



Asset Management Plan

Footpaths

2018-28

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EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

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

This asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services over a 10-year planning period.

This plan covers Council's footpath assets.

1.2 Asset Description

These assets include:

- Roadside footpaths;
- Kerb Ramps;
- Walkways/Laneways;
- Stairs;
- Pedestrian Bridges.

These infrastructure assets have significant value estimated at \$131,234,000.

1.3 Levels of Service

Our present funding levels are sufficient to continue to provide existing services at current levels.

If current funding levels are not maintained, the main services consequences will be:

- Reduced visual amenity;
- Increase risk of trips and falls;
- Potential isolation of footpath segment due to safety concerns;
- Reduced structural capacity.

1.4 Future Demand

The main demands for new services are created by:

- Population;
- Demographics;
- Technological Changes;
- Community aspirations.

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

Demand management practices for Council's Footpath assets include:

- Effective management of existing infrastructure via regulation, education and influencing stakeholders on the use of assets;
- Upgrade infrastructure and provide new infrastructure to meet the demand;
- Change habits or promote alternatives.

1.5 Lifecycle Management Plan

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets. Over the 10-year planning period the funding required is \$35,316,000 or \$3,532,000 on average per year of which \$1,047,000 relates to projected renewals.

Footpaths are long life assets and the age profile of this asset class results in the requirement for only a small amount of renewal work during the planning period. Overall, our footpath assets are depreciating at \$1,846,136 annually and budget allocation over and above the projected renewals covered by this Asset Management Plan is required to ensure the future sustainability of this asset class beyond the 10 year planning period.

1.6 Financial Summary

What we will do

Estimated available funding for this period is \$42,920,000 or \$4,292,000 on average per year as per the long term financial plan or budget forecast. This is 122 Per cent of the cost to sustain the current level of service at the lowest lifecycle cost over the 10-year planning period.

The infrastructure reality is that only what is funded in the long term financial plan can be provided. The emphasis of the Asset Management Plan is to

communicate the consequences that this will have on the service provided and risks, so that decision making is “informed”.

The allocated funding provides a surplus of \$760,000 on average per year over the projected expenditure required to provide services in the AM Plan. This is shown in the figure below.

The surplus should be set aside to cover the difference between annual depreciation and renewals over the planning period. This will ensure that the existing levels of service can be maintained beyond the 10 year planning period and for the life of the assets. This effectively returns the sustainability ratio to 1 across the life of the assets.

Projected Operating and Capital Expenditure

Randwick CC - Projected and Budget Expenditure for (Footpaths_S3_V1)

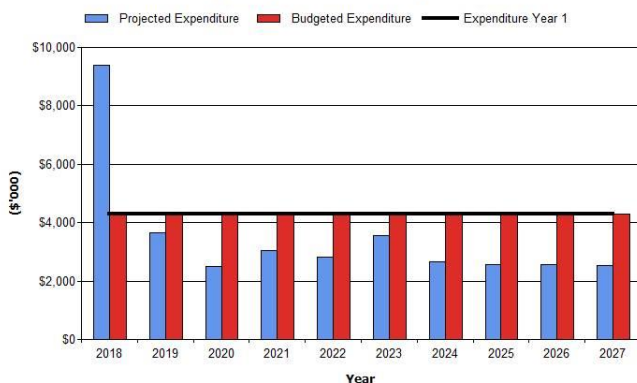


Figure values are in current (real) dollars.

We plan to provide services for the following:

- Operation, maintenance, renewal and upgrade of Footpaths, Kerb Ramps, Stairs and Bridges to meet service levels set by in annual budgets:
- Identified renewals/replacement within the 10-year planning period as identified in Appendix A.

Managing the Risks

Our present funding levels are sufficient to continue to manage risks in the medium term.

There are risks associated with providing the service and not being able to complete all identified activities and projects. Major risks to footpaths are vertical displacement, severe cracking, edge breaks and degradation of surface material.

The main risk consequences are:

- Community and technical service levels not being achieved;
- Increased risk of injury to users of Footpath assets.

We will endeavour to manage these risks within available funding by:

- Inspect 20 percent of the network each year;
- Use inspection outcomes to identify assets at risk and prioritise and include those assets into capital works programs.

