



Randwick City
Council
a sense of community

Resourcing Strategy

**ASSET MANAGEMENT
STRATEGY**

2013–23



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1. Executive Summary

The Resourcing Strategy Executive Summary outlines the integration of the Long Term Financial Plan (LTFP), Asset Management Strategy and Workforce Plan within the Randwick City Council Resourcing Strategy.

The Asset Management Strategy is a key component of the Randwick City Council Resourcing Strategy. It underpins Council's Integrated Planning and Reporting Framework and demonstrates how The Randwick City Plan will be resourced over the next 10 years.

The Integrated Planning Framework encourages and supports the review and implementation of plans relating to the Financial, Asset and Workforce contributions to Randwick Council. Through sound financial planning, proactive asset management and the development of a strong workforce, the Council will maintain its position as an industry leader.

The Asset Management Strategy, in conjunction with the Asset Management Plans, provide an approach and guidance to the Council on improving its asset management systems and practices.

Goals

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
- to provide for present and future consumers.

Objective

The objective of the Asset Management Strategy is to establish a framework to guide the planning, construction, maintenance and operation of infrastructure essential for Randwick Council to provide services to the community.

Randwick – Current asset management capacity and maturity

Randwick Council currently maintains a high standard of asset management awareness, with service areas focused on delivering the Council's adopted program. Each service area has developed good systems and processes to enable delivery of the adopted program of works. Randwick Council plans to continue developing the asset management processes by consolidating and improving corporate systems and processes.

Randwick – Future required asset management capacity

The immediate future requires that Randwick Council achieve the compliance requirements of NSW Legislation and the targets set for the National Asset Management Frameworks. Meeting these will require certain actions:

Service levels and performance targets will be documented in the Asset Management Plans and funded by a LTFP. These will aim to fully fund the capital, maintenance and operating costs needed to sustain the adopted service level targets. Performance indicators for sustainable social, environmental, economic and governance goals should be outlined in these plans along with appropriate monitoring and reporting. To achieve this balance a number of service level scenarios and long term cash flows will need to be considered to determine the optimum balance between environmental, governance, economic, social and cultural objectives.

The key functional requirements of the corporate asset management system will be reassessed, with focus on the mandatory reporting requirements of the Local Government Amendment (Planning and Reporting) Act 2009¹ and the NSW Department of Local Government Integrated Planning Framework.

Randwick – Steps to achieve the required asset management capacity

To achieve the desired asset management capacity, Randwick Council will need to be able to implement business processes, systems and resources to:

- provide the information required to assist in the wise management of the infrastructure which supports services to the community
- implement a life-cycle approach to the management of infrastructure assets
- ensure that service delivery needs form the basis of infrastructure asset management
- provide a sustainable funding model that meets community needs
- provide the necessary resources to meet the asset management goals and objectives
- demonstrate environmental leadership and minimise the impact on the environment
- develop and implement an integrated decision support system
- ensure compliance with NSW Legislative, Department of Local Government requirements, and the National Frameworks for Asset Management.

¹ New South Wales, Local Government Amendment (Planning and Reporting) Act 2009



Key strategies

The following key strategies are an amalgamation of those within the Asset Management Strategy Report. They are listed in the order that they appear, not by priority.

Key Strategy 1

An Asset Management Policy has been adopted by Randwick City Council. Align revisions with the format provided by the Institute of Public Works Engineering Australia (IPWEA) NAMS.PLUS Program.

Key Strategy 2

The corporate Asset Management Steering Group is responsible for implementing, monitoring and reporting to the Senior Management Team on the development of asset management at Randwick Council.

Key Strategy 3

Develop and maintain Asset Management Plans by regularly reviewing plans for major infrastructure asset groups including:

- road assets (road pavement, kerb and gutter)
- footpaths
- storm water drainage
- open space
- buildings
- retaining walls (to be developed)
- foreshore assets (to be developed).

Key Strategy 4

Identify infrastructure expenditure by both:

- expenditure category – i.e. the Asset Group / Class. For example, road pavement
- expenditure type – operating, maintenance, capital renewal, capital upgrade or capital expansion.

Key Strategy 5

Consider the ongoing ownership costs of new capital works proposals in budget deliberations. This is achieved by identifying the renewal and capital upgrade/ expansion components of all capital works projects, and providing for the ongoing operational and maintenance requirements.

Key Strategy 6

Develop Risk Management Plans for all major infrastructure classes.

Key Strategy 7

Review the completeness and accuracy of the data for all major infrastructure classes.



Key Strategy 8

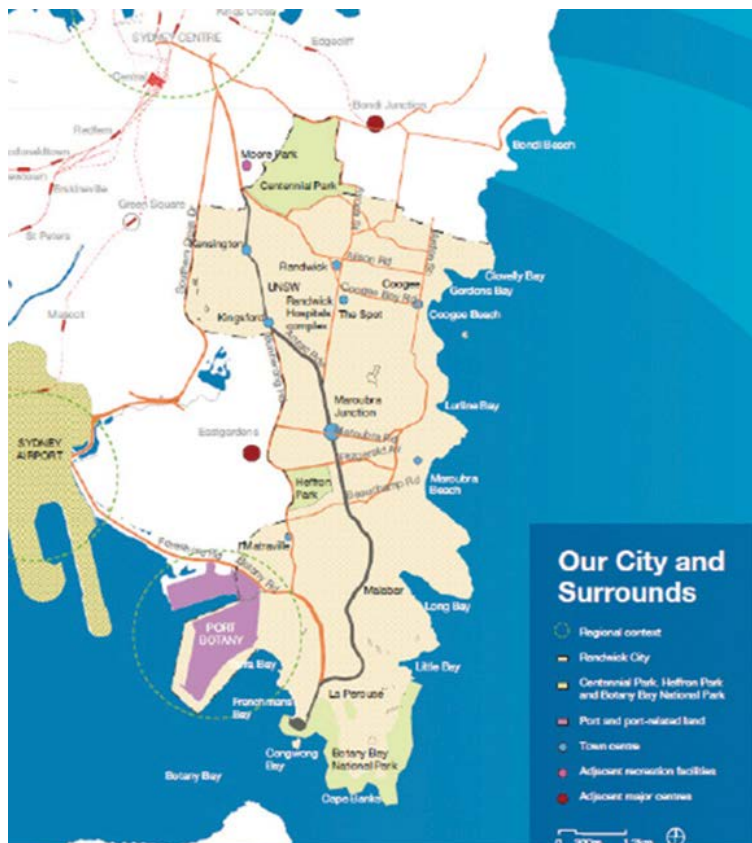
Continue to integrate all knowledge and management systems for infrastructure assets.

Key Strategy 9

Prepare a 10 year Long Term Financial Plan that provides sustainability for all Randwick Council functions that consider both the future anticipated income projections, and the future expenditure requirements to sustain services.

Key Strategy 10

Undertake a detailed assessment of the resources required to implement this Asset Management Strategy so that a program of improvement and milestones can be implemented and monitored.



2. Introduction

Randwick was incorporated as a municipality in 1859 making it one of the oldest local government areas in Australia. Randwick municipality grew rapidly after the tram line was built in 1880. After the two World Wars, the area continued to grow rapidly until the 1970s, with population growth only today returning to the levels of that time. Randwick City has an area of 37.42 square kilometres (3,742 hectares), and contains the suburbs of Centennial Park, Chifley, Clovelly, Coogee, Kensington, Kingsford, La Perouse, Little Bay, Malabar, Maroubra, Matraville, South Coogee, Phillip Bay and Randwick.

2.1 The growth of infrastructure

Most of the existing infrastructure within Randwick Council was built over the past 100 years. During past periods of rapid infrastructure expansion, little or no analysis was done to understand cumulative economic, social, environmental and cultural consequences of decisions to build capital projects funded by the apparent abundance created by rapid growth.

Compounding the issues created by informal planning of current infrastructure is the fact that the infrastructure was built to meet the needs of the time. The driving factors surrounding these needs are changing rapidly.

Some examples are:

1. Transport networks are based on abundant cheap oil available since World War
2. Allocating sustainable economic and environmental costs to transport is likely to change the mix of transport options and the supporting infrastructure that will be required.
2. Storm water drainage networks are based on stormwater being a waste product rather than a harvestable resource.

The built environment has often been driven by short-term objectives with little consideration for environmental synergy or cumulative adverse impacts of excessive resource consumption and waste output.



The net result of these factors is that the local government generates a very high environmental footprint, a factor that will increasingly influence the nature of service planning and investment in infrastructure. The existing infrastructure will need modification as these external factors become increasingly important.

This strategy requires infrastructure service plans and detailed asset construction, renewal, upgrade, maintenance, operating and disposal plans with corresponding risk management plans.

2.2 Life cycle cost results

Life cycle costs (or whole of life costs) are the average costs that are required to sustain service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense).

The projection for buildings includes a significant funding increase for the renewal of buildings included in the Buildings for our Community program to address very low levels in the past.

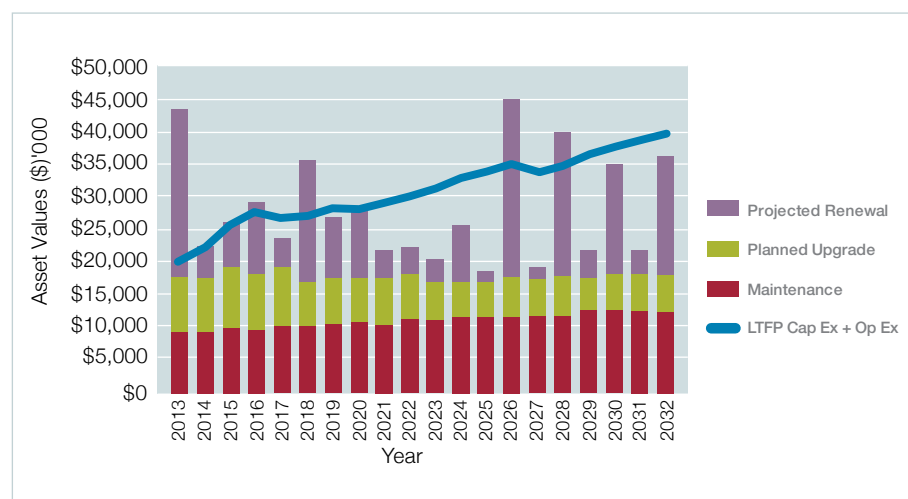
Stormwater drainage is also likely to require significant future investment in both renewal and upgrade with the associated analysis. Open space funding levels and sustainability ratios reflect significant planned upgrade projects including Heffron Park, the Coastal Walkway and Chifley Reserve. Further work is required to ensure Open space expenditure categories align with other Asset Management Plans and national standard expenditure classifications for maintenance, renewal, upgrade and expansion.

The annual average life cycle cost for the services covered in this asset strategy are shown below in table 2.2.1.

**TABLE 2.2.1 –
SERVICE COST ESTIMATES FROM ASSET MANAGEMENT PLANS (\$'000'S)**

	Total Annual Service Cost	Total LTFP Budget (Annual Average)	Sustainability Ratio
Civil Infrastructure Summary			
10 year Annual Average	\$12,465.23	\$11,657.06	0.94
20 Year Annual Average	\$12,610.45	\$12,761.02	1.01
Buildings Summary			
10 year Annual Average	\$6,889.50	\$7,683.42	1.12
20 Year Annual Average	\$7,160.19	\$7,376.44	1.03
Open Space Summary			
10 year Annual Average	\$6,510.84	\$10,269.30	1.58
20 Year Annual Average	\$7,599.67	\$11,018.42	1.45

FIGURE 2.2.2 – SERVICE COST ESTIMATES FOR CIVIL INFRASTRUCTURE FROM ASSET MANAGEMENT PLANS (\$'000'S)



2.3 The need for infrastructure planning

The majority of the Council's existing infrastructure stock was built when the provision of essential housing and infrastructure was the priority. During these past periods of infrastructure expansion, little or no analysis was done to determine a strategy to sustain this infrastructure stock by matching future maintenance and renewal expenditures with future income projections. Additionally, there has not been a good understanding of the long-term cumulative consequences of decisions to build infrastructure.

