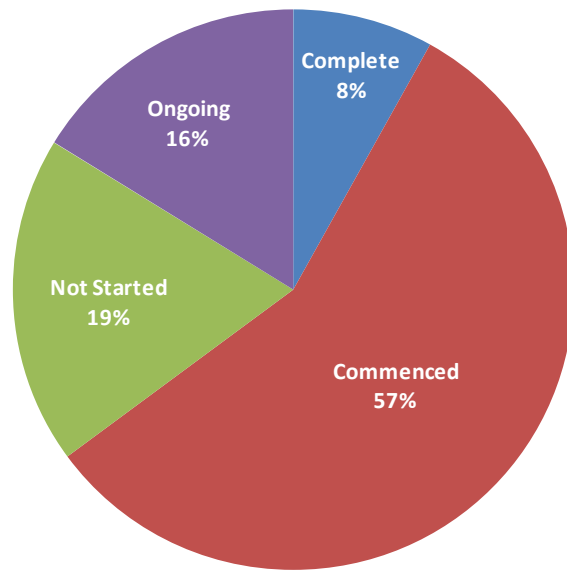


Figure 10 – Status of Implementation of Asset Management Systems Review Recommendations, as at April 2011

Many of the system related recommendations require Council to undertake significant development on its existing systems, or consider alternative products to meet its objectives.

### 6.3 Future System Requirements

The need to develop a comprehensive specification outlining Council's requirements, for an Asset Management Information System, was detailed primarily in the *Asset Management Systems Review* (2007). This document makes several recommendations about the future direction of Council, with respect to a corporate Asset Management Information System, and the need for Council to fully understand its requirements before making any decision regarding the acquisition of a new software system, or, alternatively, the retention of the existing system. Asset Management Plans, developed in the last ten years, as well as a number of external audits, also highlight the need to prepare a functional specification for an Asset Management Information System.

This project is also identified on Council's ICT (Information and Communication Technology) roadmap.

In light of this information, internal pressures at Council, more sophisticated information requirements, and complementary recommendations from Asset Management Plans, Council's key system related objectives are as follows:

# Strategic Asset Management Plan

## Chapter 6. Asset Knowledge and Information Systems

1. Maintain and improve the quality and completeness of data stored in the Asset Register, and ensure data is available to a wider audience.
2. Provide linkages between assets and services, to enable reporting by service.
3. Reduce work effort, via the implementation of mobile devices, and enhanced work processes used to collect and view asset data.
4. Prepare a System Requirements Specification, that details current and future Asset Management Information System needs.
5. Investigate the feasibility of replacing Council's existing Asset Management Information System, via Expression of Interest, and Request for Tender processes.
6. If appropriate, as an output of item 5, purchase and implement a new Asset Management Information System across Council.

### CHAPTER 6 RECOMMENDATION

#### **Asset Management Information System Upgrade or Replacement**

Provide an Asset Management Information System that is corporately supported and integrated.

**Why?** Need to ensure system supports Council processes, provides accurate data, and integrates across the organisation.

**How?** Continue to improve the quality of asset data, functionality, and investigate most appropriate system for the future.

# Strategic Asset Management Plan

# **Chapter 7.**

## **National Asset Management Assessment Framework**

# Strategic Asset Management Plan

## Chapter 7. National Asset Management Assessment Framework

### 7.1 Introduction

Council has been participating in the Municipal Association of Victoria's (MAV) STEP Program, since 2002. The Program was designed to improve asset management capacity in Local Government, and stemmed from a number of drivers (listed below) which highlighted that Local Government, as a custodian of a substantial asset portfolio, did not have good practices in place to effectively manage its community assets:

- The Department of Infrastructure's report *Facing the Renewal Challenge* (1998)
- The Victorian Auditor General's report *Management of Roads by Local Government* (2002)
- Abolition of the non-feasance rule by a High Court decision.

The MAV STEP program is now incorporated within the National Asset and Financial Management Assessment Framework (Framework). The Framework was endorsed, in 2007, by the Federal Government (Local Government and Planning Ministers' Council), in order to develop a nationally consistent asset management framework, to support improvement in Local Governments' asset management performance and sustainability. The MAV was engaged to administer and provide support for the Framework, on behalf of the Federal Government, in 2010.