1.7 Asset Management Practices

Our systems to manage assets include:

- Technology One;
- GIS-(ESRI Arcmap);
- Photographs;
- Electronic data capturing tools (ESRI Arc Collector);
- Risk management practices and tools.

Assets requiring renewal/replacement are identified from a process of annual condition assessment to 20% of the network. The asset register is updated to include data from the inspections allowing future works programs to be projected.

1.8 Monitoring and Improvement Program

The next steps resulting from this asset management plan to improve asset management practices are:

- The procurement of a Strategic Asset Management System to allow sophisticated modelling, forecasting and risk management; (*Key Asset Management Strategy 7*)
- The formation of an Asset Management Steering Group to ensure a consistent asset centric approach across the organisation that is consistent with the Asset Management Policy and Strategy; (*Key Asset Management Strategy 2*)
- Further identification and refinement of costs associated with managing this asset class. (*Key Asset Management Strategy 4*)

These next steps are aligned with Key Strategies identified Council’s Asset Management Strategy 2018-28.

2. INTRODUCTION

2.1 Background

This asset management plan communicates the actions required for the responsive management of assets (and services provided from assets), compliance with regulatory requirements, and funding needed to provide the required levels of service over a 10-year planning period.

This asset management plan is to be read with the following associated planning documents:

- The Randwick City Plan;
- Delivery Plan 2018-21 and annual Operational Plans;
- Asset Management Policy;
- Asset Management Strategy 2018-28;
- Long Term Financial Plan 2018-28;
- Resourcing Strategy-Workforce Plan 2018-28;
- ICT Digital Strategy 2018-28;
- Randwick City Council Community Consultation Principles and Consultation Planning Guide.

This plan aligns with the Asset Management Strategy 2018-28 and covers a 10 year planning period. Figures within the plan extend beyond the 10 year planning period for the purpose of projecting asset management challenges beyond the life of the plan.

The infrastructure assets covered by this asset management plan are shown in Table 2.1.

