



asset management  
framework  
2016-2026

# Asset Management Framework Contents

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## A1. Asset Management Planning

### A1.1 Introduction

Assets deliver important services to communities. 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, drains, bridges, water and sewerage and public buildings present particular challenges as their condition and longevity can be difficult to determine and funding needs can be large, requiring planning for large peaks and troughs in expenditure in renewing and replacing such assets. The demand for new and improved services adds to the planning and financing complexity.<sup>1</sup>

The creation of new assets also presents challenges not just in terms of financing initial construction (which is often grant assisted) but in financing the ongoing maintenance and capital renewal costs necessary to provide the needed service over the asset's full life cycle.<sup>2</sup>

The Local Government Financial Asset Sustainability Frameworks 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 office of the councillors and:
  - bringing together asset management plans, and long term financial plan
  - demonstrating how council intends to resource the plan
  - consulting with communities on strategic longer-term plans
- Annual budget showing the connection to the strategic objectives
- Annual report with:
  - explanation to the community on variations between the budget and actual results
  - the impact of such variances on the strategic longer-term plan
  - report of operations with review on the performance of the council against strategic objectives.<sup>3</sup>

Framework 2 Asset Planning and Management has seven elements to assist in highlighting key management issues, promote prudent, transparent and accountable management of local government and assist and introduce a strategic approach to meet current and emerging challenges.

- Asset management policy
- Strategy and planning
  - asset management strategy
  - asset management plans
- Governance and management arrangements
- Defining levels of service
- Data and systems
- Skills and processes
- Evaluation.<sup>4</sup>

The asset management strategy is to:

- enable council to show how its asset portfolio will meet the service delivery needs of the community into the future
- enable council's asset management policies to be achieved
- ensure the integration of council's asset management with its long term strategic plans.<sup>5</sup>

The goal of asset management is to ensure that services are provided:

- in the most cost effective manner
- through the creation, acquisition, maintenance, operation, rehabilitation and disposal of assets
- for present and future consumers.

<sup>1</sup> LGPMC, 2009, Framework 2 Asset Planning and Management, p 2.

<sup>2</sup> LGPMC, 2009, Framework 3 Financial Planning and Reporting, pp 2-3.

<sup>3</sup> LGPMC, 2009, Framework 3 Financial Planning and Reporting, pp 4-5.

<sup>4</sup> LGPMC, 2009, Framework 2 Asset Planning and Management, p 4.

<sup>5</sup> LGPMC, 2009, Framework 2 Asset Planning and Management, p 4.

# A1. Asset Management Planning

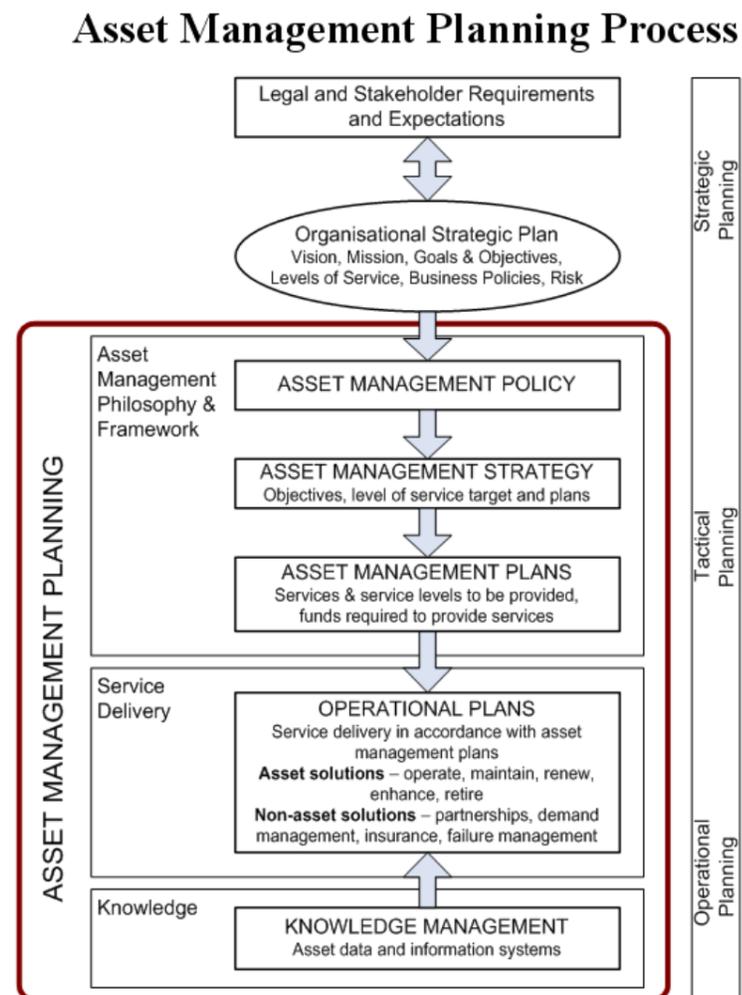
## A1.2 Asset Management Planning Process

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

Asset management planning commences with defining stakeholder and legal requirements and needs, incorporating these needs into the organisation's strategic plan, developing an asset management policy, strategy, asset management plans and operational plans, linked to a long-term financial plan with a funding plan.<sup>6</sup>

The outcomes of this planning process are incorporated within the Hornsby Shire Council Asset Management Framework.

Figure 1: Asset Management Planning Process

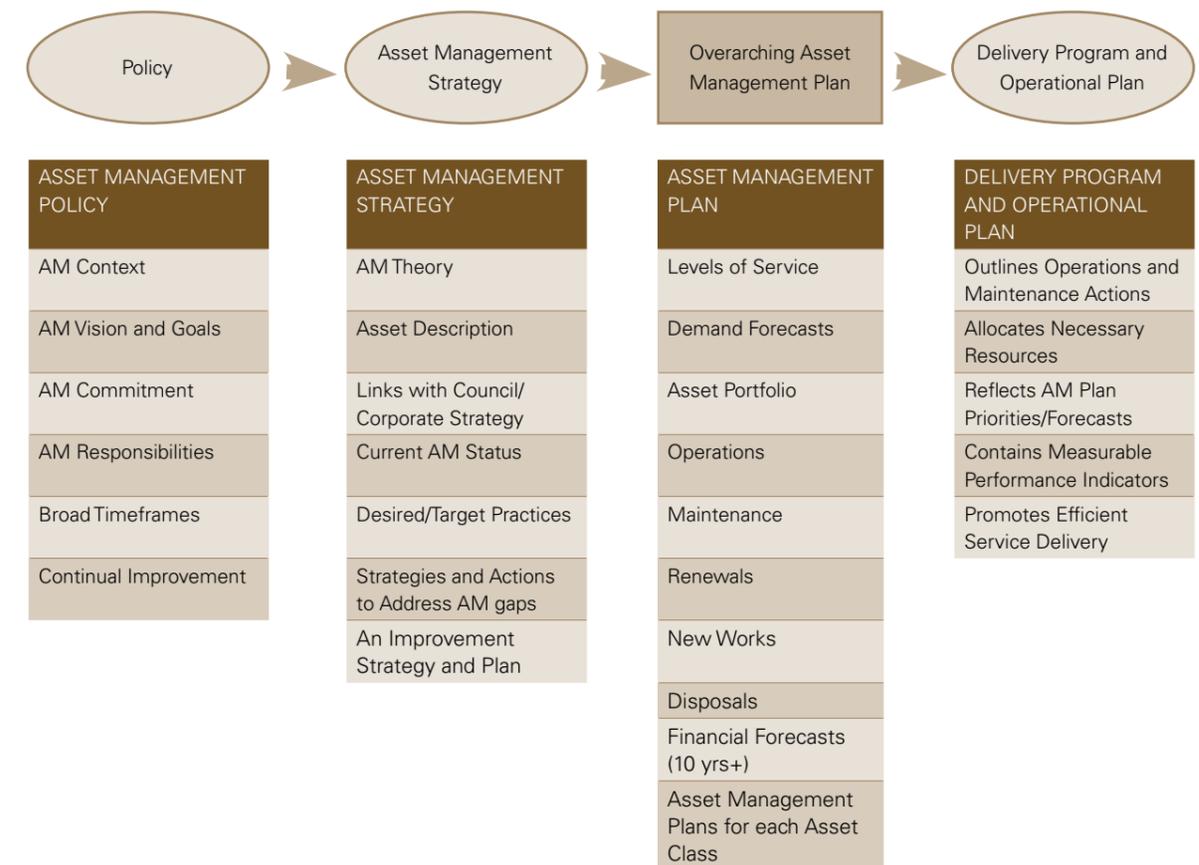


# A2. Asset Management Framework

An Asset Management Framework has a number of components including:

- Asset Management Policy *creating a framework for the provision of effective community infrastructure.*
- Asset Management Strategy *developed to support the policy and to show the current situation, the desired state and what needs to be done to achieve that state*
- Overarching Asset Management Plan *incorporating the asset portfolio with levels of service, demand forecasts and financial forecasts*
- Individual Asset Management Plans for each of the asset classes *developed to outline operations, maintenance levels, renewals, disposals, and financial forecasts*
- Delivery Program and Operational Plan *detailing operations and maintenance actions, allocation of resources and performance indicators.*

Figure 2: Asset Management Framework



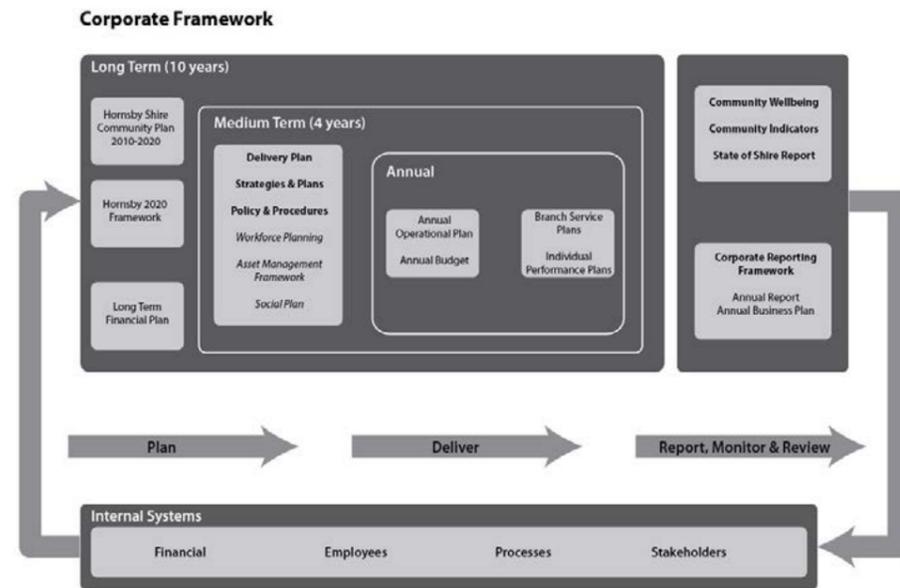
These components are individual documents as well as constituent elements of the overall framework. Each document is under continuous review and adjustment as annual budgets and operational plans are developed.

This Asset Management Framework allows Council to accomplish the community strategic plan goals and meet its 10 year objectives, four year delivery targets and annual operational plans. It will also provide the community with a clear indication of what is required to effectively manage its infrastructure assets.

<sup>6</sup> IPWEA, 2009, AIFMG, Quick Guide, Sec 4, p5.

# A2. Asset Management Framework

Figure 3: Corporate Framework



The Asset Framework (Asset Policy, Asset Management Strategy and Asset Management Plan) has been prepared in alignment with the Australian Local Government and Planning Ministers Council's adopted Local Government Financial Asset Sustainability Frameworks and under the direction of Hornsby Shire Council's community strategic plan theme of 'My Lifestyle'.

# A3. Asset Management Policy

The Asset Management Policy was endorsed by Council on 9 September 2015. The policy describes Council's integrated approach to the sustainable management of Hornsby Shire's assets. The objectives of the policy are to ensure adequate provision is made for the longer term upgrade and renewal of major assets by:

- Ensuring that Council's services and infrastructure are provided in a sustainable manner with regard to the appropriate levels of service to residents and visitors while also considering the natural environment
- Safeguarding Council assets by implementing appropriate asset management strategies and allocating resources
- Ensuring legislative requirements are met
- Ensuring resources and operational capabilities are identified and appropriately allocated
- Demonstrating transparent and responsible asset management processes that align with best practice
- Undertaking maintenance programs which may include conservation, rehabilitation and renewal to prolong the life of an asset and monitor and manage the asset life cycle
- Considering the current and future needs of the community and its ability to provide infrastructure assets which contribute to meeting these needs.

A copy of Hornsby Shire Council's Asset Management Policy is available from Council's website at [hornsby.nsw.gov.au](http://hornsby.nsw.gov.au).

# A4. Asset Management Strategy

## A4.1 Objective

The objective of the Asset Management Strategy is to show how the asset portfolio can meet the service delivery needs of the community and guide the essential planning, construction, maintenance and operation of the infrastructure.

The strategy includes:

- A strategic overview of the current services being provided by Council's assets. This includes some assessment of what assets Council has, what it costs to provide them, what funds Council currently has available, and their fitness for purpose
- The current status of asset management practices (processes, asset data and information systems) within Council and what actions Council must take to implement the Asset Management Policy, including resource requirements, timeframes and accountabilities.

## A4.2 Council's Assets

Council uses infrastructure assets to provide services to the community. An outline of the range of infrastructure assets and the services provided from the assets is shown in Table 1.

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

Asset Class	Description	Services Provided
Roads	Roads, bridges, footpaths, cycleways, kerb and guttering	Transportation of goods and services from production to market and to consumers, Movement of people around the council area for business, education, recreation and leisure.
Stormwater Drainage	Underground pipe and pit network, open channels, detention basins	Collection of stormwater drainage runoff, conveyance and return to the environment to allow continued and safe use of private and public property.
Foreshore Facilities	Wharves, pontoons	Recreation and foreshore protection
Public Buildings	Community centres, libraries, public amenities, bus shelters	Community interaction and development
Open Spaces	Parks and sportsgrounds	Community recreation and leisure
Leisure Facilities	Aquatic centres and indoor sports stadium	Recreation, social and health activities

## A4.3 Community Expectations

In 2009 Council undertook a major consultation project to elicit the community vision/dream for the Shire. The findings generally indicated that residents value the characteristics of the area and are very keen to retain those characteristics in the long term. At the same time people expressed concern about the increasing population and trend to medium and high density development and the lack of additional infrastructure to cater for new residents. These findings were confirmed in 2012 through a survey, focus groups and the successful local government election campaign and are the basis of Your Community Plan 2013-2023 which is an update of the Community Plan 2010-2020.

In particular, the extensive community consultations elicited these priorities:

- agreement by the community that improvements to the amenity of local ovals and parks, including lighting, drainage and parking, is the highest priority.

# A4. Asset Management Strategy

Other priority projects were:

- The replacement of the Hornsby Aquatic Centre
- The replacement of the Hornsby Station Footbridge
- The provision of additional active and passive recreation space
- Improvement and expansion of the footpath network
- Upgrades to the stormwater drainage network
- Additional cycleways, bike paths and BMX tracks.

These priorities mirror findings from Community Satisfaction Studies reported in February 2006 and July 2009.

Council plans to provide effective community infrastructure and services to achieve the following outcomes in Your Community Plan 2013-2023:

**Table 2: Outcomes for effective community infrastructure and services**

<i>Outcome 1: Our local surroundings are protected and enhanced:</i>
1E: Manage parks and sporting facilities
1F: Manage aquatic and leisure facilities
<i>Outcome 2: Our communities are healthy and interactive:</i>
2B: Manage and administer the provision of community and cultural facilities
<i>Outcome 3: Our living centres are vibrant and viable:</i>
3A: Provide a management and maintenance service for Council's assets
3B: Manage and coordinate design and construction of civil works
3C: Provide strategic land use planning and urban design
3D: Manage traffic flows, parking, access to public transport and road safety

The community research undertaken in late 2010 confirmed the community's willingness to accept an increase in rates in order to receive additional civil assets and improvements in existing local facilities.

## A4.4 Levels of Service

Council's existing infrastructure assets are generally in good condition, and Council is in a position to maintain the current levels of service and budget allocation towards asset maintenance and renewal expenditure.