Council has embraced the STEP audit, and combined it with the National Asset and Financial Management Assessment Framework (NAMAF), to formulate its overarching assessment program with respect to asset management. Furthermore, this program allows consistent and structured measurement over time, effective alignment with the status assessment principles of the International Infrastructure Management Manual, and the ability to benchmark against similar councils.

As part of this program, Council uses a process of self assessment and external audit, to measure its progress towards core competency, and to identify improvement actions to enhance asset management practices. Self assessment and audits are undertaken on an annual basis, with the results being reported internally, and to Council, as well as being forwarded to the Federal Government, via the MAV and the Australian Centre of Excellence for Local Government (ACELG).

The Framework comprises eleven elements, as follows:

1. Strategic Planning
2. Annual Budget
3. Annual Report
4. Asset Management Policy
5. Asset Management Strategy
6. Asset Management Plans
7. Governance and Management
8. Levels of Service
9. Data and Systems
10. Skills and Processes
11. Evaluation

All Local Governments, within Australia, are assessed against these elements.

The Framework is essentially divided into two competency ratings, Core and Advanced. The Core Maturity Rating requires a council to satisfy seventy-six questions (100% compliance) to gain that rating.

# Strategic Asset Management Plan

## Chapter 7. National Asset Management Assessment Framework

The Advanced Maturity Rating requires a council to consider, and complete, a questionnaire of one hundred and forty-three (143) questions and achieve 100 percent compliance. At this stage, there is no Federal Government requirement to achieve this status. The focus, at the moment, is on attaining the proficiency required to achieve the Core Maturity Rating.

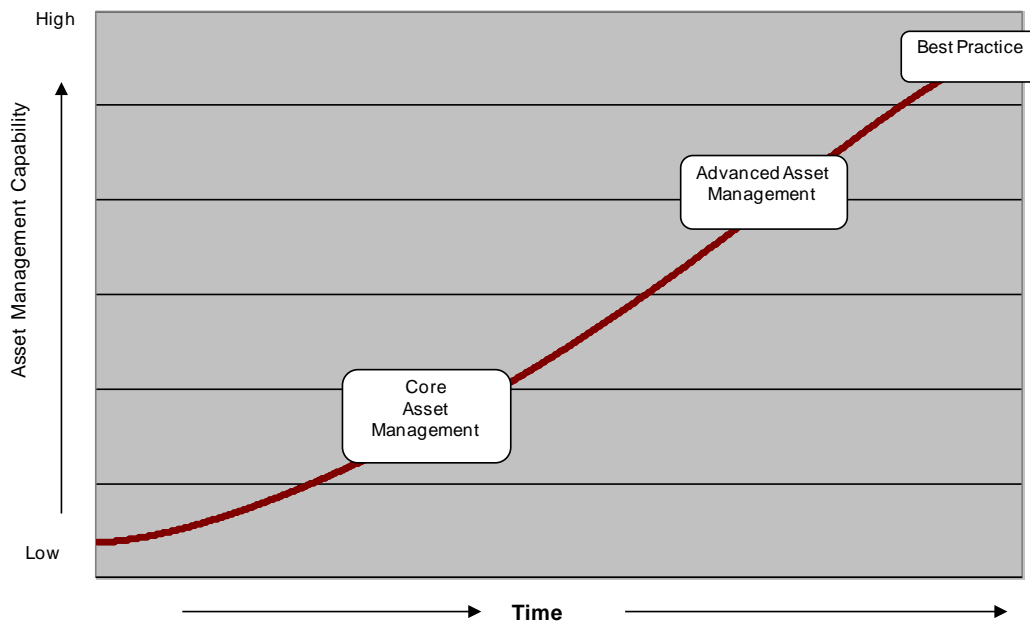


Figure 11 – Asset Management Maturity Curve

Source: MAV Step Program

## 7.2 Current Status and Progress

Figure 12 (below) presents the results from Council's most recent assessment (November 2013). Council scored strongly in Strategic Long Term Plan, Annual Budget, Annual Report, Asset Management Policy, and Strategy. Areas of improvement have been identified in the development of the outstanding Asset Management Plans, establishment of service levels, and enhancement of systems and processes to evaluate performance.