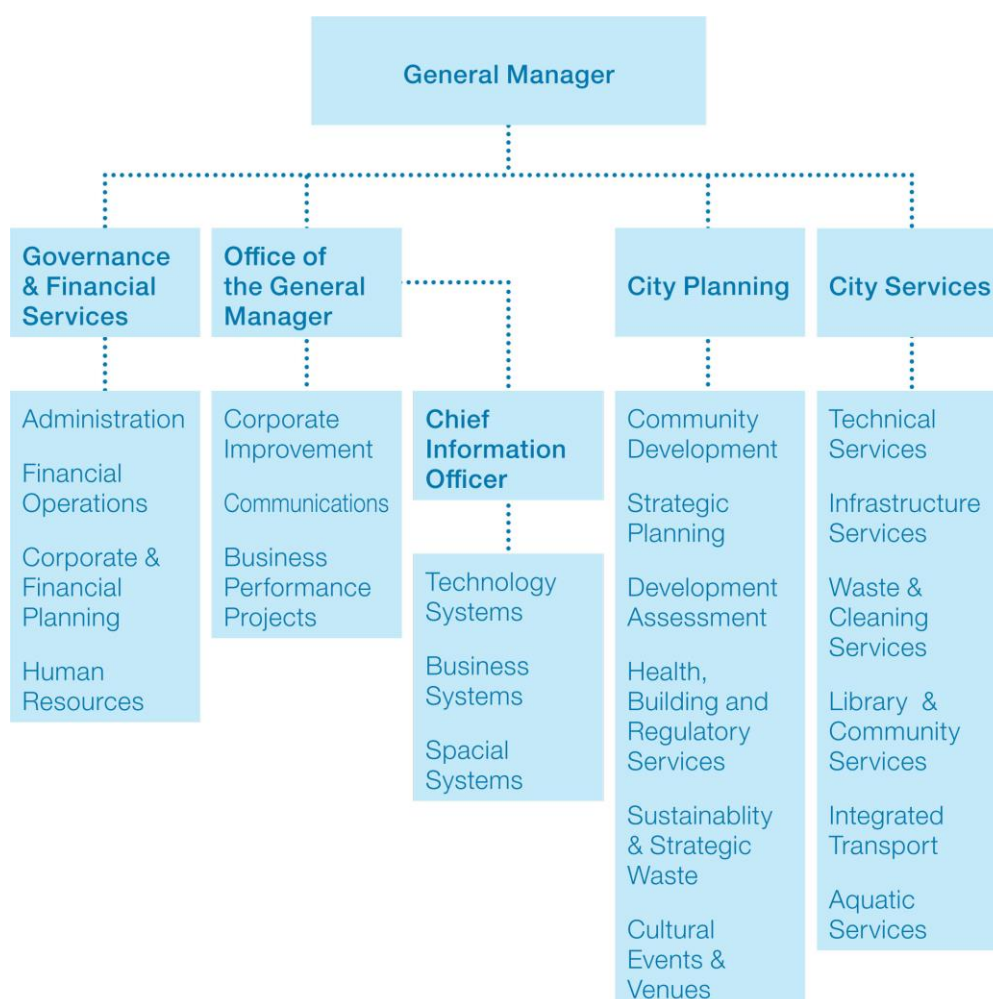
Table 2.1: Assets covered by this Plan

Asset Category	Quantity	Replacement Value
Concrete footpath	759550.8 m ²	\$107,774,513
Asphalt footpath	28911.4 m ²	\$3,399,417
Paved footpath	31662.9 m ²	\$12,644,115
Kerb Ramps	4,346 ramps	\$3,411,610
Cycleway	4353.4 m ²	\$636,994
Pedestrian bridges	289.1 m ²	\$52,715
Stairways	6683.4 m ²	\$3,314,636
TOTAL		\$131,234,000

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Council Representatives (Includes Councillors and the Mayor)	Represent needs of community/shareholders, Allocate resources to meet the organisation's objectives in providing services while managing risks, Ensure organisation is financially sustainable.
Council Officers	Manage Footpath Assets Ensure level of service provided meets needs of residents and visitors Implement the components identified in the Footpath asset management plan.
Residents	Core users of footpath assets. Their needs, wants and expectations are conveyed to the Council and should be reflected in desired levels of service.
Visitors	Second largest users of footpath assets. Their needs, wants and expectations drive the development in areas of the highest visitor usage and also commercial areas.
Insurers	Insurers have interest in implementation of systems which allow Council to gain better knowledge of the condition of their assets. Systems should be reflected in the number of claims made against each asset group.

The organisational structure for service delivery of infrastructure assets is detailed below.



2.2 Goals and Objectives of Asset Ownership

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance;
- Managing the impact of growth through demand management and infrastructure investment;
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service;
- Identifying, assessing and appropriately controlling risks;
- Linking to a long-term financial plan which identifies required, affordable expenditure and how it will be allocated.

Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 ¹;
- ISO 55000².