Under Hornsby Shire Council's Your Community Plan 2013-2023 "My Lifestyle", Service 3A states that Council will provide a management and maintenance service for Council's assets.

# A4. Asset Management Strategy

**Table 3: Key Actions and Indicators for asset management and maintenance**

Key Actions associated with Service 3A include:	Key Indicators for these Actions include:	Annual Forecast
Liaise with appropriate energy provider to ensure street lighting conforms to requirements	Annual expenditure for street lighting	< \$3M
Manage vandalism and graffiti on Council's public property	<ul style="list-style-type: none"> <li>■ Number of vandalism incidents &lt;2,500</li> <li>■ Annual expenditure for vandalism removal &lt;\$4,010</li> <li>■ Number of graffiti incidents &lt;5,370</li> <li>■ Annual expenditure for graffiti removal &lt;\$8,080</li> </ul>	
Provide out of hours emergency response for Council's road assets and buildings	Number of complaints received regarding Council's out of hours response to emergencies	< 10
Formulate rolling four-year local roads and footpath improvement programs	Average maintenance expenditure: <ul style="list-style-type: none"> <li>■ sealed roads per km \$7,600</li> <li>■ unsealed roads per km \$10,300</li> <li>■ footpaths per km \$800</li> </ul>	
	Sealed road network pavement rated in "Good" condition	>68%
	Sealed road network pavement rated in "Poor" condition	<2%
Formulate stormwater drainage improvement programs, develop and review Floodplain Risk Management Plan, and formulate and complete Foreshores Facilities Improvement program	Average maintenance expenditure for drainage per km	\$2300
Formulate and complete pavement upgrade programs	Average response time for investigation of urgent footpath maintenance work	< 5 days
	Reported trip and fall incidents on footpaths	<10 per 100km
Provide a capital renewal and maintenance service for Council's buildings as per approved program	Building capital renewal and maintenance program complete	100%
Provide a capital renewal and maintenance service for Council's aquatic centres as per approved program	Aquatic Centres capital renewal and maintenance program complete	100%
Update Asset Management Framework and supplementary Plans		

Council has adopted levels of service and targets for its assets to ensure the assets are capable of delivering the functions needed by the community.

A summary of corporate service levels and targets for each asset class is included below. More detail regarding levels of service desired both corporately and by the community for each asset class is included in the individual asset management plans.

# A4. Asset Management Strategy

**Table 4: Service level targets**

	Service level	Targets
ROADS	Percentage of Sealed Road network rated in "Good" / "Not satisfactory" rating	>68%/<2%
	Number of complaints per 100km of unsealed roads	<35 complaints
	Number of successful insurance claims on footpaths per 100km	<1 complaint
	Number of km of existing footpath reconstructed per year	3 kms
	Average and maximum response time for essential footpath maintenance work	5 work days average, 15 days maximum
	Response time to patch potholes on sealed road pavement	less than 3 work days
	Percentage of local access roads with road roughness of <150 counts/km	95%
	Percentage of local collector roads with road roughness of <100 counts/km	100%
	Average maintenance cost per km on sealed roads	\$7,600 pa
	Average maintenance cost per km on unsealed roads	\$10,300 pa
Average maintenance cost per km on footpaths	\$800 pa	
BUILDINGS	Service level	Targets
	Percentage of building maintenance program complete	100% pa
	Percentage of building capital renewal works program complete	100% pa
OPEN SPACE	Service level	Targets
	Number of playgrounds requiring immediate repair in regular equipment inspections	<6 pa
	Response time for customer requests related to sportsgrounds, parks and playgrounds	80% completed within service level agreement
	Number of insurance claims from users of parks and sportsgrounds	<3 pa
STORMWATER DRAINAGE	Service level	Targets
	Percentage of planned Catchment Remediation Rate projects undertaken annually	100%
	Volume of gross pollutants captured and removed from the Shire's waterways each year	1,000 tn/annum
	Percentage of monitored streams / waterways within the Shire classified as healthy	50%
	Average maintenance cost per km on stormwater drainage system	\$2,300 pa
	Within current budget the cumulative percentage of 1,309 known properties subject to stormwater inundation benefiting from Improvement Program is 52%	Increase the % of properties benefitting
FORESHORE FACILITIES	Service level	Targets
	Number of complaints per foreshore facility	<5 pa
LEISURE FACILITIES	Service level	Targets
	Percentage of complaints/requests actioned within 2 days of receipt	90%
	Percentage of days when water quality/pool temperature is met	99%
	Percentage of aquatic and leisure centres operated within budget	Within 10% of adopted budget
	Percentage of aquatic centres maintenance program complete	100% pa

# A4. Asset Management Strategy

## A4.5 Long Term Financial Plan

Council's Long Term Financial Plan 2014/15 to 2023/24 defines one of its four key objectives is to achieve/maintain TCorp financial sustainability benchmarks.

TCorp considers that a Council needs to be assessed with a Financial Sustainability Rating (FSR) at a Moderate or higher level to be acceptable in terms of their sustainability. A Moderate level FSR is, on average, equivalent to marginally exceeding the benchmarks utilised in TCorp's assessment process.

Hornsby Shire Council received a Moderate FSR from TCorp during their 2012 assessment of NSW Councils. Key financial indicators are endorsed by the Office of Local Government and are a requirement to report on in Council's annual financial statements. The indicators to be measured relating to asset management are:

**Table 5: Key Financial Indicators**

Indicator	Quantitative Measure	Definition	Benchmark
Infrastructure Backlog Ratio	This ratio shows what proportion the backlog is against total value of a council's infrastructure	Estimated cost to bring assets to a satisfactory condition / total infrastructure assets	<2%
Asset Maintenance Ratio	Compares actual versus required annual asset maintenance	Actual maintenance / Required asset maintenance	>100%
Buildings and Infrastructure Renewals Ratio	Compares the proportion spent on infrastructure asset renewals and the assets deterioration	Asset renewals / Depreciation of building and infrastructure assets	>100%
Capital Expenditure Ratio	This indicates the extent to which a Council is forecasting to expand its asset base with capital expenditure spent on new assets, and replacement and renewal of existing assets	Annual Capital Expenditure / Annual Depreciation	>1

In 2011, the Independent Pricing and Regulatory Tribunal (IPaRT) approved a Special Rate Variation on an ongoing basis that is to be allocated towards asset renewal works.

## A4.6 Corporate Asset Management Team

The Corporate Asset Management Team consists of:

- Deputy General Manager, Infrastructure and Recreation
- Deputy General Manager, Corporate Support
- Chief Financial Officer
- Group Manager, Environment and Human Services
- Manager, Asset Management and Maintenance.

The purpose of the Corporate Asset Management Team is to:

- demonstrate corporate support for sustainable asset management
- encourage corporate buy-in and responsibility
- coordinate strategic planning, information technology and asset management activities
- ensure uniform asset management practices across the organisation

# A4. Asset Management Strategy

- pool corporate expertise
- champion the asset management process
- allow wider accountability for achieving sustainable asset management practices.

## A4.7 Asset Management Maturity

In 2013, consultants Morrison Low carried out an asset management maturity assessment for Hornsby Shire Council using the same methodology as for the state-wide asset management practice audits carried out for the Office of Local Government (OLG). This assessment provided Council with the opportunity to understand how its asset management practices, systems and processes compared with other Councils across NSW.

The result of the 2013 Audit was that Council scored a "C" or a Core level assessment.

Council subsequently adopted a detailed asset management improvement plan with the aim of achieving a "B" or Excellent level rating.

Following the implementation of the detailed actions and activities outlined in the improvement plan, a further audit was carried out in 2015.

The result of the 2015 Audit was that Council scored a "B" indicating that Council is now at an advanced level of competence in asset management and placing Hornsby Shire Council above average for NSW Councils.

# A5. Overarching Asset Management Plan

## A5.1 Introduction

This Plan is a general overview document that identifies the key elements of the individual asset management plans for each asset category, and should be read in conjunction with other key strategic and planning documents including:

- Your Community Plan 2013-2023 and four year Delivery Program
- Asset Management Framework
- Individual Asset Management Plans
- Annual Operational Plans
- Long Term Financial Plan.

### A5.1.1 Key elements

The key elements of Hornsby's asset management planning are:

- Taking a life cycle approach
- Developing cost effective strategies for the long term
- Providing a defined level of service and monitoring performance
- Understanding and meeting the demands of growth through demand management and infrastructure investment
- Managing risks associated with asset failures
- Continuous improvement in asset management practices
- Applying sustainable energy conservation principles to all council assets.