# Strategic Asset Management Plan

## Chapter 7. National Asset Management Assessment Framework

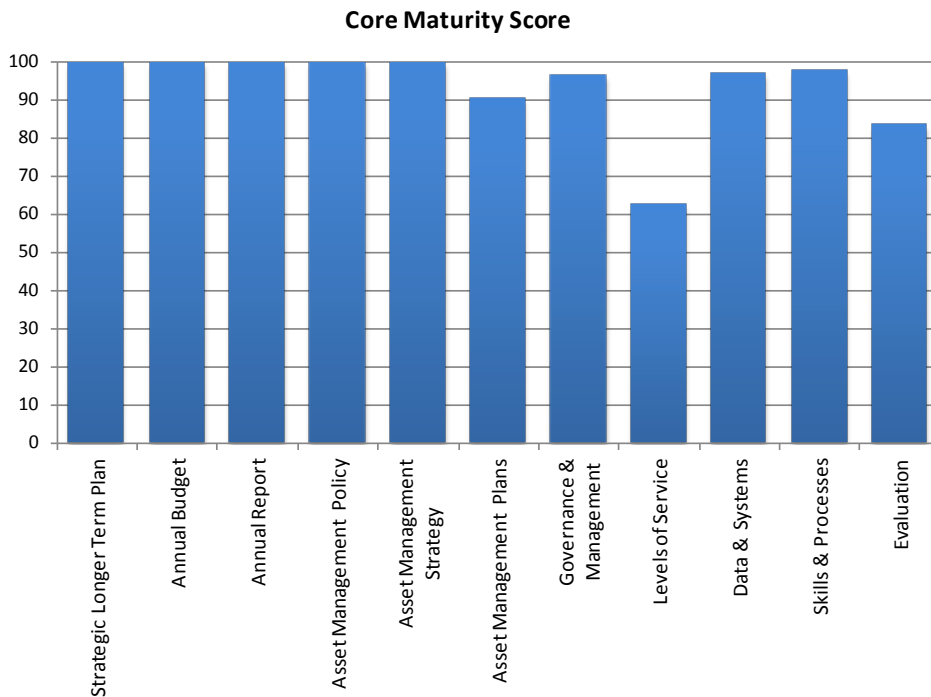


Figure 12 – Knox Core Competency Scorecard (November 2013)

This is a relatively good result which, when translated across the eleven elements, represents an average score of **93%**.

As part of the assessment process, an improvement program was also developed and designed to move Council towards achieving its Core Maturity Rating. The improvement program and report card are listed in Attachment 7. The improvement actions are already in progress.

Average scores over the years are represented in the chart below. This demonstrates Council's commitment to ongoing improvement.

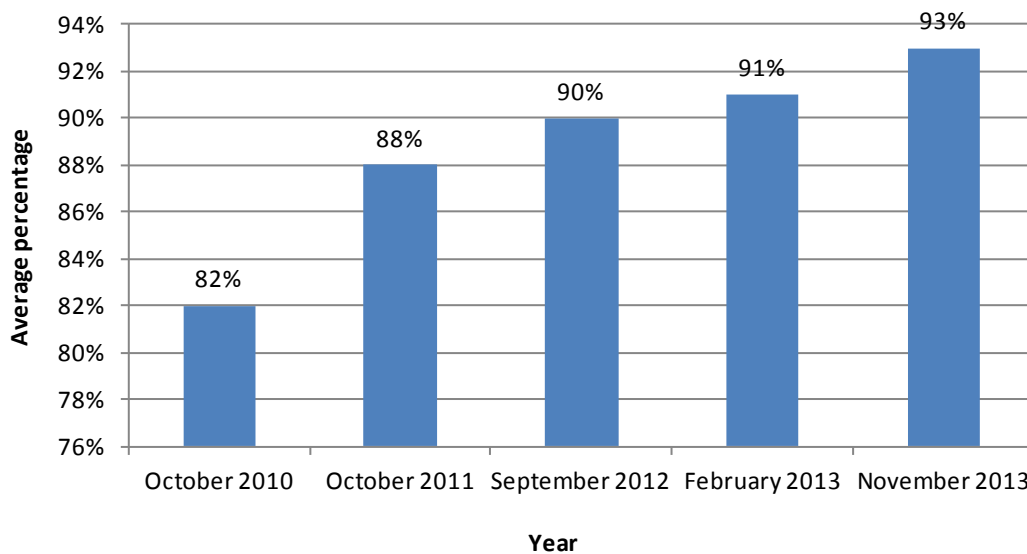


Figure 13 – Average NAMA scores (Core Competency)

Notes: The average score is calculated across all eleven elements of the Framework.