Past systems and processes had a focus on optimising the funds allocated in a given year (or the next 2–3 years) but did not analyse the long-term sustainability of managing the existing infrastructure stock. The pattern of infrastructure construction in the past points to a future peak in infrastructure renewal over and above maintenance activities.

Under the Department of Local Government's Integrated Planning and Reporting Framework, agreed levels of service performance will have an accompanying Long Term Financial Plan and Workforce Planning Strategy that aims to fully fund and resource the capital, maintenance and operating costs needed to sustain the agreed service level targets. In order to achieve this, a number of service level scenarios and long-term cash flows will be run to determine the optimum balance between environmental, economic, social and cultural objectives.

Randwick Council has already commenced analysing long-term funding requirements for infrastructure, and the organisational focus on providing 'sustainable infrastructure' is at a high level. The Council has developed a Resourcing Strategy to support the Integrated Planning Framework in recognition that the framework assists councils in providing targeted, efficient and effective services.

This Asset Management Strategy forms part of Randwick Council's Resourcing Strategy. It is a continuation of a process of improving asset management to ensure

that the Council is able to bring its infrastructure and asset management practices, processes and systems to a high level. This will be required if Randwick Council is to successfully implement the visions identified in its City Plan. The support of business and the community will also be essential in developing and implementing long-term strategies for Randwick Council.

2.4 Strategic issues

Randwick Council has embraced the principles of asset management and is now working to bring these principles of planning, strategy and associated reporting into the corporate environment to enable advanced asset management practices to be followed. Crucial to best practice asset management is the requirement for comprehensive and reliable data on existing services and infrastructure. Additionally, a strategy to link Council's operational activities with the planning and policy directions of Council is critical. This information will provide a high level of informed knowledge and assist the corporate decision making process in relation to the impact and consequences of actions.

2.4.1 The Randwick City Plan

The Randwick City Plan was developed through extensive community consultation over a number of years and first published in 2006. It is a strategic document that reflects the Randwick community's priorities and aspirations. It guides and coordinates the Council's activities over a 20 year period.

The Randwick City Plan outlines six themes and corresponding outcomes to shape our City's future:

Theme	Outcome
1. Responsible management	Leadership in sustainability
2. A sense of community	A vibrant and diverse community An informed and engaged community
3. Places for people	Excellence in urban design and development Excellence in recreation and lifestyle opportunities A liveable city Heritage that is protected and celebrated
4. A prospering city	A strong local economy
5. Moving around	Integrated and accessible transport
6. Looking after our environment	A healthy environment

By linking directions of the four year Delivery Plan and the incorporated 2012 –13 Operational Plan with the overarching City Plan, the community can see how individual projects are part of Randwick Council's broader vision.

Randwick Council also undertakes a biennial Community Satisfaction Survey to track numerical progress of the themes within the City Plan. The results of the survey reflect the needs of the community and are used to shape future planning towards short and long-term targets.

2.4.2 Legislative reform – NSW Local Government Act

As part of its commitment to continuing reform of local government, in 2009 the NSW Government amended the NSW Local Government Act. The amended act identifies the requirement for a Community Strategy along with a Resourcing Strategy inclusive of Asset Management Strategy (Policy, Strategy and Plans), Long Term Financial Plans and a Workforce Plan. The amended act is consistent with the previously released position papers entitled A New Direction for Local Government² and Asset Management Planning for NSW Local Government³.

2.4.3 Financial reporting requirements

The NSW Division of Local Government requires that councils comply with the accounting standard AASB116 for reporting on infrastructure assets. All of Council's assets have been revalued to fair value within the past 3 years. The data required to provide this level of financial reporting is also essential for the planning of future infrastructure renewal requirements.

2.4.4 Strategic issues at a national level

At its meeting on 4 August 2006, the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning, and reporting and assessing financial sustainability.

On 20 October 2006, the LGPMC endorsed the draft National Frameworks for Financial Sustainability in Local Government as a basis for consultation.

On 21 March 2007, the LGPMC endorsed the Frameworks for implementation in the context of their relationships with their local government sectors⁴.

On 8 May 2009, the LGPMC agreed to enhancement and acceleration of the Frameworks.

The National Frameworks consist of three main frameworks of which Asset Planning and Management is one. The Asset Planning and Management framework has seven elements which each State and Territory is expected to adopt as follows:

2 Department of Local Government, 2006, A New Direction for Local Government
3 Department of Local Government, 2006, Asset Management Planning for NSW Local Government
4 LGPMC, 2007, Local Government Financial Sustainability, 2007, Nationally Consistent Framework



1. Development of an asset management policy

Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist individual councils in developing their asset management policy.

2. Strategy and planning

Councils should be provided with guidance from the state on developing an asset management strategy which is designed to support and implement its asset management policy.

3. Governance and management arrangements

Councils should be encouraged to apply and implement good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the General Manager, the Council and senior managers.

4. Defining levels of service

Mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base.

5. Data and systems

A framework for collection of asset management data should be established.

6. Skills and processes

The asset management framework should contain a continuous improvement program.

7. Evaluation

The asset management framework should contain a mechanism to measure its effectiveness.

The proposed changes to legislation in NSW are consistent with the National Frameworks.



3. Asset Management Planning

3.1 Key areas of asset management planning

The following key areas of asset management underlay and guide the direction for future systems, processes and planning.

1. Sustainable environmental performance

All aspects of the management of the Council's assets will include criteria to achieve sustainable environmental performance.

2. Life cycle asset management principles

Apply a 'whole of life' methodology for managing infrastructure assets including:

- planning
- acquisition/creation
- operation
- maintenance
- renewal
- disposal.

3. Best value

The Council will balance financial, environmental and social aspects to achieve best value for the community.

4. Decision support systems and knowledge

The Council's systems will be a corporate resource integrated with core packages and will include the measurement, monitoring, evaluation and performance reporting of assets to enable better and more informed decisions.

5. Service levels

Asset service levels will be clearly defined and reflect the needs of the community, meet corporate policy objectives and balance capital investment, operational safety and costs.

6. Long term financial plan

Asset practices, plans and systems will enable the development of long term financial plans for asset classes.

7. Asset planning strategies

Randwick Council is committed to integrating long-term sustainability objectives into asset planning and project delivery. The Council recognises the need to strategically plan to meet the service delivery needs of stakeholders. The Asset Management Strategy forms part of the Resourcing Strategy that also includes the Long Term Financial Plan and the Workforce Plan.

8. Asset management practices

Council will adopt a consistent and standard methodology for the management of all infrastructure asset groups, including the development of infrastructure asset and risk management plans for all asset groups.

9. Responsibility

The responsibility for all individual aspects of the management and use of the Council's assets will be clearly defined by means of a responsibility matrix or decision chart.

Asset management planning aims to optimise services to the community at a cost and risk that is acceptable. To assist in undertaking this, Randwick Council is developing various sustainability planning tools. The primary tools include Community Strategic Plans, Asset and Risk Management Plans and Long Term Financial Plans. The implementation of asset management planning is guided by the Asset Management Strategy within the context of the Asset Management Policy.

3.2. Asset Management Policy

3.2.1 Benefits of producing an asset management policy

An infrastructure asset management policy provides the guiding principles for:

- how the Asset Management Strategy and Asset Management Plans connect with other planning documents
- the time horizon for financial and service planning
- compliance with mandatory requirements
- whether the Council seeks to take a leading position on advanced asset management
- ensuring asset provisions meet current policies but also emerging and rapidly changing circumstances and competitive global environments.

“An adopted asset management policy provides the framework which, together with the organisational strategic plan, enables the asset management strategy and specific objectives, targets and plans to be produced.”⁵ This is shown in Figure 3.2.1.

FIGURE 3.2.1 KEY ELEMENTS OF ASSET MANAGEMENT PLANNING STRATEGY

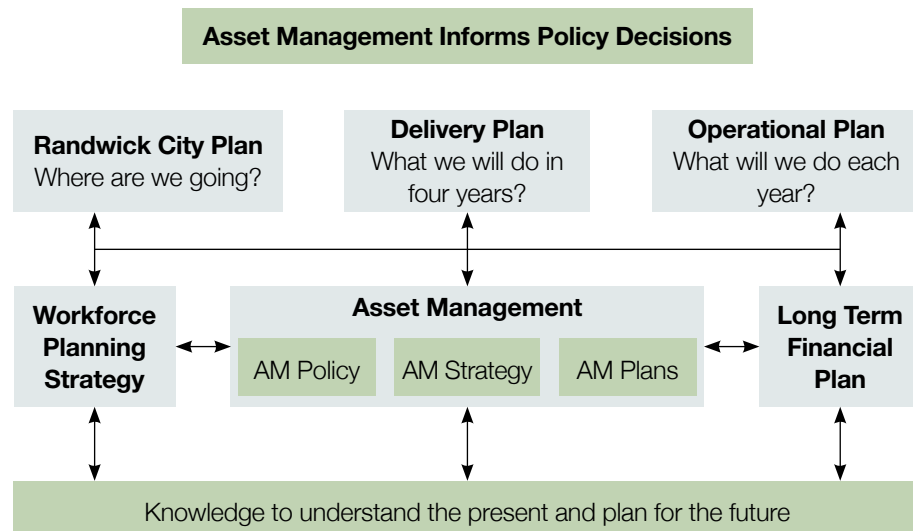


Figure 3.2.1 shows the key elements of the framework for asset management planning. The Asset Management Strategy will improve the bottom two tiers shown in this diagram. Informed decisions need to be supported by Asset Management and Risk Management Plans linked to Financial Plans. These should be informed by sound data derived from an integrated asset decision support system.

3.2.2 Objectives of the Asset Management Policy

The following policy objectives set the broad direction that Randwick Council should follow to satisfy the strategic goals set out in its City Plan and other strategic documents.

The objective or purpose of an Infrastructure Asset Management Policy is to:

1. Provide infrastructure and services to sustain Randwick Council area

- support the quality of life and amenity, urban environment and cultural fabric appropriate to Randwick City
- adapt to the emerging needs in sustainable transport
- facilitate the changes to infrastructure needed to cater for change.

2. Implement a life cycle approach to the management of infrastructure assets:

- asset planning decisions are based on an evaluation of alternatives that consider the 'whole of life' of an asset through acquisition, operation, maintenance, renewal and disposal
- the asset management cycle will consider environmental, economic and social outcomes.

3. Ensure that service delivery needs form the basis of infrastructure asset management:

- establish and monitor levels of service for each asset class linked to the strategic planning framework and the corporate management plan
- infrastructure asset management and risk management plans will be established for each asset class to enable effective prioritisation and monitoring

- enable a flexible and scenario-based approach through systems and plans to allow for innovative use of assets in the future particularly in recycling and environmental indicators.

4. Provide a sustainable funding model that meets community needs:

- Council will have a funding model for all asset related services extending at least 10 years and addressing the need for funds, peaks and troughs and how funds will be sourced.

5. Contribute to the protection of the environment:

- Council will minimise energy and water use, waste generation and air quality impacts through its own initiatives and by working with stakeholders
- contribution to environmental protection and enhancement will be fundamental to all infrastructure asset management planning, project and service delivery.

6. Develop and implement an integrated decision support system to:

- provide systems and knowledge necessary to achieve policy outcomes
- minimise risk of corporate knowledge and data loss
- manage knowledge as efficiently as possible through the appropriate use of software, hardware and communication tools
- reduce data duplication and multiple entries.