## A5.2 Summary of asset classes

**Table 6: Key assets held by Council**

Key Assets held by Council	
<b>my community</b>	
Libraries	5
Community centres	32
<i>including :</i>	
<i>Leisure and Learning Centres</i>	5
<i>Arts and Cultural Centre</i>	1
<i>Youth and Family Centre</i>	1
<b>my lifestyle</b>	
Public bushland (hectares)	5,950
Parks	184
Playgrounds	137
Sportsground complexes	40
<i>including:</i>	
<i>marked Summer sportsfields</i>	85
<i>marked Winter sportsfields</i>	102
Netball courts	42
Tennis courts (at 17 centres)	75
Dirt jump (BMX) facilities	2
Skate parks	5
Aquatic centres	3
Four-hectare Rural Sports Facility	1
Indoor recreation centre 'The Brickpit'	1
Dog off leash areas	8
Floating pontoons	7
Public wharves	5
Boat launching ramps	4
Quarry	1
Pedestrian footbridge	1
Sealed public car parks	8
Sealed roads (km)	635.1
Unsealed roads (km)	28.5
Paved footpaths (km)	428.9
Minor road bridges	7
Major culverts	47
Loading docks	2
Drainage pits	20,588
Pipelines (km)	397

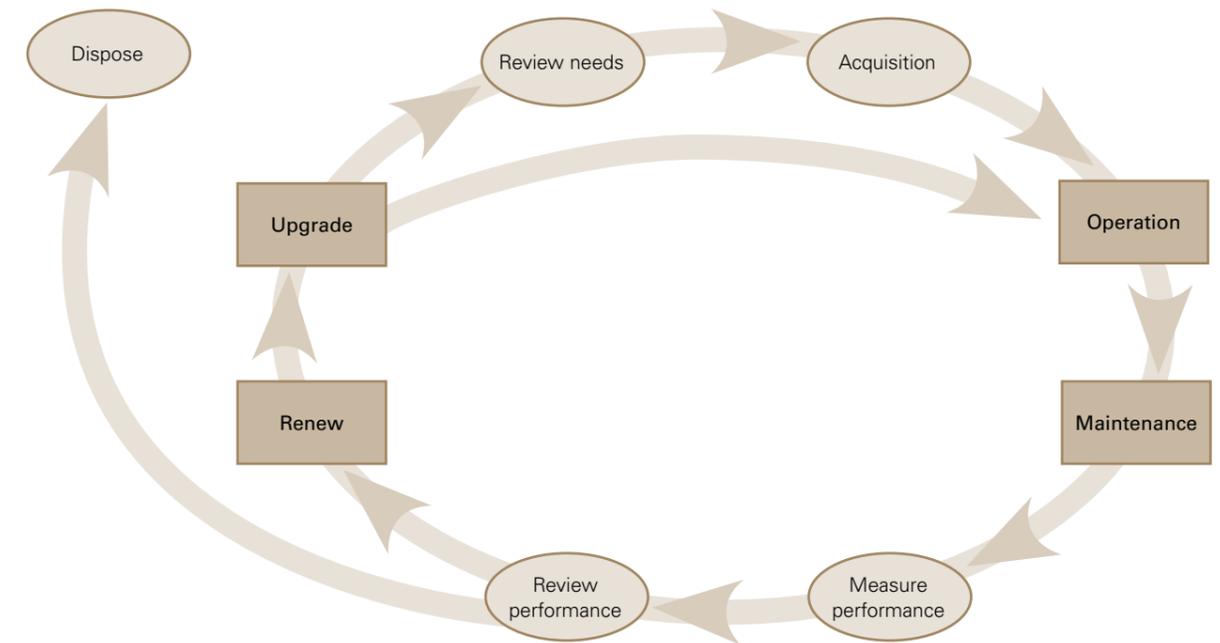
In 2015 the estimated replacement value for all Council assets was over \$1.1 billion (this excludes land value).

# A5. Overarching Asset Management Plan

## A5.3 Life Cycle Management

Life cycle management aims to optimise the total cost of asset ownership over the whole life of the asset thereby obtaining the lowest long term cost, as opposed to decisions based on short term savings.

**Figure 4: Typical Asset Life Cycle**



The life cycle activities undertaken on an asset, as illustrated above, may be categorised into the following four main types: operation, maintenance, renewal (or rehabilitation) and or upgrade/reconstruct.

### A5.3.1 Operations

Operations are those activities that have no effect on asset condition but are necessary to keep the asset appropriately utilised.

**Table 7: Typical operational activities for each asset class**

Roads	Foreshore Facilities	Leisure Facilities
<ul style="list-style-type: none"> <li>■ Street sweeping and litter removal</li> <li>■ Condition inspections</li> </ul>	<ul style="list-style-type: none"> <li>■ Tankering of effluent</li> <li>■ Probe calibration and swap over</li> <li>■ Software and hardware updates</li> <li>■ Pump maintenance</li> <li>■ Pressure cleaning of boat launching ramps and public wharf steps</li> </ul>	<ul style="list-style-type: none"> <li>■ Power costs for electricity</li> <li>■ Operation of air conditioning</li> <li>■ Security patrols</li> <li>■ Pool chemicals</li> <li>■ Gas heating</li> <li>■ Garbage removal</li> <li>■ Provision and testing of fire fighting equipment</li> </ul>

# A5. Overarching Asset Management Plan

Open Spaces	Buildings	Stormwater Drainage
<ul style="list-style-type: none"> <li>■ Grass cutting, weed control and turf maintenance</li> <li>■ Sportsground line marking and goal post maintenance</li> <li>■ Maintenance and utility costs for lighting, sewerage, stormwater collection/reuse and irrigation systems</li> <li>■ Cleaning of barbecues and other visitor facilities</li> <li>■ Repairs to fencing, irrigation and floodlighting systems</li> <li>■ Repairs to park assets such as playgrounds, picnic tables and seating</li> <li>■ Litter removal</li> <li>■ Tree and garden maintenance</li> </ul>	<ul style="list-style-type: none"> <li>■ Power costs for electricity</li> <li>■ Power costs for gas</li> <li>■ Operation of air conditioning</li> <li>■ Air Quality Monitoring for air conditioning systems</li> <li>■ Provision and testing of fire fighting equipment</li> <li>■ Garbage removal</li> <li>■ Cleaning</li> <li>■ Insurances</li> <li>■ Water and sewer charges</li> <li>■ Asset condition inspections</li> <li>■ Vandalism</li> </ul>	<ul style="list-style-type: none"> <li>■ Power costs for electricity to pumps</li> <li>■ Water quality monitoring of stormwater and receiving waters</li> <li>■ Street sweeping to remove litter and debris</li> <li>■ Asset condition inspections</li> </ul>

## A5.3.2 Maintenance

Maintenance is the day to day work required to keep assets operating at agreed service levels and falls into two broad categories:

- Planned (proactive) maintenance which is designed to prevent premature asset deterioration or correct defects
- Unplanned (reactive) maintenance which is to correct asset malfunctions and failures on an 'as required' or ad-hoc basis.

Maintenance work is required to maintain the asset's ability to provide the agreed service levels but generally does not extend the life of the asset.

## A5.3.3 Renewals

Renewal works are the substantial replacement of assets or significant asset components compared to the asset's original size and capacity.

### Typical Renewals

#### a. Stormwater Drainage

Renewal works for the stormwater drainage system generally consist of replacement of damaged pits, pipes lining of channels to prevent erosion or property damage and the replacement of existing channel linings with new or improved materials.

#### b. Buildings

Major renewal works for public buildings typically include:

- Replacement or rehabilitation of ceilings, roofing
- Replacement of air conditioning systems
- Replacement of kitchens

# A5. Overarching Asset Management Plan

- Refurbishment of toilet and shower facilities
- Installation of disabled access and facilities
- General refurbishment of buildings
- Replacement or rehabilitation of flooring systems
- Replacement or rehabilitation of foundations
- Replacement or rehabilitation of claddings and walls.