2.3 Plan Framework

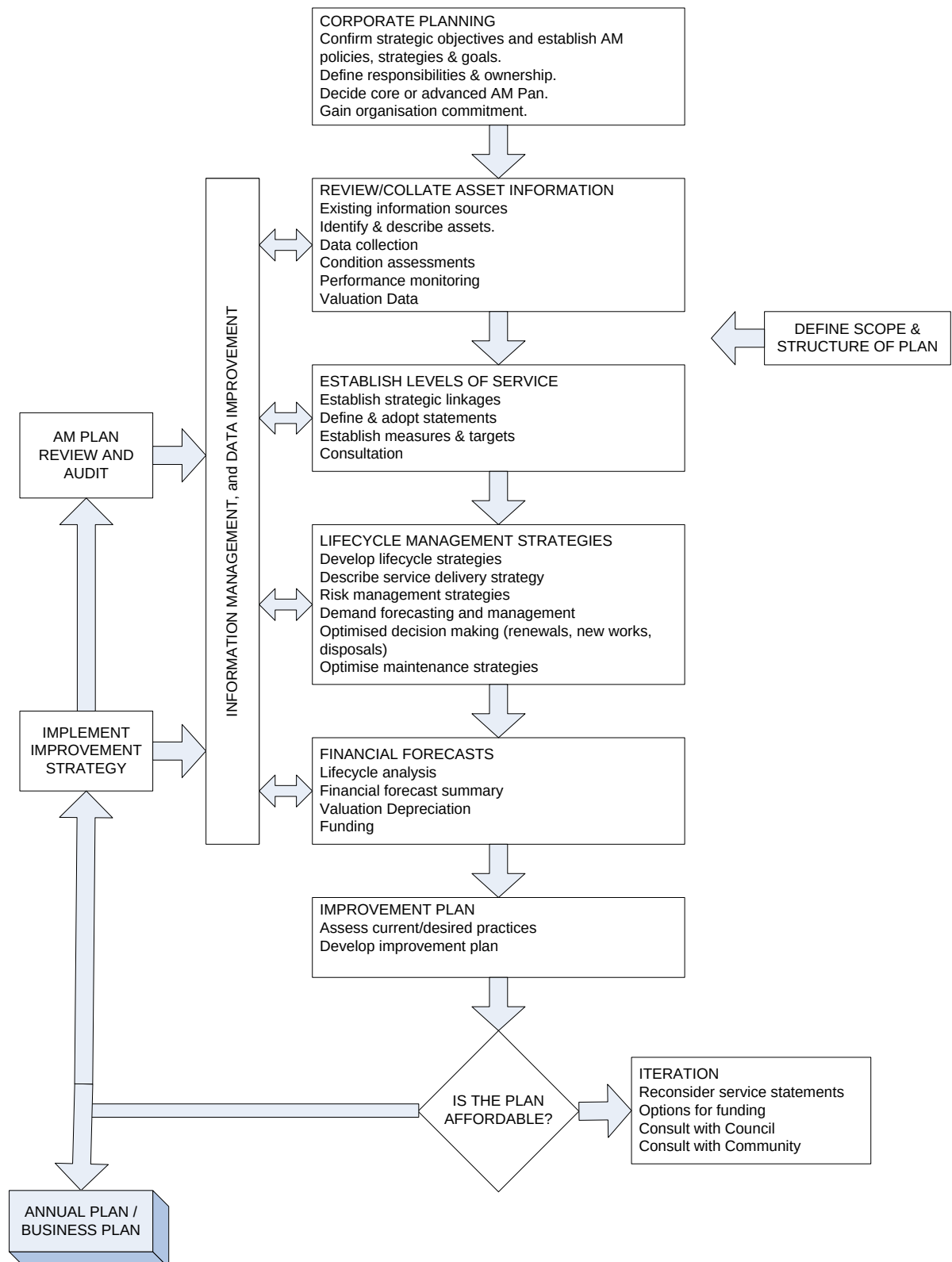
Key elements of the plan are:

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

A road map for preparing an asset management plan is shown below.

¹ Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2 | 13

² ISO 55000 Overview, principles and terminology



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 10-year planning period in accordance with the International Infrastructure Management Manual³. Core asset management is a 'top down' approach where analysis is applied at the system or network level. An 'advanced' asset management approach uses a 'bottom up' approach for gathering detailed asset information for individual assets.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

In 2014 Council commissioned a community satisfaction survey conducted by Micromex Research^A. The survey was administered by a computer aided telephone system to a sample of 1,000 residents. The most recent customer satisfaction survey reported satisfaction levels for the following services.

Table 3.1: Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level*
Overall satisfaction with Council's performance	95%
Council's response time to request for service	78%
Coastal open spaces and walkway	97%
Maintaining footpaths	76%
Maintaining local roads	72%
Street cleaning	85%
Town centre cleaning	92%
Attractiveness of town centres	80%

*Based on Top 3 box (percentage of residents indicating they are very satisfied, satisfied, or somewhat satisfied).

Community satisfaction information is used in developing the 20-year Randwick City Plan and in the allocation of resources in the budget.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the 20-year Randwick City Plan and within the Integrated Planning and Reporting (IPR) framework.

³ IPWEA, 2015, IIMM.

^A TRIM D02266591

Integrated Planning and Reporting framework



This plan will guide the delivery of actions by Council to achieve the following City Plan Outcomes:

Outcome 1: Leadership in Sustainability.