# Strategic Asset Management Plan

## Chapter 7. National Asset Management Assessment Framework

As Council closes in on 'core maturity', its objective should shift to starting to address the requirements of the advanced assessment.

The advanced assessment builds on the requirements of the core assessment. Whilst there are a number of additional questions across all elements, the key differences relate to the following:

- Longer term planning horizons for Long Term Financial Forecast, Council Plan, etc.
- Better alignment to service planning.
- Better comprehension and utilisation of lifecycle costing in decision making.
- Improved audit and monitoring processes.
- Improved costing of targeted levels of service.
- Better collection and usage of asset related data.

Aiming to address aspects of the advanced assessment is an incremental exercise, and can largely be undertaken using existing resources, as part of business improvement opportunities.

### CHAPTER 7 RECOMMENDATION

#### **Beyond Core Asset Management Maturity**

Commence assessing asset management capabilities against the NAMAFA advanced maturity framework.

**Why?** Need to maintain and enhance an environment of continuous improvement, with regard to asset management capability.

**How?** Assess against advanced maturity, take actions as required, and report annually.

# Strategic Asset Management Plan

# **Chapter 8.**

# **Asset Management Improvement Plan**

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

### 8.1 Planned Program of Asset Management practice improvements

This Chapter collates and summarises the recommendations from the Plan, into an implementation program of asset management practice improvements. Each recommendation has been aligned with the National Asset Management Assessment Framework elements, as well as recommendations from the 2014 Victorian Auditor-General Office's report.

The implementation program is intended to be largely resourced through existing operational budgets, and business planning processes.

While the majority of the implementation will be facilitated by the Asset Strategy team, and Sustainable Infrastructure Department, it is expected that cross-organisational support, and resourcing, will be required to continue to embed asset management principles.

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

Action ID	Recommended Action	SAMP Reference	VAGO Recommendation Reference	Reference to NAMAF elements	Key responsibility	Support from	Target Timeframe	City Plan Objective
<b>SAMP 1</b>	<p><b>Service Planning Integration</b></p> <p>(a) Support service planning across the organisation, through provision of infrastructure analysis which takes account of whole of life costs of buildings, and supporting infrastructure.</p> <p>(b) As part of service planning analysis, define goals, consistently quantify infrastructure requirements/implications, and levels of service to achieve those goals. Incorporate this information into future reviews of Asset Management Plans.</p> <p>(c) Centralise an asset requirements register, which aggregates key asset requirements identified in the service planning and capital works planning processes, and allows for balanced decision making to inform asset planning.</p> <p>(d) Design and develop decision tools that allow for geo-spatial macro analysis of service provision, to inform discussion on current levels of service provided within the community, and across key service areas.</p> <p>(e) Develop capacity for integrated facility planning.</p>	Chapter 2	Recomm. 11	8 – Levels of Service	Asset Strategy	Corporate Planning & Performance	Ongoing	5.3

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

Action ID	Recommended Action	SAMP Reference	VAGO Recommendation Reference	Reference to NAMAFA elements	Key responsibility	Support from	Target Timeframe	City Plan Objective
<b>SAMP 2</b>	<b>Sustainable Asset Funding</b>	Chapter 4	Recomm. 8	6 – Asset Management Plans 7 – Governance & Management 9 – Data & Systems	Asset Strategy	Finance Capital Works	Ongoing	3.1
	(a) Collate and analyse all current data, to provide an accurate forecast of Council’s capital renewal funding requirement.							3.3
	(b) Continue to progress Council on the journey towards sustainable renewal funding within the Capital Works planning processes. Fund a minimum of 98% of asset renewal requirements by 2019.							4.2
	(c) Advance Council’s knowledge and awareness of new asset requirements, to inform asset planning and development within the constraints of the LTFF.							5.3
	(d) LTFF to start reflecting demand for new/upgraded/disposed infrastructure, as a result of service planning/asset management integration.							
	(e) All capital funding requirements to be incorporated into LTFF on an annual basis.							
<b>SAMP 3</b>	<b>Asset Management Plans</b>	Chapter 5	Recomm. 2	6 – Asset Management Plans	Asset Strategy	Relevant departments – according to assets and services in question	Ongoing (refer program)	3.1
	(a) Continue to review and update Asset Management Plans, to maintain their currency and validity in accordance with the program in Attachment 3.							3.3
	(b) Develop enhancements to the Asset Management Plans, to facilitate progression							4.2