#### c. Open Spaces

Renewal works for parks, sports grounds and playgrounds include:

- Replacement of playground equipment and under surfacing that does not meet Australian Standards or is aged and worn
- Replacement of tennis and netball court surfaces and synthetic cricket pitches
- Replacement of fences, car park surfaces and other infrastructure.

#### d. Roads

Renewal works for road assets include:

- Pavement base course stabilisation with cement or lime
- Pavement base course replacement with deep-lift asphaltic concrete.

#### e. Foreshore Facilities

Renewal works for foreshore facilities includes:

- Replacement or rehabilitation of pontoons
- Replacement of pumps
- Replacement or rehabilitation of wharf structures
- Replacement or rehabilitation of seawalls
- Replacement or rehabilitation of boat ramps.

#### f. Leisure Facilities

Renewal works for leisure facilities includes:

- Replacement or rehabilitation of swimming pools
- Replacement or rehabilitation of floorings
- Replacement or rehabilitation of foundations
- Replacement or rehabilitation of ceiling and roofing systems
- Refurbishment of toilets and change rooms
- Replacement or rehabilitation of air conditioning systems
- Replacement of mechanical filtration and pumping systems.

# A5. Overarching Asset Management Plan

## A5.3.4 New Assets

New capital works are projects that create an asset that did not exist. Council's Delivery Program and annual Operational Plans lists the new capital works projects to be undertaken in the coming four years.

Specific funding sources for capital upgrades include Section 94 development contributions, other restricted assets, grants and subsidies, specific purpose rates such as water catchments remediation, special rate variation, asset sales and loans. Any expenditure for the capital items not funded from specific sources is funded from general purpose revenue, including general rates, general purpose grants, interest earned on investments and carry-over working funds.

Investment in new capital civil infrastructure will mainly occur through land development by property owners and/or developers. Investment in new capital public buildings and facilities will continue to be achieved mainly through Section 94 funding where developers contribute to community facilities and other projects determined by Council in consultation with the community.

The Section 94 Development Contributions Plan evolves from Section 94 of the Environmental Planning and Assessment Act. Section 94 funds must be used to provide new facilities or improve existing facilities to serve the new population.

From 1993 to June 2010, Council collected about \$80.6 million (including interest) of Section 94 funds. Over the same period Council expended about \$74.3 million on a wide range of community facilities and infrastructure. This includes traffic and transport management, open space and recreational facilities, library and community facilities, bushland and environmental regeneration, civic improvements, stormwater drainage remediation and bushfire protection works. The remaining Section 94 balance is committed to spending on the acquisition of open space, local road intersection improvements, upgrading stormwater in the Hornsby town centre and the provision of community and cultural facilities.

## A5.3.5 Rationalisation of Assets

Council owns and operates various assets throughout the Shire and is continually reviewing these in order to dispose or retire those which are surplus to requirements.

Council's policy for the use of funds from these sales is to:

- Place 10% in a Land Acquisition Restricted Asset Account to acquire land for open space purposes
- Place 10% into Working Funds to cover costs associated with the sale
- Place 80% into a Debt Retirement and Capital Projects Restricted Asset Account, the use of which is determined by Council. (See *Council Policies CSFM5 – Use of Funds Generated by Land Property Sales; CSFM6 - Land Acquisition Restricted Asset Account; CSFM7 - Debt Retirement and Capital Projects Restricted Asset Account; and CSFM8 - Parks Development Restricted Asset Account.*)

## A5.3.6 Asset Disposal

Asset Disposal is the removal or decommissioning of assets following the end of an asset's service life or change in asset requirements due to rationalisation.

Asset Disposal costs are associated with the physical removal or disposal of decommissioned assets. The disposal costs may include:

- Evaluation of options
- Consultation and advertising

# A5. Overarching Asset Management Plan

- Provision of professional services eg. legal, engineering
- Demolition, site clearing, and health and safety costs.

These costs, and the use of the sale proceeds, are determined by Council as part of the disposal decision-making process.

## A5.4 Levels of Service

Levels of service represent an agreement between Council and the community to perform certain activities now and into the future. Understanding the level of service required for each asset allows Council to determine the required maintenance, renewal, replacement and disposal cycles.

In many instances current service levels have evolved over time as a combination of Council officers' decisions, traditional work practices and industry standards. As asset classes are different in composition and function, this means Council must rely on community surveys, service requests, complaints, correspondence and anecdotal evidence to understand desired service levels.

In early 2009 Council engaged its community in a survey of customer expectations regarding a wide variety of issues. One of the survey questions asked respondents to nominate the priority areas they would like Council to focus on. The highest priority focus area nominated was infrastructure, with 45% of all participants nominating the provision of quality infrastructure as a key concern for Council.

In late 2009 and early 2010 Council undertook broad consultation via focus groups and community meetings regarding a proposed rate variation to fund infrastructure improvements. The outcomes from the consultation and engagement about the proposed rate variation indicated that, when residents understand and appreciate the enormity of the problem, the majority supported the introduction of a rate variation for infrastructure improvements. Given the choice between either paying an increase of \$50 to \$100 a year more or lowering the current level of services provided by Council's infrastructure, most people preferred to retain current service levels, recognising the modest financial impact on households.

The following issues related to each asset category were raised in the consultations in 2009 and 2010.

### Roads

- More footpaths across the Shire
- Install kerb and gutter at more areas within existing suburbs
- More parking facilities particularly around the train stations and some bus stops
- More bike paths and end of trip facilities such as bike lockers
- Better traffic management
- Implement plans with the RMS to deal with Pennant Hills Road
- Improve public transport, particularly at night

### Public Buildings

- Upgrade and remodel the libraries
- Provide a cultural centre and town hall complex
- Replace the Hornsby Station footbridge

# A5. Overarching Asset Management Plan

## Open Spaces

- Provide additional passive and active recreational areas
- Improve the amenities at local ovals and parks
- Increase weed control in parks and bushland areas
- Control rabbits and other feral animals
- Provide more playgrounds and play areas
- Develop BMX tracks in appropriate bushland

## Recreation Facilities

- Replace the Hornsby Aquatic Centre
- Upgrade the aquatic facilities at Galston and Epping
- Provide additional sports grounds

## Foreshore Facilities

- Provide commuter berthing facilities
- Continue working towards water quality improvements

## Stormwater Drainage

- Extend the sewer to outlying areas
- Improve drainage in the Hornsby CBD
- Improve drainage in areas subject to flooding, particularly Beecroft and Galston

Further community consultation undertaken during 2012, as well as the successful local government election campaign in 2012, showed that people continue to support the increased spending on infrastructure.

The service level rating methods adopted at Hornsby Shire Council vary across the asset categories. Generally, rating methods are based on the International Infrastructure Management Manual as described below and adapted to the specifics of the asset category.

**Table 8: Service level ratings**

Rating	Description	Definition
Rating 1	Excellent	No work required (normal maintenance)
Rating 2	Good	Only minor maintenance work required
Rating 3	Average	Maintenance work required
Rating 4	Poor	Renewal required
Rating 5	Very poor	Urgent renewal/upgrading required

**Tables 9: Current service ratings**

Buildings	
Rating	% of the network
Excellent	5.4%
Good	35.5%
Average	49.9%
Poor	5.4%
Very poor	3.8%

Foreshore Facilities / Bus Shelters	
Rating	% of the network
Excellent	19.3%
Good	40%
Average	16.5%
Poor	16.2%
Very poor	8%

Roads	
Rating	% of the network
Excellent	36%
Good	33.2%
Average	24.8%
Poor	3%
Very poor	2.9%

Stormwater Drainage	
Rating	% of the network
Excellent	11.2%
Good	79.6%
Average	8.1%
Poor	1.2%
Very poor	0%

Open Space / Recreational Assets	
Rating	% of the network
Excellent	95.4%
Good	4.6%
Average	0%
Poor	0%
Very poor	0%

# A5. Overarching Asset Management Plan

## A5.5 Special Rate Variation

The Independent Pricing and Regulatory Tribunal (IPaRT) approved a special rate variation (SRV) to general income in June 2011. SRV Funds generated will enable Council to provide over \$45 million worth of new infrastructure and facilities over the next 10 years.