Relevant goals and objectives and how these are addressed in this asset management plan are:

Table 3.2: Goals and how these are addressed in this Plan

Randwick City Plan Outcome	Direction	Objective	How Goal and Objectives are addressed in AM Plan
Outcome 1. Leadership in Sustainability	Direction 1a: Council has a long-term vision based on sustainability	Ensure financial strategies underpin Council's asset management policies and strategic vision	The Footpath Management Plan aligns with Council's Resourcing Strategy, including the Asset Management Strategy, Workforce Plan and Long Term Financial Plan
Outcome 6: A Liveable City	Direction 6a: Our public infrastructure and assets are planned, managed and funded to meet the community expectations and defined levels of service.	Conduct programmed asset maintenance management in accordance with adopted service levels	The Footpath Asset Management Plan includes funding for operations and maintenance and provisions for performance monitoring against adopted service level.
Outcome 6: A Liveable City	Direction 6c: The safety of our community is paramount and is acknowledged and supported through proactive policies, programs and strategies.	Conduct minor reactive maintenance management in accordance with adopted service levels	<ul style="list-style-type: none"> Respond to customer requests within service level agreements. Identify High and Extreme risk roads Planned Inspections for High and Extreme risk roads Develop an operational and maintenance plan and allocate funding to carry out remediation work as required

The Council will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 6.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
NSW Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local government including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability, in the areas of provision of goods, facilities, services and land.
Civil Liability Act 2002 and Civil Liability Amendment (Personal Responsibility) Act 2002	Protects the Council from civil action by requiring the courts to take into account the financial resources, the general responsibilities of the authority and the compliance with general practices and applicable standards
Workplace Health and Safety Act 2011	Protecting workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work.
Australian Accounting Standard AASB116	Reporting on asset condition and consumption to Councillors, management and the community.

3.4 Customer Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service. These are supplemented by organisational measures.

Customer Levels of Service measure how the customer receives the service and whether value to the customer is provided.

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

Quality	How good is the service ... <i>what is the condition or quality of the service?</i>
Function	Is it suitable for its intended purpose <i>Is it the right service?</i>
Safety	It is safe for its intended purpose?
Capacity/Use	Is the service over or under used ... <i>do we need more or less of these assets?</i>

The current and expected customer service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the expected levels of service based on resource levels in the current long-term financial plan.

Organisational measures are measures of fact related to the service delivery outcome e.g. number of occasions when service is not available, condition percentages of Very Poor, Poor/Average/Good, Very good.

These Organisational measures provide a balance in comparison to the customer perception that may be more subjective.

Table 3.4: Customer Level of Service

	Expectation	Performance Measure Used	Current Performance	Expected Position in 10 Years based on the current budget.
Service Objective: Footpaths meet the needs of the community and are maintained in a safe and accessible manner.				
Quality	Provide quality footpath assets free from obvious defects	Customer Satisfaction Survey results	Satisfaction for coastal open space and walkways 78% Satisfaction for maintaining footpaths 44% Satisfaction for town centre cleaning 78%	Increase in customer satisfaction survey results
	Routinely inspect footpath network.	20% of the network to be inspect annually.	Achieved.	Maintain the current position
	Confidence levels		Medium	High
Function	Footpaths are swept mechanically daily in town centres, with litter pick up in the afternoon	Town Centre footpaths are maintained free of litter and weeds.	Footpaths swept daily.	Satisfied with Current performance
	Continue to improve the footpath network to meet community needs	Design and construction of footpath assets to Council and Australian Standards.	Footpath construction works are designed and funded under the capital works program.	Maintain current approach.
	Confidence levels		Medium	High
Safety	Footpath assets are operational, presented in a safe manner and free from hazards	Routine inspections of footpaths	Six monthly risk inspections of high use footpaths.	Increase inspections to Quarterly risk inspections of high use footpaths.
		Respond to CRM's within SLA timeframe	95.8% of Service Requests actioned within allocated time frames. ^B (up from 65.6% in 2012)	Increase in % of requests actioned within service level agreement timeframes
		Claims made against Council regarding footpath assets	Average of 16 claims per annum of past 5 years.	Goal of zero claims.
	Confidence levels		High	High
Capacity and Use	Ensure construction meets Council standards	Inspect all works post construction.	Construction works inspected as part of project management of works.	Satisfied with Current performance
	Confidence levels		Medium	High

3.5 Technical Levels of Service

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

Technical service measures are linked to the activities and annual budgets covering:

- Operations – the regular activities to provide services; (e.g. opening hours, cleansing, grass mowing, garden care, energy, inspections, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life; (e.g. road patching, building and structure repairs, graffiti removal, turfing, lines and goalposts),
- Renewal – the activities that return the service capability of an asset up to that which it had originally; (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade/New – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.⁴

Table 3.5 shows the technical levels of service expected to be provided under this AM Plan. The 'Desired' position in the table documents the position being recommended in this AM Plan.