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

Action ID	Recommended Action	SAMP Reference	VAGO Recommendation Reference	Reference to NAMAFA elements	Key responsibility	Support from	Target Timeframe	City Plan Objective
	<p>from core to advanced status, in line with the requirements of the MAV STEP program.</p> <p>Reviewing of AMPs, to have a greater focus on:</p> <ul style="list-style-type: none"> <li>Identifying future asset requirements, in line with service planning.</li> <li>Validation of service levels, in consultation with community requirements.</li> <li>Advancing understanding of the intrinsic relationship between maintenance, and optimised renewal funding.</li> <li>Creating a framework for the recognition, analysis, and reporting of new asset categories not previously identified by Council.</li> <li>Exploring models of management that recognise different ownership options, for managing services other than Council owned infrastructure (particularly buildings).</li> </ul> <p>(c) Continue to centralise the recording and monitoring of AMP recommendations.</p>							

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

Action ID	Recommended Action	SAMP Reference	VAGO Recommendation Reference	Reference to NAMAFA elements	Key responsibility	Support from	Target Timeframe	City Plan Objective
<b>SAMP 4</b>	<p><b>Asset Management Information System Upgrade or Replacement</b></p> <p>(a) Continue to provide an Asset Management Information System that is corporately supported and integrated.</p> <p>(b) Maintain and improve the quality and completeness of data stored in the asset register, and ensure data is available to a wider audience.</p> <p>(c) Investigate whether current AMIS is the most suitable tool for managing Council’s assets into the future, whilst meeting organisational requirements.</p> <ul style="list-style-type: none"> <li>• Prepare a System Requirements Specification that details current and future Asset Management Information System needs</li> <li>• Investigate the feasibility of replacing Council’s existing Asset Management Information System, via Expression of Interest, and Request for Tender processes.</li> <li>• If appropriate, purchase and implement a new Asset Management Information System across Council.</li> </ul>	Chapter 6	Recomm. 9	9 – Data & Systems	Asset Strategy	Information Management		5.3
						Relevant departments – according to assets and services in question		



# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

Action ID	Recommended Action	SAMP Reference	VAGO Recommendation Reference	Reference to NAMAF elements	Key responsibility	Support from	Target Timeframe	City Plan Objective
	<p>(d) Provide linkages between assets and services to enable reporting by service.</p> <p>(e) Reduce work effort, via the implementation of mobile devices, and enhanced work processes used to collect and view asset data.</p>							
<b>SAMP 5</b>	<b>Beyond Core Asset Management Maturity</b>	Chapter 7	N/A	All elements	Asset Strategy	Relevant departments – according to specific NAMAF elements in question  Asset Management Steering Group	2019	5.3
	<p>(a) Commence activities and assessment of advanced asset management maturity, by considering tools available. Achieve 80% average across all elements by 2019.</p> <p>(b) Continue to participate/engage with the MAV STEP program (or equivalent), to progress Council towards an advanced status.</p> <p>(c) Report to Council, on an annual basis, against current advanced asset management assessment framework.</p>							

# Strategic Asset Management Plan

## Chapter 8. Asset Management Improvement Plan

# Chapter 9. Monitoring and Review

# Strategic Asset Management Plan

## Chapter 9. Monitoring and Review

### 9.1 Performance and reporting measures

The efficacy of this *Strategic Asset Management Plan* will be monitored, annually, through the Asset Management Steering Group, and through MAV STEP Program audits.

Participation in the MAV STEP Program, which includes assessment of Council practices against the National Asset Management Assessment Framework, is the key tool used by Council to monitor and evaluate its asset management performance, and benchmark this performance against other Victorian Councils.

Reports on the implementation of asset management (including, but not limited to this *Strategic Asset Management Plan* and the MAV STEP Program) will be provided to the Executive Management Team, the Audit Committee, and Council, on an annual basis. The intent of these reports is to demonstrate Council's continuing development and maturity in asset management, and its integration across other facets of Council service delivery.

This *Strategic Asset Management Plan* will be updated in a maximum of ten years.

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## Appendices



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