The additional funds generated by the special rate variation will ensure Council is able to:

- Provide existing services to the community at existing levels, including community development, libraries, food shop inspections, child care, control of traffic, public place cleansing, tree services and environmental education
- Maintain existing infrastructure to a high standard (roads, footpaths, amenities at local parks, public buildings) and commence an upgrade/renewal program
- Replace ageing infrastructure (Hornsby Aquatic Centre, playgrounds, pedestrian footbridge)
- Provide the additional infrastructure and services identified by the community in the Hornsby Shire Community Plan (additional recreational facilities, more bike paths and BMX tracks).

**Table 10: Special Rate Variation June 2011**

Asset class	Additional funds	Description of works
Hornsby Pool	Repay a \$20 million loan	Replace the facility with a modern Aquatic Centre
Pedestrian footbridge	\$1 million over three years	In conjunction with RMS and StateRail replace the bridge with a contemporary expanded bridge
Amenities at local ovals and parks, and playgrounds	\$1.8 million per year	Replace fencing, build carparks, upgrade lighting, improve toilet blocks, upgrade playgrounds, build mountain bike tracks
Stormwater drainage	\$0.5 million in 2011/12, increasing each year to \$1 million per year 2015/16	Amplify drainage system, improve overland flows, increase inlet and outlet connections, upgrade pits
Footpaths	\$350,000 in 2011/12, \$100,000 - \$150,000 per year thereafter	Construct additional footpaths in high traffic areas and areas of need such as near schools and shopping centres
Roads	\$100,000 per year	Fast track the local road improvement program
Bike paths and cycleways	At least \$100,000 per year	To 'match' RMS funding for cycleway projects
Thornleigh Indoor Stadium	\$3.9 million total, commencing in 2013/14	Stadium operates at full capacity. Expand the space by constructing new indoor courts <i>(Original proposal to build an additional two new indoor courts at the Stadium deferred. Council decided better option was to make a \$2.85 million contribution to the Waitara PCYC development which will provide three indoor court facilities at Waitara.)</i>
Community buildings	Approx \$300,000 per year	To improve the appearance, condition and the accessibility of community buildings across the Shire
Foreshore facilities	\$80,000 per year	Upgrade walls, pontoons and boat launching ramps

# A5. Overarching Asset Management Plan

## Short term

As stated above, Council through the special rate variation will concentrate in the first years on providing the improvements and upgrades desired by the community as well as addressing those asset classes which pose the greatest risk to the community should they deteriorate further, for example the pedestrian footbridge at Hornsby Station and Hornsby Pool which failed and was replaced by a new Aquatic and Leisure Centre in August 2015.

## Medium term

Over the medium term the focus of funding generated by the special rate will move to address the significant renewals and upgrades required by existing assets.

## Longer term

The additional assets and upgraded assets will require an expanded maintenance program to maintain service levels and enable the assets to meet community expectations. From 2020 onwards the focus will be on maintaining and renewing the asset stock.

## A5.6 Demand trends and impacts on service delivery

Demand trends and impacts on service delivery are summarised below:

**Table 11: Demand trends and impacts on service delivery**

ISSUE	IMPACT ON SERVICE DELIVERY
<b>Population</b>	
<ul style="list-style-type: none"> <li>Current estimated resident population as at 30 June 2015: 170,563 (ABS)</li> <li>Change from previous year: +1.15%.</li> <li>Projected to be 176,000 # by 2026 (# Department of Planning (2009) New South Wales Statistical Local Area Population Projections, 2006-2036. Sydney: Department of Planning)</li> </ul>	<ul style="list-style-type: none"> <li>Increased users of roads and footpaths, causing greater deterioration rates and more traffic</li> <li>Increased pressure on ageing stormwater network</li> <li>Increased demand and use of sports grounds and ovals</li> <li>Increased demand and use of foreshore structures</li> <li>Greater demand for public space and community services</li> <li>More people using libraries, swimming pools and other recreational infrastructure</li> <li>More waste and recyclable materials to be collected</li> </ul>
<b>Demographics</b>	
<ul style="list-style-type: none"> <li>Increase in ageing population</li> <li>Increase in migration</li> <li>Changing cultural diversity</li> <li>More working parents</li> <li>Changing work patterns as retail and commercial industries expand operating hours</li> </ul>	<ul style="list-style-type: none"> <li>Increased demand for footpaths and bike paths that link to public transport, shops and other services</li> <li>Change in park usage to suit older residents</li> <li>Change in types of sports usage</li> <li>Need for greater accessibility to all parks, amenities and open spaces</li> <li>Increased demand for quantity and flexibility in child care facilities</li> <li>Increased demand for adaptable housing</li> </ul>
<b>Urban Planning</b>	
<ul style="list-style-type: none"> <li>Trend to higher density living around transport nodes and town centres</li> </ul>	<ul style="list-style-type: none"> <li>Increased pressure on roads due to heavy vehicles at construction sites</li> <li>Greater impervious surfaces impacting on stormwater run-off</li> <li>Less personal outdoor space and therefore greater reliance on public spaces</li> <li>Less personal entertaining spaces and therefore greater need for halls for hire</li> </ul>

# A5. Overarching Asset Management Plan

## Environmental factors

- Climate change impacts and increasing pressure on bushland
- Potential for increased bushfires and subsequent impact on bushland
- Expanding development which then encroaches on bushland
- Potential for sea level rises and impact on foreshore structures
- Increased consumption resulting in increased waste and landfill sites

**Table 12: Summary of Demand and Management per asset class**

DEMAND	MANAGEMENT
<b>Buildings</b>	
The increasing population will place higher expectations for an increased number of community service related buildings to be in place. The changing demographic profile will demand changes to existing buildings in order to adapt to different needs. Higher density development will limit privately owned recreational space, placing more demand on community facilities	Demand management will include a move from single use to multi-use facilities. Specific buildings may require upgrades and augmentation to meet contemporary user needs
<b>Roads</b>	
The increasing population will mean the road network needs to carry more vehicles. The network's use for transit will impact demand. Particular roads may need to change classification and in some places footpaths may be upgraded to shared use paths	Demand will be managed through regular monitoring and maintenance / renewal / upgrade of the network. This will be influenced by funding availability
<b>Open Spaces</b>	
Trends are towards more personalised activities. Ageing demographics will affect the types of facilities provided. Other issues are age and location of playground equipment, safety/cleanliness, higher maintenance standards and shade. Current demand on open spaces is substantial	Demand management is focused on equity, accessibility and linkages to permit a wide range of activities to occur and reduce duplication
<b>Foreshore Facilities</b>	
Impacting trends include population growth, density and demographic change, climate change with associated predictions of changes in weather, and increased emphasis on biodiversity and environmental needs	Demand is managed by regular monitoring and maintenance. Periodic major repairs will be required for wharves and seawalls
<b>Leisure Facilities</b>	
The catchment 'pull' of the three pools (Hornsby, Epping, Galston) and the Thornleigh Stadium is quite high with 28% of people coming from over 10km away. The normal mode of transport is by car (83%) which exacerbates the parking issues. Parking issues are expected to continue. The Thornleigh stadium is operating at capacity as the popularity of indoor sports such as badminton and basketball continues to grow	At the Thornleigh Stadium demand is managed by extending the operating hours until 11pm each night of the week and seeking to accommodate a wide range of indoor sports. Demand at local swimming pools is managed by offering alternative and extended times to swim such as twilight carnivals. Learn to swim activities operate on a wait list system which extends into the winter months
<b>Stormwater Drainage</b>	
Impacting trends include population growth, density and demographic change, climate change with associated predictions of changes in weather, and increased emphasis on biodiversity and environmental needs. Current issues include flood protection in some locations, a focus on water quality and water harvesting and preparation for climate change. Customer expectations have changed following significant drought	The management of stormwater is tied to the changing perceptions of stormwater as a harvestable product rather than waste. Large water harvesting projects for parks and ovals are underway  Amplification of the stormwater network is costly and flood mitigation strategies are being considered to lessen the impact of stormwater inundation upon properties

# A5. Overarching Asset Management Plan

## A5.7 Risk analysis

The implementation of effective asset management plans considers the relationship and prioritisation of maintenance and capital works to support the delivery of Council services. Management of risk and liability through the assessment of risk assists Council in allocating resources in the most effective manner. Below is a summary of risks according to each of Council's major asset classes.