7. Ensure compliance with legislative and Department of Local Government requirements:

- having clear policy in place to ensure that organisational objectives and legislative requirements are met is essential.⁶ The Local Government Act 1993 as amended requires councils to undertake asset management planning and reporting. To assist in meeting these requirements the NSW Department of Local Government has released the Integrated Planning and Reporting Manual, 2010.

8. Allocate Asset Management responsibilities:

- the roles and responsibilities of the Council, General Manager and Asset Managers are clearly identified.

3.2.3 Asset Management Policy

Randwick Council is a participating organisation in the Institute of Public Works Engineering Australia (IPWEA) National Asset Management Strategy program, NAMS.PLUS. This program provides assistance to councils to develop asset management plans.

Randwick Council has adopted an Asset Management Policy that reflects Randwick Council's corporate approach to asset management. The policy is similar to the NAMS.PLUS draft asset management policy. When the asset management policy is reviewed, it can be aligned with the NAMS.PLUS template for consistency across the suite of Asset Management documents.

Key Strategy 1

An Asset Management Policy has been adopted by Randwick City Council. Align revisions with the format provided by the IPWEA NAMS.PLUS Program.

Key Strategy 2

The corporate Asset Management Steering Group is made responsible for implementing, monitoring and reporting to the Senior Management Team on the development of asset management at Randwick Council.

3.3 Asset Management Strategy

3.3.1 Purpose of the Asset Management Strategy

The purpose of the Asset Management Strategy is to provide direction for developing the ongoing processes for managing infrastructure assets.

The Asset Management Strategy forms part of the Randwick City Council Resourcing Strategy that also includes the Long Term Financial Plan and the Workforce Plan. This strategy will continue to evolve as the strategic objectives of the Council develop and change. The key steps in this process include reviewing the strategic trends, assessing potential impacts on the asset stock, and assessing gaps in the asset knowledge required to prepare Asset Management Plans.

3.3.2 Establishing a corporate approach

It is essential to recognise that asset management is a corporate, not a technical responsibility. The key components of a sound asset management approach cannot be achieved within the individual operational areas of the Council alone.

Some of the areas where the need for a corporate cooperative can be demonstrated include:

- organisational support for workforce planning
- sound information and systems
- comprehensive asset management planning
- community involvement in establishing service standards
- rigour in financial assessments, and
- performance measurement of asset management.

To develop a strong corporate approach to asset management, a cross-divisional Asset Management Steering Group is required.

Randwick Council previously recognised the need for a corporate approach to asset management and established a cross-divisional Asset Management Planning Project Working Group. The role of this group is to oversee the development of Asset Management Plans within the Council. A second working group monitors the implementation of the Council's corporate asset management system. These are both important activities for the Council, however it is also important to develop a core planning group for all of the Council's Asset Management functions, inclusive of systems. The new Asset Management Steering Group's role will be to implement, monitor and report on the corporate approach to asset management.

3.4. Asset Management Plans

3.4.1 Purpose of the Asset Management Plan

An Asset Management Plan provides a long-term assessment of the asset activities and actions required to deliver services related to civil infrastructure.

The objective of an Asset Management Plan is to outline the particular actions and resources required to provide a defined level of service in the most cost effective manner.

3.4.2 Preparation of Asset Management Plans

Asset Management Plans provide input into the Council's Long Term Financial Plan. They are an important requirement of the NSW Integrated Planning and Reporting Framework and a requirement of the amended legislation.

Guidelines for the preparation of Asset Management Plans are shown in the IPWEA International Infrastructure Management Manual (IIMM).⁷ During 2007, IPWEA commenced workshops specifically to assist councils with preparing Asset Management Plans (NAMS.PLUS). Randwick Council is part of this program and has access to the templates produced by NAMS.PLUS. These templates are used by Council in preparing its Asset Management Plans.

Preparation of an Asset Management Plan should be approached as a staged process. The ideal Asset Management Plan will only be achieved after many stages of development and knowledge improvement.

The first step in preparing an Asset Management Plan is to document existing knowledge and processes and build up to a comprehensive plan through a process of continuous improvement.

The Council should work towards 20 year Asset Management Plans covering all public works assets. Information contained in the Asset Management Plans should contribute to the Long Term Financial Plan.

For Randwick Council, it is likely Asset Management Plans will be required for:

- road assets (road pavement, kerb and gutter)
- footpaths
- stormwater drainage
- open space
- buildings
- retaining walls (to be developed)
- foreshore assets (to be developed).

Key Strategy 3

Develop and maintain Asset Management Plans by regularly reviewing the plans for major infrastructure asset groups including:

- road assets (road pavement, kerb and gutter)
- footpaths
- stormwater drainage
- open space
- buildings
- retaining walls (to be developed)
- foreshore assets (to be developed).

Key Strategy 4

Identify infrastructure expenditure by both:

- expenditure category – i.e. the Asset Group / Class. For example, road pavement
- expenditure type – operating, maintenance, capital renewal, capital upgrade or capital expansion.

3.4.3 Expenditure types

The nature of works undertaken by Randwick Council and knowledge of the type of expenditure is an important requirement for preparing an Asset Management Plan. An Asset Management Plan distinguishes between operations, maintenance, capital renewal, capital upgrade and expansion, all of which enhance the Council's existing operating capacity. This is discussed further in Section 6.1.2.

Expenditure types can be described as follows:

Operating expenditure:

This is the expenditure on providing a service which is continuously required such as staff salaries and wages, plant hire, materials, power, fuel, accommodation and equipment rental, on-costs and overheads. Operating expenditure excludes maintenance and depreciation.

Maintenance expenditure:

This is expenditure on an existing asset that is periodically or regularly required as part of the anticipated schedule of works to ensure that the asset achieves its economic life. It is expenditure which is anticipated in determining the asset's economic life. Maintenance may be planned or unplanned (for example, repairing a pothole in a road, repairing the decking on a timber bridge, repairing a drainage pipe or repairing the fencing in a park).

Capital renewal expenditure:

This is expenditure on renewing an existing asset that returns the service potential or the life of the asset to that which it had originally, eg. resurfacing part of a road, renewing a section of a drainage network, major maintenance on bridge pylons or resurfacing an oval. Capital renewal works restore existing service levels and do not add to budget liabilities. Well-planned capital renewal works can reduce operating and maintenance costs by reviewing service levels and the use of automation and more energy efficient equipment.

Capital upgrade expenditure:

This is expenditure on upgrading an existing asset to provide a higher level of service or to increase the life of the asset beyond that which it had originally. For example, widening the pavement and sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility, replacing an existing bridge with one having a greater carrying capacity, or replacing a chain link fence with a wrought iron fence.

Capital expansion expenditure:

This is expenditure on extending an infrastructure network to the same standard currently enjoyed by residents to a new group of users. For example, extending drainage or a road network, or the provision of an oval or park in a new suburb. Capital expansion expenditure is discretionary expenditure, which increases future operating and maintenance costs because it increases the Council's asset base. However, it may also be associated with additional revenue from the new user group.

Capital upgrade and expansion expenditure adds to future liabilities and does not contribute to the sustainability of the existing infrastructure. These works commit the Council to fund ongoing budget liabilities for operations, maintenance, depreciation and finance costs (where applicable) for the life of the asset.

3.4.4 The cost of asset ownership

All councils need to know not only the upfront capital costs incurred in each capital works project listed on the capital works program, but also the ongoing costs associated with additional and upgraded assets. The full costs of ownership are generally not considered. One method of providing this information is detailed below. It is based on 'Annual Service Cost'.

The Annual Service Cost is the approximate price that would be proposed if tenders were called for the service required under a Build Own Operate (BOO) contract for the life of the service. This requires the service to be specified in performance terms.

It is critical that the Council and the community understand the financial effect of capital project decisions and, that if a rate revenue increase is required, this information is known and considered as part of the decision to approve the project.

The method of project analysis shown above can be useful for the Council in evaluating capital projects.

3.5 Risk Management Plans

Service levels are built into the asset management plans. Risk management is built into risk management plans. However, both can be summarised under three general categories, outlined below.

Quality

Quality indicators are used to measure how assets will be maintained in a condition necessary to deliver targeted standards. Defects found or reported that are outside set service performance standards will be repaired.

An asset management plan sets out the renewal and maintenance response if service levels fall below target levels. An important improvement to current practice is that there should be a forward projection of a minimum of 10 years, rather than just an annual defect prioritisation.

Function

The intent of function-based performance measurement is to ensure that an appropriate level of service function is maintained in partnership with other levels of government and stakeholders to achieve the organisation's objectives.

Safety

A risk management plan sets out how safety and risk will be managed to agreed levels. This includes the inspection and defect prioritisation processes as well as risk mitigation and control measures.

Key Strategy 5

Consider the ongoing ownership costs of new capital works proposals in budget deliberations. This is achieved by identifying the renewal and capital upgrade/ expansion components of all capital works projects, and providing for the ongoing operational and maintenance requirements.

Key Strategy 6

Develop risk management plans for all major infrastructure classes.

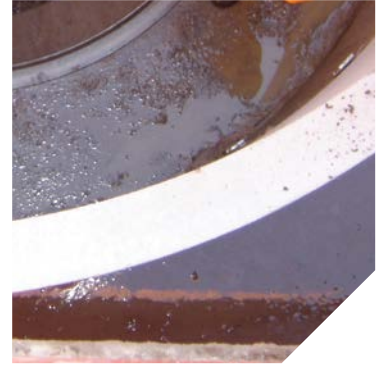
Risk management considers that:

- Risk management must be integrated with all service planning and delivery activities rather than an administrative 'add on'. This means the Risk Register is an output from infrastructure asset management and risk management plans, and is integrated with corporate plans and 10 year financial plans.
- Infrastructure risk management plans will be consistent with any existing risk management policy, particularly the steps for risk identification, assessment, management and mitigation. Risk management plans will incorporate use of the corporate Risk Register as the tool for recording and reporting risk.
- The view that risk is both an opportunity and a responsibility will be reflected in infrastructure risk management plans. Innovative solutions and community promotion of solutions will be encouraged.
- Systematic management of risk is a large task requiring a continuous improvement approach. Most service areas are already doing an excellent job of managing operational risk but not through a consistent framework of infrastructure asset management plans and risk management plans.
- Allocate ownership to risk. Ownership must be linked to capacity in order to control risk.
- Management of operational risk is a core line management function. It is not an 'add on' overhead.
- Strategic risk inherent in resource allocation needs to be communicated, measured and reviewed through the framework of planning and operational plans. The 10 year financial plan for resource allocation is the mechanism for implementation.
- Service performance measurement/review/consultation/incident management is crucial to guide a systematic approach and enable us to learn from our mistakes.

3.6 Long Term Financial Plans

The Long Term Financial Plan (LTFP) is the document which addresses the balance between future income and future expenditure. The Integrated Planning and Reporting Manual requires councils to prepare a 10 year LTFP. It stipulates that the LTFP is to be aligned with Asset Management Plans. These documents form part of the Resourcing Strategy of the NSW Integrated Planning approach.

Randwick Council has prepared a Resourcing Strategy as part of the Integrated Planning and Reporting Framework. The Resourcing Strategy includes the Asset Management Strategy, Workforce Plan and LTFP that covers a 10 year period.



4. Gap analysis on current asset management performance

To establish the current asset management performance and identify key areas for future improvements, an assessment gap analysis should be undertaken.

The gap analysis examines three core themes: Stewardship, Asset Management Planning and Financial Planning. For each of these themes, a series of capabilities are assessed in relation to the current capacity, the desired capacity and the importance of that capability. The priority for improvement is determined by calculating the gap between the desired and current capacity, with a weighting applied based on the importance of the particular capacity being assessed.