**Table 13: Risks according to major asset class**

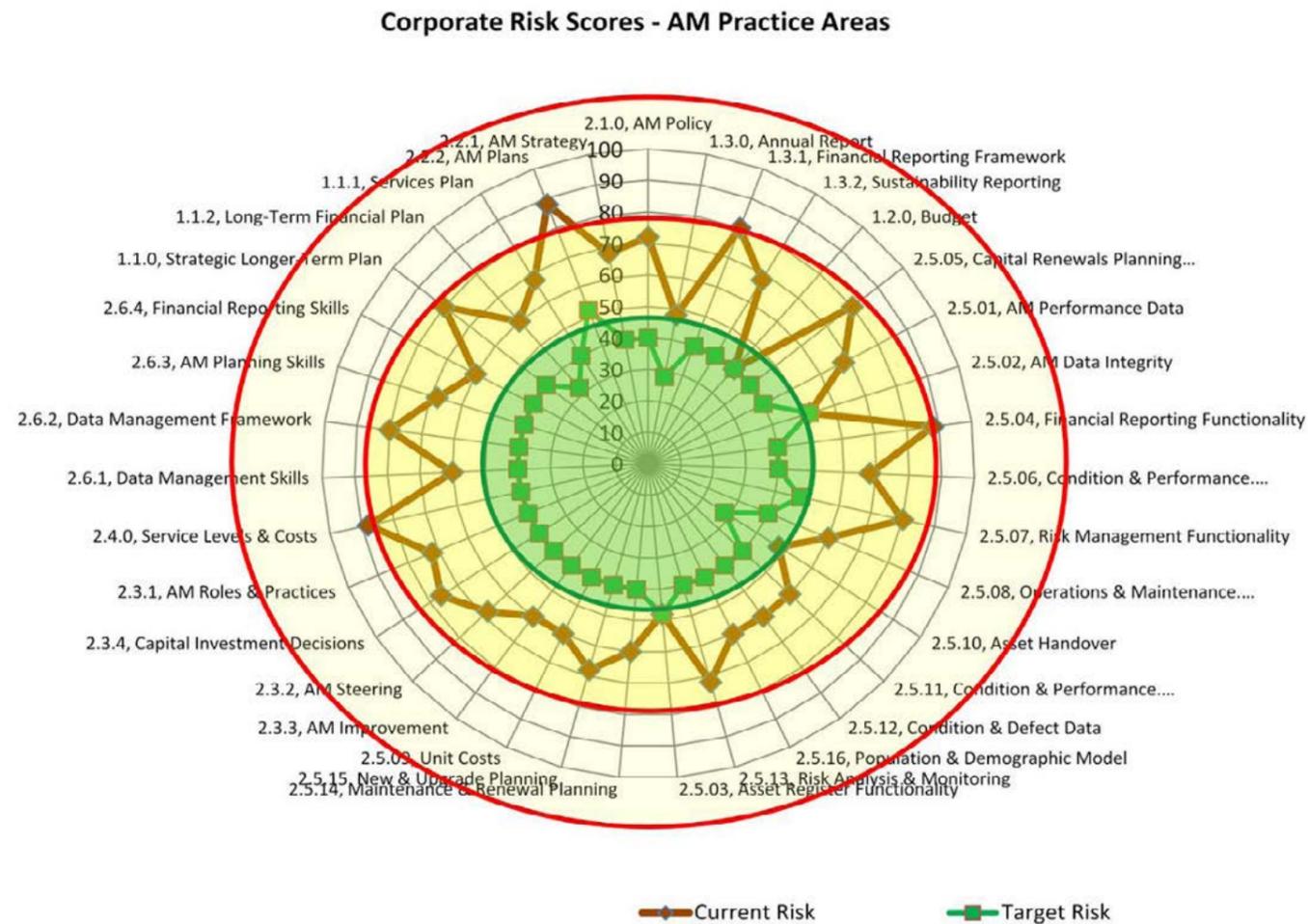
Asset Class	What can happen	Risk Rating	Risk treatment
Roads	<ul style="list-style-type: none"> <li>Crashes occur causing fatality/injury/ damage to property</li> </ul> <p><i>Possible causes: Design flaws, damaged road surface, existing unsafe elements in the road environment</i></p>	High	<ul style="list-style-type: none"> <li>Australian Standards, RMS regulations, regular pavement inspections, public liability insurance</li> </ul>
	<ul style="list-style-type: none"> <li>Network deterioration, eg potholes</li> </ul> <p><i>Possible causes: Poor maintenance practices by others, development related deterioration, heavy ongoing rain</i></p>	High	<ul style="list-style-type: none"> <li>Annual re-sheeting program, reactive pothole repairs, road restoration standards, public liability insurance</li> </ul>
	<ul style="list-style-type: none"> <li>Crashes occur causing fatality/injury/ damage to property</li> </ul> <p><i>Possible causes: damaged traffic control devices, obscured or missing signs, driver unaware of recommended speed, vandalism of traffic facilities</i></p>	High	<ul style="list-style-type: none"> <li>Australian Standards, RMS regulations, regular inspections, replacement of faded signs, reactive maintenance, public liability insurance</li> </ul>
Foreshore Facilities	<ul style="list-style-type: none"> <li>Wharves, jetties or pontoons collapse or fail creating personal hazard</li> </ul> <p><i>Possible causes: age, deterioration, storms, vandalism, navigation accidents</i></p>	High	<ul style="list-style-type: none"> <li>Foreshore Facilities Asset Management Plan and associated condition assessment with timely works program</li> <li>Public liability insurance</li> </ul>
Open Spaces	<ul style="list-style-type: none"> <li>Impacts of climate change (heat and drought) on surface conditions.</li> <li>Over-use of areas leading to increased surface degradation.</li> <li>Inappropriate use or vandalism damage to surfaces.</li> <li>Poorly functioning, unsuitable or inadequate amenities at local parks and ovals</li> </ul>	High	<ul style="list-style-type: none"> <li>Implement a stormwater harvesting program for use on parks and sports grounds</li> <li>Management of the use of ovals and parks by sporting bodies</li> <li>Timely maintenance and upgrade of amenities such as lighting, seating, fencing and toilet blocks</li> </ul>

# A5. Overarching Asset Management Plan

Asset Class	What can happen	Risk Rating	Risk treatment
Buildings	<ul style="list-style-type: none"> <li>Failure of structural components or electrical components</li> <li>Impacts of storms, wildfires and natural disasters</li> <li>People impacts such as vandalism and accidental damage</li> <li>Environmental impacts such as termites</li> <li>Electrical Fire or other systems failures</li> </ul>	High	<p>The following criteria are used to identify high risks and to prioritise the improvement works:</p> <ul style="list-style-type: none"> <li>Public safety risk</li> <li>Environmental risk</li> <li>Financial risk (if work is deferred)</li> <li>Statutory obligation</li> <li>Intensity of use</li> <li>Condition assessment</li> <li>Public/customer complaint or service request</li> <li>Poor appearance or under performance</li> <li>Importance of asset location (eg. high amenity area)</li> </ul>
Leisure Facilities	<ul style="list-style-type: none"> <li>Leisure Facilities assets are at highest risk from asset structural component failures, storms, wildfires and natural disasters. Other risks evolve from people, including vandalism and accidental damage</li> </ul>	High	<ul style="list-style-type: none"> <li>Leisure Facilities use similar criteria to Buildings to identify high risk and prioritise remedial or improvement works</li> </ul>
Stormwater Drainage	<p>Reticulation risks include:</p> <ul style="list-style-type: none"> <li>Failure of capacity leading to flooding particularly in storm events</li> <li>Structural failure leading to flooding particularly in storm events</li> <li>Environmental conditions resulting in blockages eg roots, leaves</li> <li>Remediation device risks included: access and escape risk, physical injury risk, drowning, health, odours, and mosquitoes</li> </ul>	High	<ul style="list-style-type: none"> <li>Regular inspection and condition monitoring</li> <li>Engineering investigation and production of prioritised work program for all stormwater assets</li> <li>Continuous staff training and certification to level skills</li> <li>Compliance to OH&amp;S Act – Safety Committees</li> <li>Accident/Hazard Reporting and inspections</li> <li>Safe Work Method Statements and Procedures Manuals</li> <li>Workers Compensation Procedures</li> <li>Induction and Safety Training (White Card)</li> </ul>

# A5. Overarching Asset Management Plan

Figure 5: Corporate Risk Scores



# A5. Overarching Asset Management Plan

## A5.8 Asset Management Systems

Hornsby Shire Council uses various asset systems according to asset class and asset needs.