In summary, the priority order for capacity improvements are in the practice areas of:

- Risk Management
- Life Cycle Costs in Investment Decisions
- Asset Management Plans
- Asset Management Policy
- Workforce Planning Strategy
- Long Term Financial Plan
- Risk Management Process
- Sustainability Reporting
- Asset Data Maintenance
- Service Levels and Delivery Costs
- Asset Identification and Recording
- Asset Management Strategy
- Asset Management Accountability and Responsibility
- Future Demand Impacts
- Asset Condition Data
- Revaluation Process
- Reporting Asset Consumption.

Key Strategy 7

Review the completeness and accuracy of the data for all major infrastructure classes.

5. Systems and knowledge management plan

5.1 System and knowledge views

Randwick Council requires considerable knowledge of assets in order to provide services to the community in an effective and efficient manner.

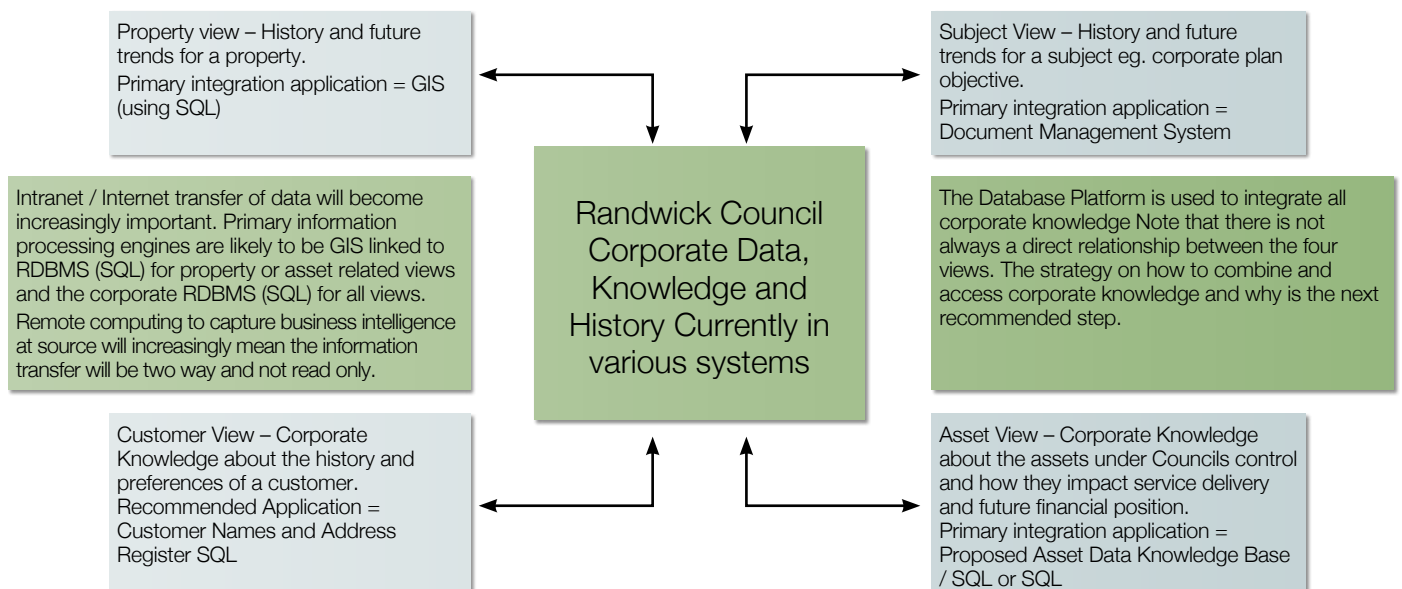
The current systems have improved so that much information is available within a single asset register. This should now be developed so that it will be possible to understand and discern trends on citizen and customer preferences and needs, trends on property usage and management, trends on asset usage, maintenance and renewal, and trends and performance on policy objectives. This is primarily because much of the information on assets is still held in individual operational areas of the Council. There is no source where all the key corporate information can be obtained and utilised to support corporate decision making. Obviously the quality of the information is crucial to the benefit it will provide to decision making. Therefore, an important outcome from this strategy will be a continual review of the existing infrastructure data to ensure that it is accurate and complete.

To allow Randwick Council to fulfil its service delivery responsibilities, information will be required. It is helpful to consider this as there are four strategic views of corporate knowledge to meet the needs of different service areas of the organisation. The four knowledge views are:

- property view (Financial and Geographical Information Systems (GIS))
- customer view (Rates, Customer Action Request Systems)
- subject view (Financial, Management Plan and Records Management systems), and
- asset view (Asset Management Software, GIS).

These four views of the desired model for managing knowledge are shown in Figure 5.1.

**FIGURE 5.1 THE FOUR STRATEGIC VIEWS OF CORPORATE KNOWLEDGE
THE BUSINESS MODEL FOR SYSTEM INTEGRATION**



The asset knowledge needed to achieve asset management improvement currently exists in core corporate systems as well as in standalone databases, spreadsheets, documents, specialist systems and local knowledge, as shown in Fig 5.2.

For data and information under Council's control, the primary operational objective is to ensure that the right decision support information is provided and maintained at lowest possible overall cost whilst controlling exposure to risk and loss. To carry out these functions and deliver the strategy, Council needs a decision support system that can answer both policy and operational questions for asset management.

The decision support system is a combination of technology, operational and policy processes and corporate knowledge of the past current and future information relevant to decision options before Council.

The key functions of the decision support system are to:

- measure the effectiveness and efficiency of current strategies used to achieve the corporate plan objectives and provide external and internal reporting that reflects the true financial and operational position of Council
- measure and predict the likely results of past policy decisions and current policy options
- measure and report on the operational performance of service providers
- support operational areas using software applications under the control of system owners by providing integrated and current information on all aspects of Councils operation
- provide an information platform for measuring the performance of the current strategies and tactics used for service delivery.

5.2 Steps in the knowledge management plan

The two key aspects of the asset knowledge management plan are:

1. A single asset register using the corporate relational database management system (RDBMS)

Information system environments should be standardised or be compatible with the Council's corporate database platform.

2. Integrate and manage core information

Traditionally, core information on assets has been fragmented resulting in gaps and duplication of core information.

Business functions that need data from multiple applications need to open each application to access the data, adversely affecting both business and technology performance. The strategy is to identify, manage and integrate core data in a RDBMS environment with GIS front end recommended to allow business users to access all data on a topic or view.

A knowledge management plan generally recommends an integrated system strategy. This is primarily to bring together the existing asset knowledge, which is currently held in various corporate applications, each being managed by separate system owners (for example, finance, property, records, service requests, works management).



The system owner concept (not integrated) tends to follow a 'best of breed' approach to business applications. In this approach, the emphasis is on business outcomes over technology or integration preferences. The downside of the business owner concept is the trend towards further fragmentation of corporate knowledge into 'operational islands'. This makes policy analysis and the application of corporate knowledge and wisdom difficult to the extent that it cannot be practically achieved at present. The aim is to integrate business knowledge.

The need for corporate wisdom should be the driver for integration of knowledge. Corporate wisdom enables informed policymaking and optimises the allocation of scarce resources. It identifies strengths, weakness and opportunities for advancement.

5.3 Integrate current fragmented systems into a single asset register

Randwick Council has commenced incorporating asset data into a corporate single register. This is a significant project and is important for future asset management improvements. Whilst technical progress has been achieved, the process is still focused on system implementation and data collection. Consequently, asset information is still fragmented across many applications throughout the Council.

Given the new reporting requirements planned for NSW Councils, an examination of the ownership and coordination of this application is essential. This assessment should be conducted with the reporting and management priorities at the forefront of the review.

5.4 Integrate and manage core information

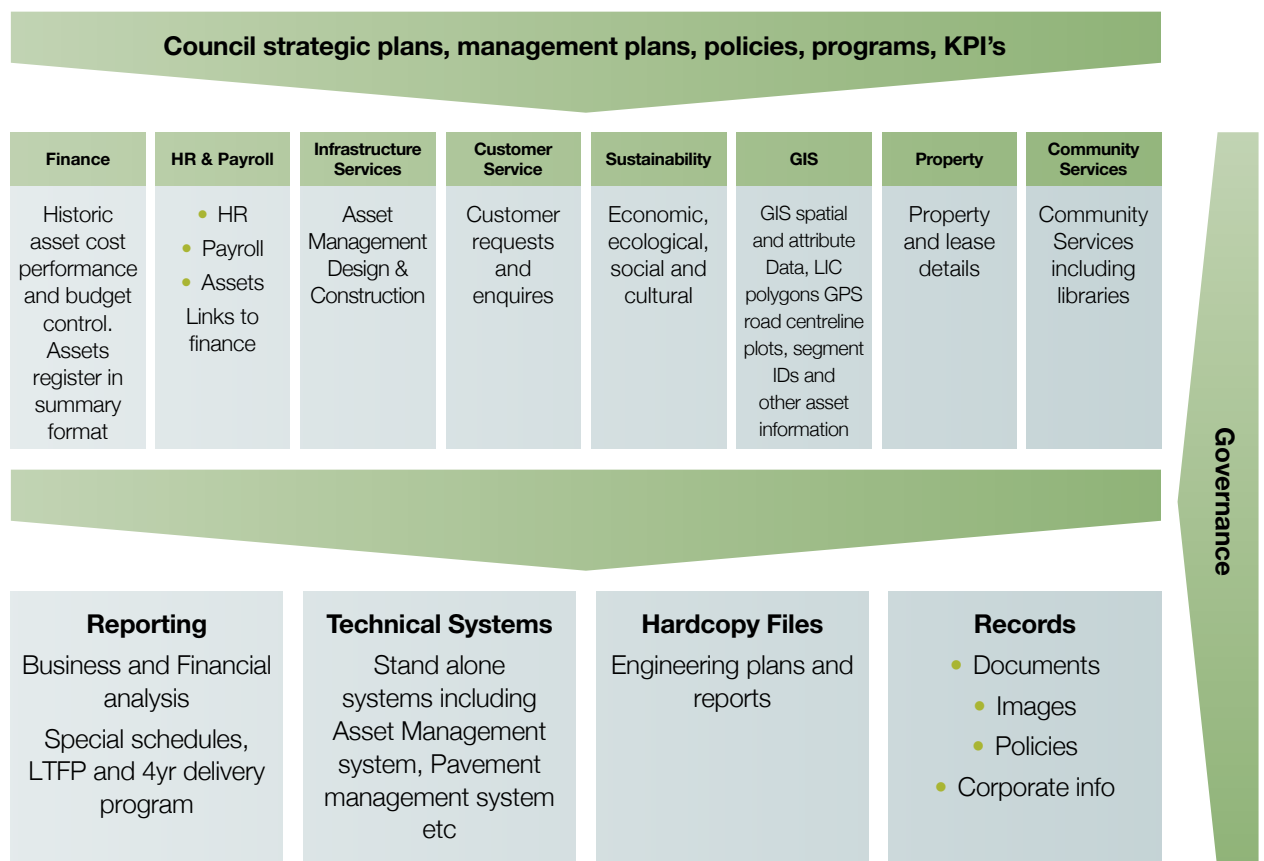
The development of integrated corporate knowledge relevant to asset management is critical. Any system user should be able to readily access all corporate knowledge about any topic without needing to open multiple applications and manually assemble fragmented data. For example, clicking on a property in the GIS should display all past, present and future information known about that property. This information first needs to be integrated and then managed as a corporate resource.

A dedicated project is required to integrate existing systems and create the necessary links and views. Once established, this corporate resource needs to work in partnership with system owners to manage data integrity, security, access and metadata. The current environment does not easily provide information to understand and discern trends on customer preference and needs, property usage and management, asset usage, maintenance and renewal, or trends and performance on policy objectives.

5.5 Develop a corporate decision support system from integrated core information

In general, current business system data flow processes at Randwick Council have an operational rather than policy focus. This situation is shown in Figure 5.2 where each operational area of information is focused on the operational needs of that service to the community. The change is to enable the integration of all sources of information to measure how effectively the corporate plan objectives are being delivered and measure performance and value for each service against indicators such as unit cost, response time, customer satisfaction, risk management, life cycle cost, and compliance with external and internal policy and regulation.

FIGURE 5.2 – DIAGRAM SHOWING FRAGMENTATION OF RANDWICK COUNCIL'S ASSET KNOWLEDGE



Key Strategy 8

Continue to integrate all knowledge and management systems for infrastructure assets.

5.6 Achieving a corporate decision support system

The model shown in Figure 5.3 suggests a framework for the integration of all information required to support decision-making at policy level. Current systems provide operational decision support, albeit in a fragmented fashion within operational 'islands' such as document management, service requests, health and approvals, property management, community services, financial reporting, management reporting and asset management. There is no corporate system for decision support at policy level and corporate decisions on relative priority of operational areas operates primarily through judgment and verbal communication processes. Examples of policy decision support include producing 10 year cash flows and expenditure optimisation across all service categories and the capacity to integrate Management/Corporate Plan objectives with technical operations.

Existing operational islands of information contain some best practice innovations, for example, the Council's Pavement Management System. By integrating these islands of information, the implementation of a knowledge management plan can remove some of the current duplication and gaps in core decision support information.

The continuation of past practices, even with the implementation of highly advanced operational software, may result in continuous improvement of operational effectiveness within each area, but it is unlikely to deliver decision support at policy level. This is because policy decision support needs to include a number of systems and applications that exist or will exist independently of any decision support systems. These include systems such as financial transactions, asset utilisation, and customer satisfaction in relation to key policy objectives, service requests, LIS/GIS, risk management and document management.

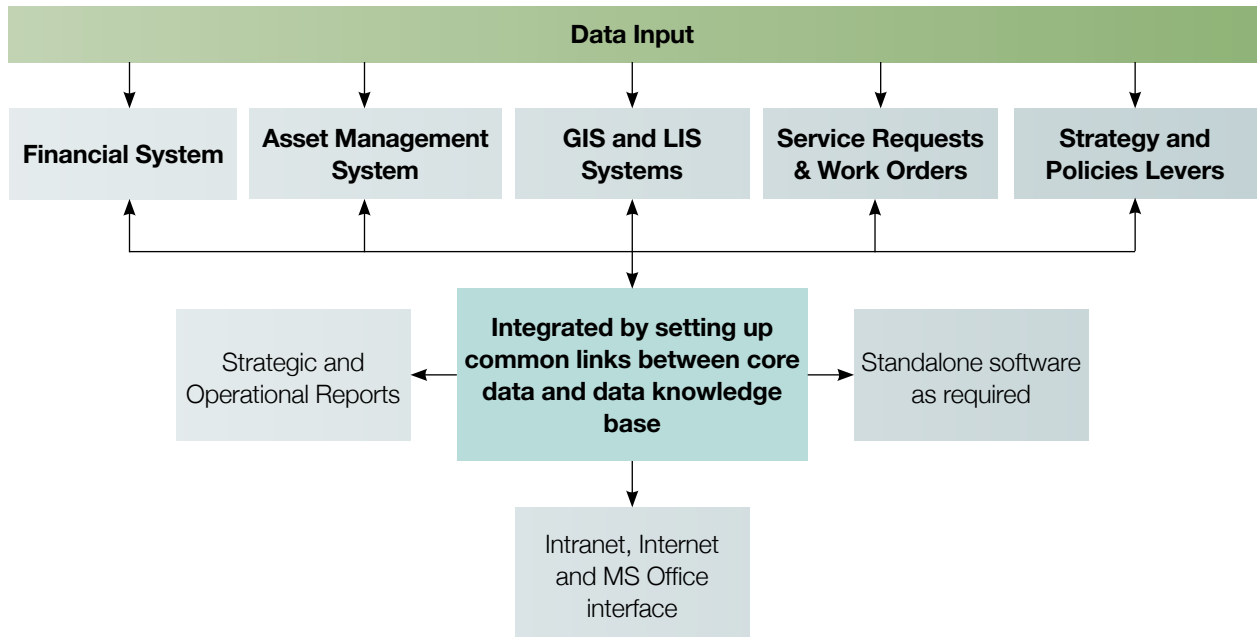
Substantial progress has been made at Randwick Council with respect to developing a single asset register that is used for both financial and technical reporting. This level of progress has not been achieved by many councils, and allows Randwick Council to now consider the next step in integrating all its knowledge systems relating to infrastructure assets.

The historical focus for managing information systems has been to satisfy operational needs. This is a valid strategy and remains important in ensuring the provision of services within each operational area is managed. Past efforts to provide corporate-wide integrated systems have failed in most organisations because systems are not available, too complex to manage, or not able to keep up with the rapidly changing business application environment. The current approach is an optimum solution to meeting operational business needs.

The Systems and Knowledge Management Plan provides the direction to obtain views of the corporate knowledge base that not only satisfy statutory and operational requirements, but also give a consistent account of future expenditures and management decisions necessary to deliver the Management and City Plan aims. This is regarded as the primary driver for developing a corporate standard database platform.

Implementation of the Systems and Knowledge Management Plan is a substantial task and requires resourcing throughout the planning and implementation phases. The impact of this strategy should be given due consideration.

FIGURE 5.3 DIAGRAM SHOWING KNOWLEDGE MANAGEMENT STRATEGY FOR INTEGRATING ASSET KNOWLEDGE. THIS STRATEGY IS INDEPENDENT OF ANY SOFTWARE SOLUTIONS





6. Asset management guidance notes

The Asset Management Improvement Plan has been documented in three sections:

Section 1 includes guidance notes on key improvement areas

Section 2 shows the key strategy recommendations from within this report

Section 3 lists the specific capability areas and the priority for improvement as assessed in the gap analysis.

6.1 Section 1 – Guidance notes

6.1.1 Life cycle costing

Life cycle costing for infrastructure is the sum of two components, the annual maintenance expenditure required to provide the required service levels and the Average Annual Asset Consumption (AAAC).

AAAC is the sum of the current replacement cost for individual assets divided by the economic (or useful life). It is the average annual sum required to maintain the service potential of the assets over their life cycle.

Life cycle cost can be compared to present maintenance and asset renewal expenditure in order to assess Randwick Council's position on funding of asset maintenance and renewal. This does not mean that the life cycle cost level of funding needs to be provided now. The actual level of funding required depends on desired service levels and the age and renewal needs of the asset stock. The service levels being targeted will cover a broad range of items inclusive of condition, risk, environmental, social, economic and governance factors.

6.1.2 Expenditure types

To achieve benefits from undertaking life cycle analysis, it is important to be able to compare predicted costs with current expenditures. This requires the Council's expenditures to be identified as operating, maintenance, capital renewal, capital upgrade or capital expansion. (See Section 3.4.3.)

The purpose of the asset management plan is to estimate the level of funds required to meet desired service levels taking into account the timing of asset renewals. For this analysis to be undertaken it is essential to know what the Council currently spends on operations and maintenance as well as capital renewal, upgrade and expansion. Without this detail of expenditure, the assessment of sustainability will not be adequately informed.

6.1.3 Funding models

A 10 year long term funding model is to be developed using data sourced across the Council, including the outputs from the Asset Management Plans.

Randwick Council has developed a Long Term Financial Plan (funding model) that addresses the sustainable renewal of infrastructure identified in the introduction of this report. The funding model includes options such as:

- rate revenues
- borrowing strategies
- non asset renewal
- reduction in service levels

- external grant funding
- fees and charges
- extending asset life
- non asset service provision
- transfer service provision to others, and
- agreed deficit funding.

6.1.4 Linking service levels and cost

Ultimately, the setting of service levels should be undertaken in conjunction with the community. This enables the Council to make informed decisions on the allocation of community resources in accordance with community priorities and willingness to pay.

The linking of service levels and the cost of service delivery is an essential component of strategic asset management. It is essential that the Council knows the true costs of service delivery, priorities placed by the community on infrastructure, the service levels that are desired by the community and what level they are willing to pay for.

The first asset management plans prepared by Randwick Council were core asset management plans. These plans are prepared at a network level and aim to document the costs required to maintain the current level of service provided by the existing infrastructure. Although the core asset management plans will be prepared with minimal community consultation, they provide an excellent starting point for future consultation.

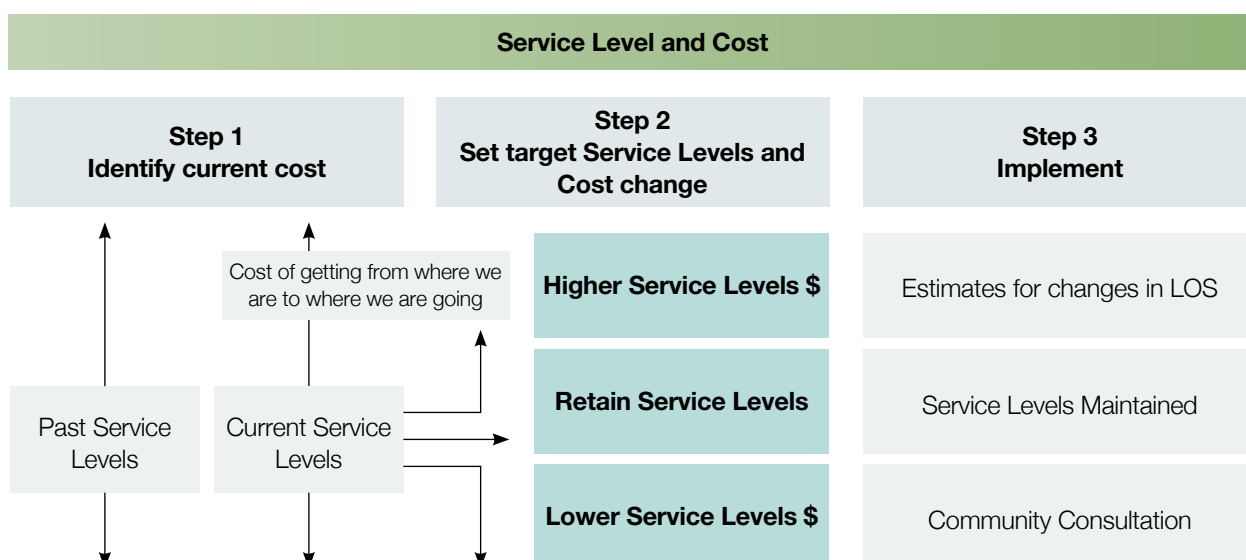
Randwick Council should further develop these service levels in the asset management plans for each major asset group and link these service levels to the Management Plan.

This will provide the link between service levels and costs of service delivery. It will provide a tool for community consultation about services and enable the Council to make decisions on service levels and costs when setting budgets. It will also provide a base for management performance reporting linking service levels and expenditure. This is shown in Figure 6.1.1.

Key Strategy 9

Prepare a 10 year Long Term Financial Plan that provides sustainability for all Randwick Council functions and that considers both the future anticipated income projections and the future expenditure requirements to sustain services.

FIGURE 6.1.1 SERVICE LEVEL AND COST RELATIONSHIP



Key Strategy 10

Undertake a detailed assessment of the resources required to implement this Asset Management Strategy so that a program of improvement and milestones can be implemented and monitored.

6.1.5 Organisational capacity and resourcing

In order to implement this strategy, it is important that Randwick Council undertakes a resource assessment so that a staged and monitored program of improvement can be developed. Appropriate levels of resourcing will be required to ensure the strategy is implemented.

As a general principle, it is reasonable to expect that asset management should be part of good business practice and should not impose high levels of additional demand on the resources of that organisation.