### Pavement Management System for Roads

SMEC (Snowy Mountain Engineering Corporation) Pavement Management System (PMS) to strategically manage the road network; utilises the system data to undertake life cycle costing and then produce an optimised work program based on this modelling. The system is able to model both individual road assets on the network or as a whole. The work program is designed to maintain the network at a predetermined level of service.

### PipePak for Drainage

PipePak is a pipe asset management system that provides a user interface with an integrated spreadsheet for defining entire piping systems, which can then be analysed for compliance with industry-standard piping codes. PipePak can model behaviour, including degradation and depreciation, and can be used to define long term strategies as well as optimum medium term and annual maintenance management programs.

### Financial/accounting system

Hornsby Shire Council uses the TechnologyOne Financials accounting system. TechnologyOne Financials is a single, integrated enterprise solution built on a single modern platform for developing timely, reliable and personalised forecasts and budgets.

Asset managers at Council maintain their own budgets, including the setup of job numbers according to maintenance and capital and the processing of invoices against these budgets. The Asset managers provide valuation information to the finance section of Council. This information is used to update the accounting records and to produce the yearly financial reports.

### Geographic Information System (GIS)

Council uses IntraMaps which allows the special characteristics of assets to be displayed. By linking to the main asset data bases above the special representation of asset data is possible.

### Customer Request Management system (CRM)

Council uses a web based Customer Request Management System or CRM through Pathway to keep track of the jobs that are communicated to Council by residents and the wider community. The Pathway CRM System can be accessed by staff via the web and has the ability to automatically assign tasks to the appropriate staff and record the actions taken by that staff member and the completion time.

Enquiries are primarily entered by Council customer service team and actioned by the responsible officers, although the system is utilised by other areas of Council. Future developments of the CRM system may allow for residents to lodge their own enquiries via the internet.

### Electronic Document Management (HP Records Manager)

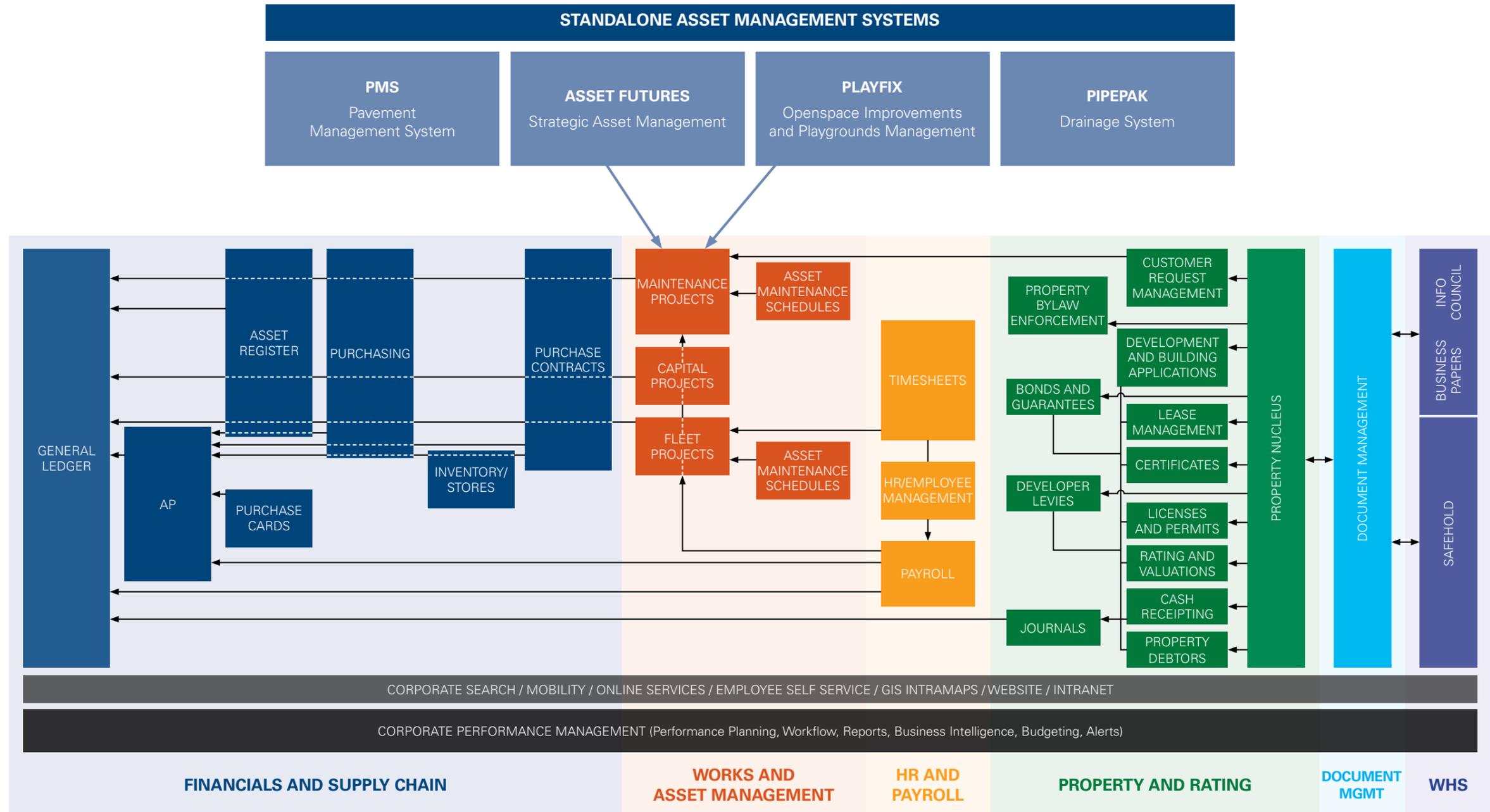
HP Records Manager is an electronic document and records management system (EDRMS) which captures, manages, and secures business information in a variety of formats in order to meet governance and regulatory compliance obligations. HP Records Manager integrates with a number of other Council systems (eg. Pathway, Word, Outlook, Internet/Intranet etc) to provide an effective storage facility which allows shared access to information across the organisation.

# A5. Overarching Asset Management Plan

# A5. Overarching Asset Management Plan

Council's online business system is based on the TechnologyOne suite of products. The diagram below displays the systems and their linkages.

Figure 6: Council's systems for asset management



## CORPORATE SYSTEMS



# A6. Glossary

## Annual Service Cost

The annual service cost includes operating, maintenance, depreciation, opportunity and disposal costs, less revenue, and is an estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term.

## Asset Class

Grouping of assets of a similar nature.

## Asset Condition Assessment

The process of periodic inspection, assessment, collection and interpretation of the resultant data to indicate both the condition of an asset and the need for preventative or remedial action.

## Asset Management

The application of financial and engineering management to infrastructure assets with the objective of providing the required level of service in the most cost effective manner.

## Asset Management Strategy

Documents how the asset portfolio can meet the service delivery needs of the community and guides the essential planning, construction, maintenance and operation of the infrastructure.

## Asset Hierarchy

The hierarchy is comprised of:

1. Class
2. Asset Type
3. Asset
4. Component.

## Average Annual Asset Consumption (AAAC)

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and total for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

## Capital Expenditure

Capital expenditure includes renewal, expansion and upgrade works to an asset or a new asset.

## Capital Grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

## Current Replacement Cost

The cost to replace the existing asset with an equivalent new asset with the same economic benefits.

## Fair Value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable and willing parties in an arm's length transaction.

## Heritage Asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities.

## Infrastructure Assets

Physical assets of the Council that contributes to meeting the community's need for access to major economic and social facilities and services, eg. roads, drainage, community buildings, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets.

## Level of Service

The defined service quality for a particular asset against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental acceptability and cost.

## Life Cycle Cost

The Life Cycle Cost (LCC) is the average cost to provide the service over the longest asset life cycle. It comprises of annual maintenance and asset consumption expense.

# A6. Glossary

## Maintenance Expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service.

## Operating Expenditure

Recurrent expenditure which is continuously required, eg. power, fuel, staff, plant equipment, on-costs and overheads.

## Remaining Life

The time remaining until an asset ceases to provide the required service level or economic usefulness.

## Residual Value

The net amount which Council expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.