However, when implementing change it is likely that some additional resources will be required to:

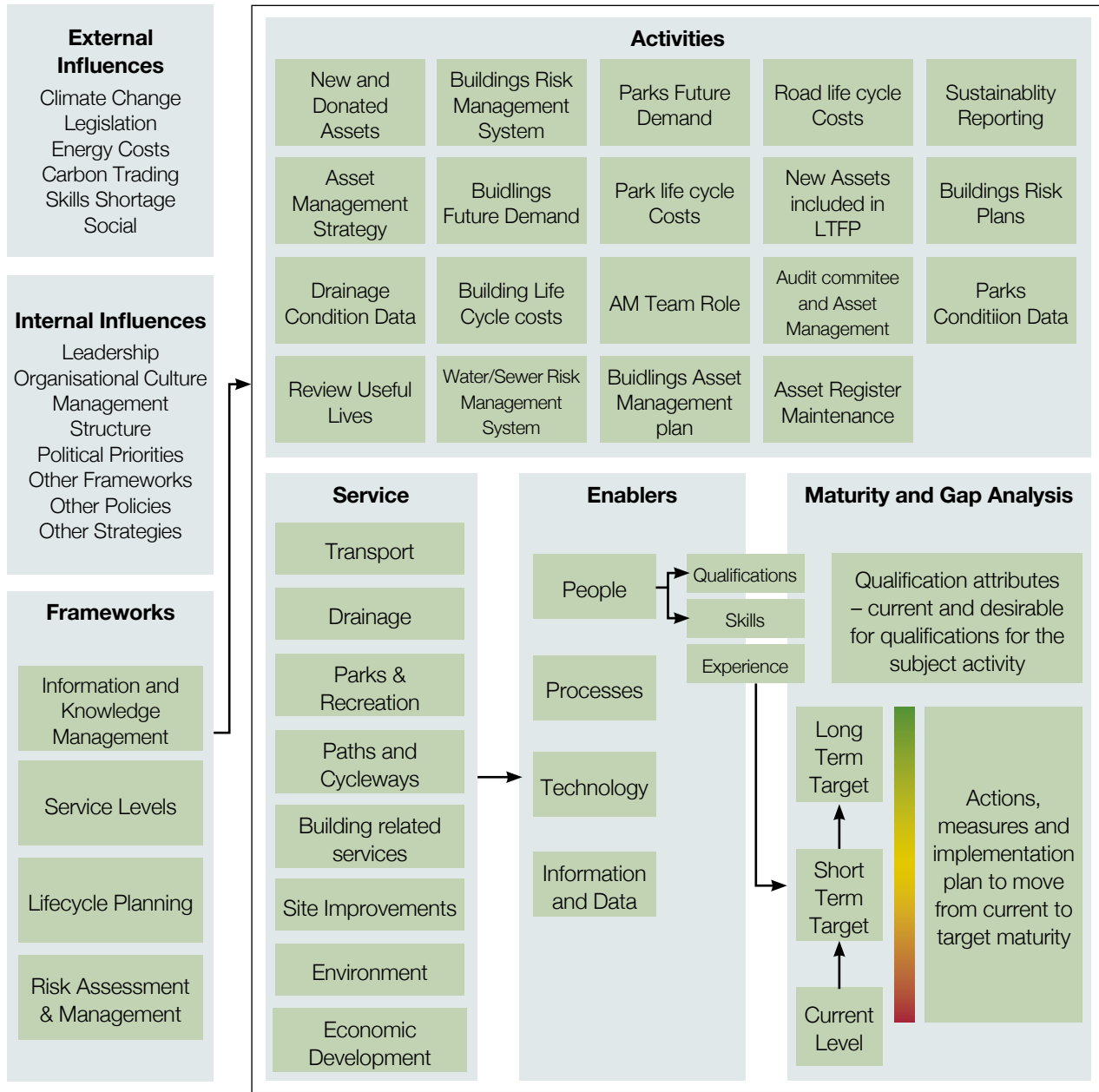
- determine exactly how the changes will be implemented into the routine business practices of the organisation
- develop business processes which support the changes
- support and train staff who are involved in the change process
- assess any long term resourcing impacts, and
- monitor and review that the outcomes sought by the changes are being achieved.

The actions required to undertake improvement of these areas of asset management capability are impacted by both internal and external influences and require resources or enablers. These enablers can be in the areas of People, Processes, Technology and Information & Data and may be at various levels of maturity in different organisations. This is shown in Fig 6.1.5.

The improvement plan prioritises these specific capability areas where action is required to raise Randwick Council's Asset Management capacity to the desired level of maturity. The relevant plans on resourcing have been developed. These include the Workforce Planning Strategy, Information Technology Strategy and the Long Term Financial Plan. It is recommended that the impact on resources be periodically reviewed by the Asset Management Steering Group in consultation with the relevant stakeholders and the senior executive of the Council. This will allow Randwick Council to balance the priorities of the gap analysis, the tasks to be undertaken and the resources that are available to implement the associated actions within an acceptable timeframe.

To assist in undertaking the resource planning, details should be documented and built into the Council's business planning process.

FIG 6.1.5 IMPROVEMENT PLAN COMPONENTS



6.2 Section 2 – Summary of key strategies

The key strategies have been developed following interviews with staff representing major areas of service planning and Randwick Council's Senior Executive, and through examination of the Council's existing asset management systems and processes.

They are presented here in the order they have been identified within this document, not in order of priority.

Key Strategy 1

An Asset Management Policy has been adopted by Randwick City Council. Align revisions with the format provided by the IPWEA NAMS.PLUS Program.

Key Strategy 2

The corporate Asset Management Steering Group is made responsible for implementing, monitoring and reporting to the Senior Management Team on the development of asset management at Randwick Council.

Key Strategy 3

Develop and maintain Asset Management Plans by regularly reviewing the plans for major infrastructure asset groups of:

- road assets (road pavement, kerb and gutter)
- footpaths
- stormwater drainage
- open space
- buildings
- retaining walls (to be developed)
- foreshore assets (to be developed).

Key Strategy 4

Identify infrastructure expenditure by both:

- expenditure category – i.e. the Asset Group / Class. For example, road pavement
- expenditure type – operating, maintenance, capital renewal, capital upgrade or capital expansion.

Key Strategy 5

Consider the ongoing ownership costs of new capital works proposals in budget deliberations. This is achieved by identifying the renewal and capital upgrade/ expansion components of all capital works projects, and providing for the ongoing operational and maintenance requirements.

Key Strategy 6

Develop Risk Management Plans for all major infrastructure classes.

Key Strategy 7

Review the completeness and accuracy of the data for all major infrastructure classes.

Key Strategy 8

Continue to integrate all knowledge and management systems for infrastructure assets.

Key Strategy 9

Prepare a 10 year Long Term Financial Plan that provides sustainability for all Randwick Council functions which considers both the future anticipated income projections, and the future expenditure requirements to sustain services.

Key Strategy 10

Undertake a detailed assessment of the resources required to implement this Asset Management Strategy so that a program of improvement and milestones can be implemented and monitored.

6.3 Section 3 – Capability improvement

6.3.1 Improvement priorities

Whilst this Asset Management Strategy identifies the Key Strategies for Randwick Council's asset management development as summarised in Section 6.2, the table 6.3.1 summarises the highest priorities to be reviewed by the gap analysis.



TABLE 6.3.1 GAP ANALYSIS PRIORITY CAPABILITIES

Theme	Practice area	Capability	Code	Priority for improvement
Asset Management Planning	Asset identification and recording	Road Assets Recognition	AM_01_01	1
Asset Management Planning	Risk Management	Road Risk Plans	AM_04_01	1
Asset Management Planning	Risk Management	Buildings Risk Plans	AM_04_02	1
Asset Management Planning	Risk Management	Open Space Risk Plans	AM_04_03	1
Asset Management Planning	Risk Management	Drainage Risk Plans	AM_04_05	1
Asset Management Planning	Service Levels and Delivery Costs	Drainage Life Cycle Costs	AM_05_05	1
Financial Planning	Life Cycle Costs in Investment Considerations	Life Cycle Cost Considerations	FP_01_02	2
Stewardship	AM Accountability & Responsibility	Audit committee & AM	S_04_05	2
Asset Management Planning	Asset Identification & Recording	Buildings Assets Recognition	AM_01_02	2
Asset Management Planning	Asset Identification & Recording	Drainage Assets Recognition	AM_01_05	2
Asset Management Planning	Asset Data Maintenance	Asset Register Maintenance	AM_02_02	2
Asset Management Planning	Asset Data Maintenance	New & Donated Assets	AM_02_03	2
Asset Management Planning	Asset Data Maintenance	Useful Life Review	AM_02_04	2
Asset Management Planning	Asset Data Maintenance	Responsibility for Asset Register	AM_02_05	2
Asset Management Planning	Asset Data Maintenance	Resources for Asset Register	AM_02_06	2
Asset Management Planning	Service Levels & Delivery Costs	Open Space Life Cycle Costs	AM_05_03	2
Asset Management Planning	Asset Management Plans	Roads AMP	AM_07_01	2
Asset Management Planning	Asset Management Plans	Buildings AMP	AM_07_02	2
Asset Management Planning	Asset Management Plans	Open Space AMP	AM_07_03	2
Asset Management Planning	Asset Management Plans	Drainage AMP	AM_07_05	2
Financial Planning	Life Cycle Costs in Investment Decisions	Renewal/Upgrade & Expansion	FP_01_01	2
Financial Planning	Long Term Financial Plan	LTFP Term	FP_04_01	2
Financial Planning	Long Term Financial Plan	Asset Renewals in LTFP	FP_04_02	2
Financial Planning	Long Term Financial Plan	Growth in LTFP	FP_04_03	2
Financial Planning	Long Term Financial Plan	New Assets in LTFP	FP_04_04	2
Stewardship	Asset Management Policy	Asset Management Policy	S_01_01	2
Stewardship	Risk Management Process	Roads RM System	S_03_01	2
Stewardship	Risk Management Process	Buildings RM System	S_03_02	2
Stewardship	Risk Management Process	Open Space RM System	S_03_03	2
Stewardship	Risk Management Process	Drainage RM System	S_03_05	2
Stewardship	Sustainability Reporting	Sustainability Reporting	S_05_01	2

7. Conclusions

Randwick Council has a strong commitment to asset management planning and a high level capability to carry out asset management practices. This Asset Management Strategy outlines a strategic approach to asset management practices and systems to provide the future direction and guidance for improving asset management performance.

The priority improvement areas are as follows:

- Risk Management
- Life Cycle Costs in Investment Decisions
- Asset Management Plans
- Long Term Financial Plan
- Workforce Planning Strategy
- Information Technology Strategy
- Risk Management Process
- Sustainability Reporting
- Asset Data Maintenance
- Service Levels & Delivery Costs
- Asset Identification & Recording
- Asset Management Strategy
- AM Accountability & Responsibility
- Future Demand Impacts
- Asset Condition Data
- Revaluation Process
- Reporting Asset Consumption.





Appendix 1 – Glossary of terms

Average Annual Asset Consumption (AAAC)

Average Annual Asset Consumption is the amount of a local government's asset base consumed during a year. It is the sum of the current replacement cost divided by the economic life for all assets in an asset category or class.

Annual Service Cost (ASC)

ASC is an estimate of the cost that would be tendered for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Assets

"An asset of the local government shall be recognised in the statement of financial position when and only when:

- it is probable that the future economic benefits embodied in the asset will eventuate, and
- the asset possesses a cost or other value that can be measured reliably."

Most road infrastructure assets satisfy both criteria. Exceptions are land under roads and bulk earthworks.

For network assets such as roads, the combined application of the concept of materiality and high variability of the road attributes across the network has resulted in the almost universal and correct practice that assets be broken into segments.

Each asset has a current replacement value, written down current replacement value, annual depreciation amount, and economic and remaining life.

Asset Category

Grouping of like assets, eg. all unsealed roads.

Asset Category – Bridges

Bridges, underpasses and major culverts with waterway span > 6 m.

Asset Category – Unsealed Roads

Formed roads with a constructed pavement of natural gravel or manufactured road base without a bitumen or asphalt wearing surface.

Asset Category – Kerb & Gutter

Road drainage structure generally of concrete construction, which bound formed roads, providing road drainage and pavement boundary support.

Asset Category – Parking

Assets associated with the provision of a car parking service including pavements, wearing surfaces, kerb & gutter, drainage, structures, fences, lighting, parking machines, signage, medians, line marking etc.

Asset Category – Pavement Type

All pavement types include all pavement layers but exclude bulk earthworks and seal. Road pavement assets constructed with standard base, stabilised base or deep lift asphalt.

Asset Category – Path Paving

Assets associated with the provision of pedestrian footpaths including pavements, wearing courses/seals, footpaths, pedestrian bridges, signage, etc.

Asset Category – Cycleway

Assets associated with the provision of cycle use including pavements, wearing courses/seals, bridges, signage, etc.

Asset Category – Road Seal

The wearing surfaces of roads and streets pavements providing a smooth riding surface and waterproofing of the pavement, including bitumen flush seals, asphalt, pavers, concrete, etc.

Asset Category – Traffic Control

Assets associated with traffic control including traffic islands and medians, signage, etc.

Asset Category – Buildings

Building assets including building structures, mechanical/electrical equipment, service roads, landscaping, utility services, signage, window and floor coverings, fittings and equipment etc.

Asset Category – Conduits & Inlets

Assets associated with the provision of stormwater drainage services including pipes, channels, inlet structures, access structures.

Asset Category – Pollution Control Devices

Assets associated with control of stormwater drainage pollution.

Asset Category – Flood Mitigation

Assets associated with the provision of flood mitigation services including major drainage channels, levees, improved waterways, inlet and control structures, access structures, etc.

Asset Category – Open Space Hard Works

Tangible Open Space assets including toilet blocks, amenities buildings, playground equipment, seating, shade structures, fencing, rotundas, paths, drainage, kerbing, change rooms, grandstands, swimming pools, etc.

Asset Class

Grouping of like asset categories, eg. all pavement, seal, kerb & gutter are all part of the asset class of roads.

Asset Condition Assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset Management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Capital Expansion Expenditure

Capital expansion is expenditure on extending an existing asset network, at the same standard currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases Council's asset base but may be associated with additional revenue from the new user group (eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents).

Capital Expenditure

Expenditure which is relatively large (ie material) and has benefits expected to last for more than 12 months. Capital expenditure can be split into three areas, renewal, upgrade and expansion.

Capital Renewal Expenditure

Capital renewal is expenditure on an existing asset, which increases asset service potential of an existing asset. This may be to the same or a lower level than initially provided (partial renewal). It is periodically required expenditure, relatively large (i.e. material) in value compared with the value of the asset or asset component being renewed. As it reinstates existing service potential, it has no impact on revenue but may reduce future operating and maintenance expenditure if completed at the optimum time (eg. resurfacing a sealed road, resheeting an unsealed road, replacing a drainage pipeline with pipes of the same capacity, relining of an existing drainage pipeline, replacing bridge decking or resurfacing an oval). Where renewal works include a significant upgrade, the renewal and upgrade components should be separately identified (eg. if a swimming pool with a replacement cost of \$3M is replaced with a \$15M leisure centre, then \$3M is identified as renewal and \$12M as upgrade).

Capital Upgrade Expenditure

Expenditure which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in Council's asset base (eg. widening the pavement and sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility, replacing an existing bridge with one having a greater carrying capacity, replacing a chain link fence with a wrought iron fence).

Confidence Level

A measure of the certainty, reliability and trust in information that lies behind a decision.

Cost

Cost is the resources sacrificed or foregone to achieve a specific objective. Costs are measured in monetary units that must be paid for goods and services.

Current Replacement Cost

The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.



Depreciation

Depreciation is a measure of the average annual consumption of service potential over the life of the asset. Depreciation is not a measure of required expenditure in any given year.

Economic Life

The period from the acquisition of an asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular level of service. The economic life is at the maximum when equal to the physical life; however obsolescence will often ensure that the economic life is less than the physical life.

Estimated Maintenance and Renewal Budget

The amount that a council anticipates that it will actually be spending and will be able to afford to spend as outlined in its long term financial plan or strategic resource plan for maintenance and renewal works in a future time period (eg. 0–5, 6–10, 11–15 years).

Expenditure

Expenditure is the spending of money on goods and services. Expenditure falls into two basic categories, recurrent and capital.

Fair Value

The amount for which an asset could be exchanged or liability settled, between knowledgeable, willing parties, in an arm's length transaction, normally determined by reference to market or comparable prices. Generally, there is no market for Council's infrastructure assets and Fair Value is current replacement cost less accumulated depreciation.

Funding Model

A Funding Strategy which addresses:

- The need for funds
- The peaks and troughs in this need and
- How the funds will be sourced.

Life cycle analysis should be the basis of the funding model. The funding model adopted by Council decides how it determines:

- The level of funds year by year
- The source of those funds

The use or allocation of those funds to recurrent/capital, to infrastructure and to other assets and other services.

Infrastructure Assets

These are typically large, interconnected networks of or portfolios of composite assets such as roads, drainage and recreational facilities. They are generally comprised of components and sub-components that are usually renewed or replaced individually to continue to provide the required level of service from the network. These assets are generally long lived, are fixed in place and often have no market value.



Level of Service

Level of Service is the defined service quality for a particular Primary Service (eg. roads, child care services) against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost (eg. the number of accidents on local roads).

Maintenance Expenditure

Maintenance is expenditure on an existing asset which is periodically or regularly required as part of the anticipated schedule of works required ensuring that the asset achieves its economic life. It is expenditure which was anticipated in determining the assets economic life. Maintenance may be planned or unplanned (eg. repairing a pothole in a road, repairing the decking on a timber bridge, repairing a drainage pipe or repairing the fencing in a park).

Maintenance and Renewal Gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg. 5, 10 and 15 years).

Maintenance and Renewal Sustainability Index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg. 5, 10 and 15 years).

Materiality

The concept of materiality referred to in accounting standards has been amplified in these guidelines. An asset is material if its omission would result in misleading the reader of the financial report. The convention of an asset being material if greater than 10 – 15 % of asset value is only partly useful for road assets because of historic variability in practice in measuring value. The overriding principle is that financial reports present a true and fair picture of the financial position of the council.

Operating Expenditure

Expenditure on providing a service, which is continuously required including staff salaries and wages, plant hire, materials, power, fuel, accommodation and equipment rental, on-costs and overheads. Operating expenditure excludes maintenance and depreciation.

Pavement Management System

A PMS is a systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance

Planned maintenance is anticipated maintenance due to expected normal usage, which can be scheduled in advance. (eg. routine grading or unsealed roads, clearing of drainage pipelines, painting of recreation facilities). Planned maintenance falls in three categories;

- Periodic – necessary to ensure the reliability or to sustain the design life of an asset.
- Predictive – condition monitoring activities used to predict failure.
- Preventative – maintenance that can be initiated without routine or continuous checking (eg using information contained in maintenance manuals or manufacturers recommendations) and is not condition based.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Primary Service

The services provided by councils to their communities, eg. local roads, libraries, child care services.

Projected Maintenance and Renewal Expenditure

The sum of projected maintenance and capital renewal expenditure required in a future time period (eg. 0–5, 6–10, 11–15 years) Projected maintenance expenditure is that required to provide the target level of service allowing for changes in the asset inventory from donated and constructed assets. Projected renewal expenditure is the sum of the current replacement cost for all assets with a remaining life equal to or less than defined future time periods (eg. 0–5, 6–10, 11–15 years).

Rate of Annual Asset Consumption

A measure of average annual asset consumption (AAAC) expressed as a percentage of the current replacement cost.

Rate of Annual Asset Renewal

A measure of the rate at which assets are being renewed per annum expressed as a percentage of current replacement cost.

Rate of Annual Asset Upgrade

A measure of the rate at which assets are being upgraded and expanded expressed as a percentage of current replacement cost.

Recurrent Expenditure

Recurrent expenditure relates to providing a service, which has benefits, expected to last less than 12 months. Recurrent expenditure includes operating expenditure and maintenance.

Remaining Life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Remaining life is economic life minus age.

Reporting Year

The financial year for which financial data is reported and for which audited financial reports are available.

Risk Management

The allocation of probability and consequence to an undesirable event and subsequent actions taken to control or mitigate that probability and/or consequence.

Sustainability Factor

The ratio between the average annual asset consumption and average actual renewal expenditure

Service Category

Grouping of like primary services (eg. drainage/flood protection, environmental protection/waterways, waste management and waste minimisation/recycling are grouped as Environmental Services).

Service Level Target

Target set for level of service to be achieved in the next reporting period (eg. to retain, increase or reduce the number of accidents on local roads).

Service Potential Consumed

A measure of the percentage of the asset's potential to provide services that have been used up in providing the services. It also expresses the age of assets as a percentage of their economic life. In financial reports it is expressed as the accumulated depreciation.

Special Schedule 7 (SS7)

A schedule required under section 428 2(d) of the NSW local government act which shows in the annual report:

- The condition of infrastructure assets
- The amount required to bring assets to satisfactory
- The amount required to maintain assets at a satisfactory level
- The actual expenditure.

Transparency

A measure of the accuracy and confidence levels in council's reporting of asset consumption as depreciation in financial reports.

QBL Indicators

Measures of Quadruple Bottom Line (social, environmental, economic and governance) benefits

Unplanned Maintenance

Anticipated maintenance due to abnormal usage, faults, accidents and natural disasters (eg. additional grading of roads, and cleaning of drainage pipes due to floods, repairs to recreation facilities due to storm damage or vandalism).

Useful Life

See Economic Life.

Appendix 2 – Lifecycle Management Plan

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

A2.1 Background Data

A2.1.1 Physical parameters

The assets covered by this asset management plan are shown below.

Asset Class	Asset Type	Quantity	Unit	Average Unit Rate	Estimated Current Replacement Cost	Average Useful Life	AAAC (Average Annual Asset Consumption)
Roads	Pavement	2,802,641	m ²	\$124.53	\$372,027,993.14	110	\$ 3,596,684.00
	Surface	2,802,641	m ²	\$23.69	\$69,487,389.36	20	\$ 2,723,204.00
	Bridge	450	m ²	\$4,668.00	\$2,100,600.00	100	\$29,407.00
Roads Totals					\$443,615,982.50		\$6,349,295.00
Footpaths		432	km	\$130.00	\$76,186,141.00	43	\$ 1,392,000.00
Kerb and Gutter		656	km	\$74.14	\$49,181,596.05	108	\$451,000.00
Buildings		152	each	\$1,154,750.00	\$175,522,000.00	50	\$466,000.00
Open Spaces	Assets	1906	each	\$35,163.68	\$67,021,966.84	53	\$1,588,000.00
Drainage	Conduits	8871	each	\$24,980.03	\$221,597,889.95	78	
	Pits	9852	each	\$5,695.05	\$56,107,661.79	110	\$3,027,000.00
	Box Culverts	976	each	\$71,576.95	\$69,859,107.28	110	
Drainage Totals					\$347,564,659.02		\$3,027,000.00

A2.2 Asset condition

A condition profile of Council's assets is available as per the chart below.

It is recommended that condition is measured using a 1 – 5 rating system.⁸

Rating	Description of Condition
1	Excellent condition: Only planned maintenance required.
2	Very good: Minor maintenance required plus planned maintenance.
3	Good: Significant maintenance required.
4	Average: Significant renewal/upgrade required.
5	Poor: Unserviceable.

Council currently uses a 1 – 10 rating. The pavement management system uses a 1 – 100 index and is converted to the rating scale as required. This data should be retained for historical referencing.

8 IIMM 2006, Appendix B, p B:1–3 ('cyclic' modified to 'planned')

A2.3 Routine Maintenance Plan

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

A2.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

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

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

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Total planned service costs and budgets are shown below in Table A2.3.1

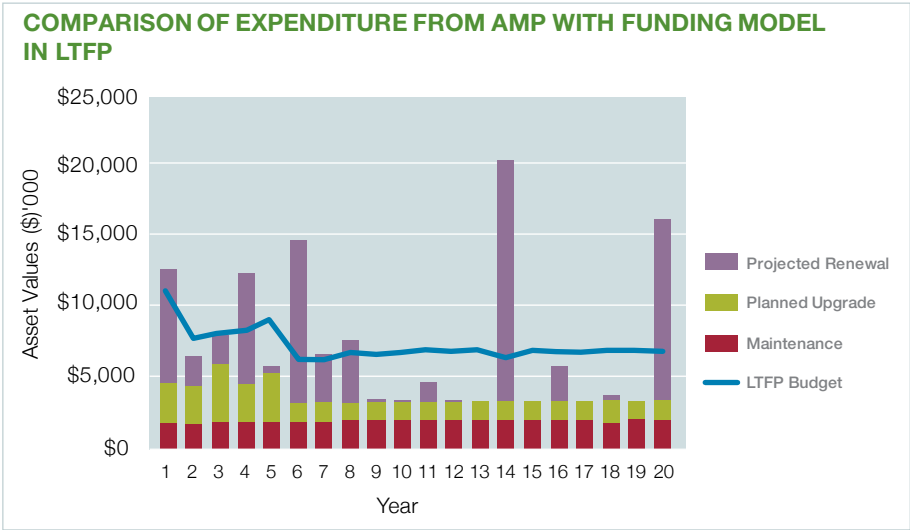
TABLE A2.3.1. PROJECTED 10 YEAR EXPENDITURES

Asset Class	Expenditure	Cost ('000)	10 Year Projected Budget	10 Year Planned Budget	Sustainability Ratio
Buildings	Maintenance	\$18,510.04	\$60,554.40	\$54,816.517	0.91*
	Planned Renewal	\$36,306.17			
	Planned Upgrade	\$29,214.00			
	Projected Renewal	\$42,044.00			
Footpaths	Maintenance	\$10,886.38	\$19,440.12	\$19,686.38	1.01
	Planned Renewal	\$8,800.00			
	Planned Upgrade	\$8,200.00			
	Projected Renewal	\$8,553.74			
Kerb and Gutter	Maintenance	\$1,182.40	\$1,197.34	\$1,482.40	1.15
	Planned Renewal	\$300.00			
	Planned Upgrade	\$1,700.00			
	Projected Renewal	\$14.94			
Roads	Maintenance	\$21,752.02	\$53,056.38	\$61,018.02	1.10
	Planned Renewal	\$39,266.00			
	Planned Upgrade	\$0.00			
	Projected Renewal	\$31,304.36			
Stormwater Drainage	Maintenance	\$7,768.39	\$20,606.69	\$22,834.34	1.11
	Planned Renewal	\$15,065.95			
	Planned Upgrade	\$4,594.15			
	Projected Renewal	\$12,838.30			
Open Spaces	Maintenance	\$44,794.92	\$47,139.75	\$62,164.32	1.20
	Planned Renewal	\$17,369.40			
	Planned Upgrade	\$40,528.70			
	Projected Renewal	\$2,344.83			

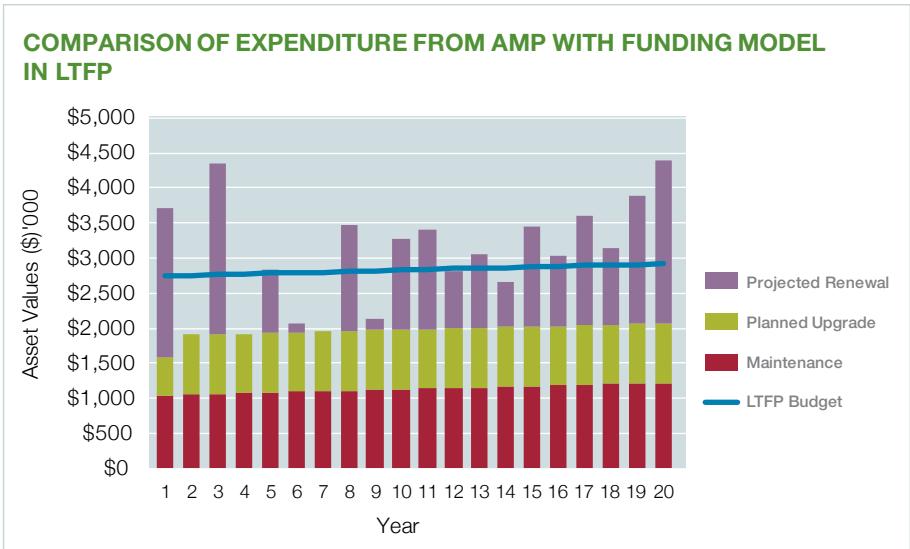
*The Buildings Asset Management Plan shows that the continued investment at this level raises the sustainability ratio to 0.98 over 20 years.

A2.4 Category Life Cycle Profiles

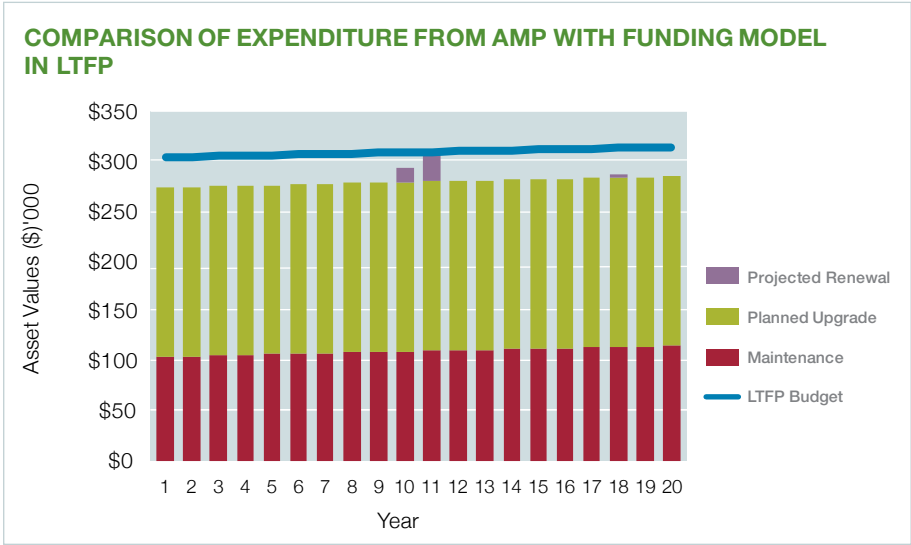
Buildings



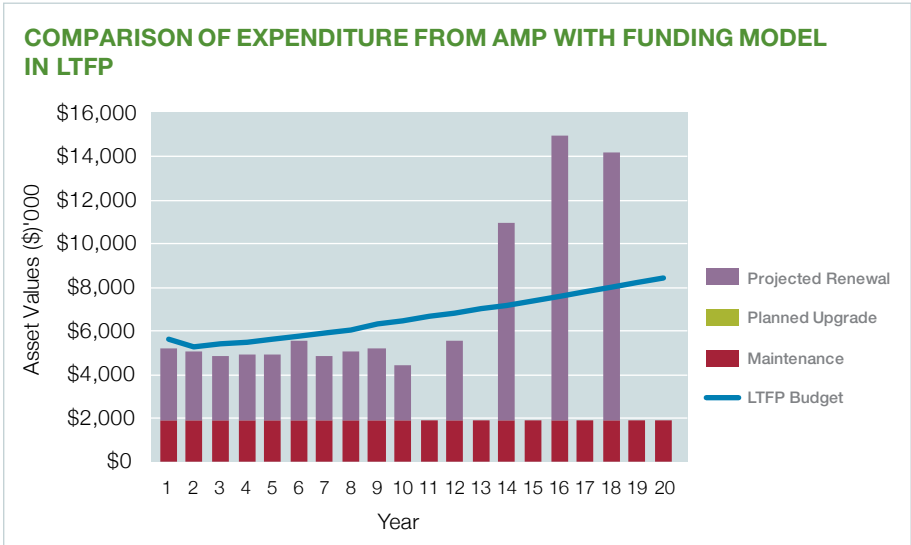
Footpaths



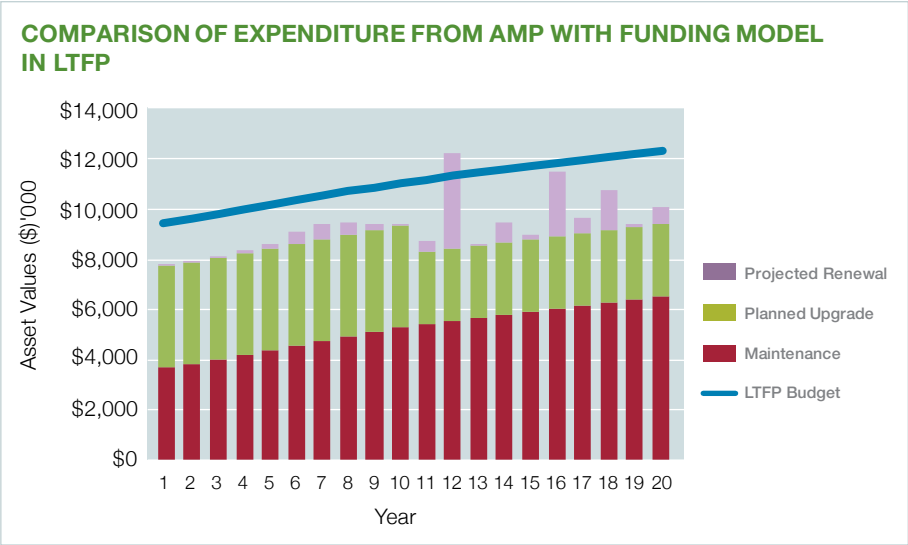
Kerb and Gutter



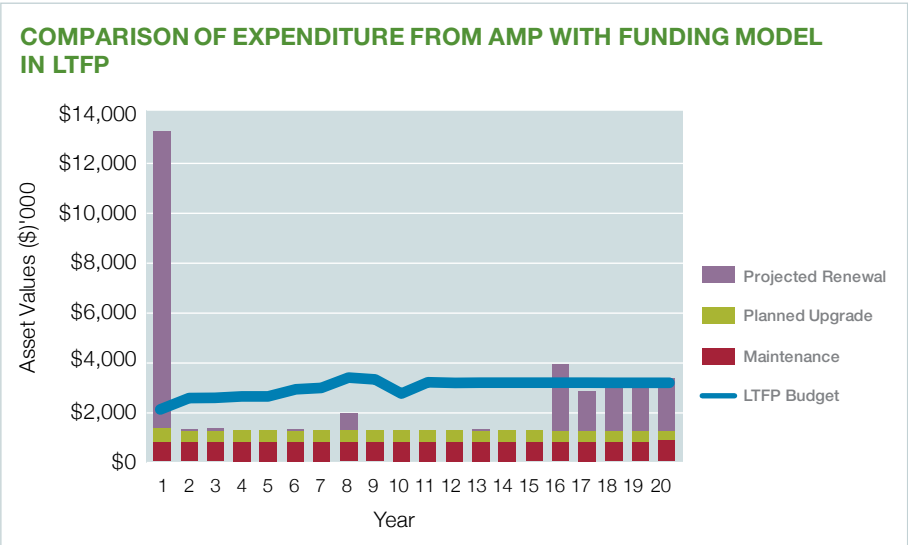
Roads



Open Spaces



Stormwater drainage



Randwick City Council
30 Frances Street
Randwick NSW 2031

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8:30am–5:00pm, Monday to Friday

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