Table 3.5: Technical Levels of Service

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
TECHNICAL LEVELS OF SERVICE				
Operations				
	Routine cleaning of footpaths in town centres.	Frequency of cleaning	Scheduled Street cleaning program	Maintain current performance
	Apply a risk management approach to footpath inspections.	20% to be inspected annually	20% inspected annually	Maintain current performance
		Budget	\$731,000	
Maintenance				
	Trips >10mm.	Repair/remove trips >10mm.	Trips identified and prioritised for repair within budget limitations.	Satisfied with Current performance
	Footpath repairs	Respond to CRM's within SLA timeframe	95.8% of Service Requests actioned within allocated time frames. (up from 65.6% in 2012)	Increase in % of requests actioned within service level agreement timeframes
		Budget	\$1,211,000	
Renewal				
	Replace footpaths in Poor condition	Condition Assessment	Footpath assets renewed as required.	Satisfied with Current performance
		Budget	\$1,850,000	
Upgrade/New				

⁴ IPWEA, 2015, IIMM, p 2 | 28.

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
	Replace Asphalt footpaths with Concrete footpaths	Ongoing replacement of asphalt footpaths as part of Capital Works Programme.	Upgrade / new footpath assets are funded under the project budget with new assets capitalised into the footpath register.	Maintain current approach.
	New footpaths to nature strips without footpaths	Ongoing construction of footpaths as part of Capital Works Programme	Upgrade / new footpath assets are funded under the project budget with new assets capitalised into the footpath register.	Maintain current approach.
		Budget	\$500,000	

Note: * Current activities and costs (currently funded).

** Desired activities and costs to sustain current service levels and achieve minimum life cycle costs (not currently funded).

It is important to monitor the service levels provided regularly as these will change. The current performance is influenced by work efficiencies and technology, and customer priorities will change over time. Review and establishment of the agreed position which achieves the best balance between service, risk and cost is essential.

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecasts

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

4.3 Demand Impact on Assets

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

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
population	140,660 (As at June 30 2016, ABS estimated resident population – whole of Randwick Council area)	NSW Department of Planning and Environment projects a 23% increase in population by 2036 within Randwick Local Government Area.	An increase in population will require an increase in community and infrastructure services. Existing services may require amendment to cater for changes in use or increased patronage.
Demographics	Randwick City Council are has -18% over 60 YO -43% in the 20-45 YO group (As at June 30 2016, ABS estimated resident population – whole of Randwick Council area)	Greater proportion of 10-20 YO (>35% growth) Greater proportion of over 60 YO (>45% growth) Low proportion of 25-45 YO (<10% growth)	Greater need for aged and disability access. Increase in population will require improvements to public transport infrastructure and accessible recreational infrastructure.

These demand drivers may impact on footpath assets as land is modified to meet changing community needs.

4.4 Demand Management Plan

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

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

Demand Driver	Impact on Services	Demand Management Plan
Population	An increase in population will require an increase in community and infrastructure services	Balance priorities for infrastructure with what the community is prepared to pay (statutory requirements / standards is the minimum standard)
Demographics	Greater need for accessible infrastructure	Assess capacity to fund current and/or improved levels of service
Land Area	An increase in development may include a subsequent increase in footpath dimensions.	New footpath works should be assessed for asset management requirements prior to works commencing.
Technology Changes	Potential to reduce maintenance and resource requirements.	New and emerging technologies should be assessed for both performance, abilities to improve service and whole of life costs

4.5 Asset Programs to meet Demand

The new assets required to meet demand can be acquired, donated or constructed. Additional assets are discussed in Section 5.5. The summary of the cumulative value of additional asset is shown in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand – (Cumulative)

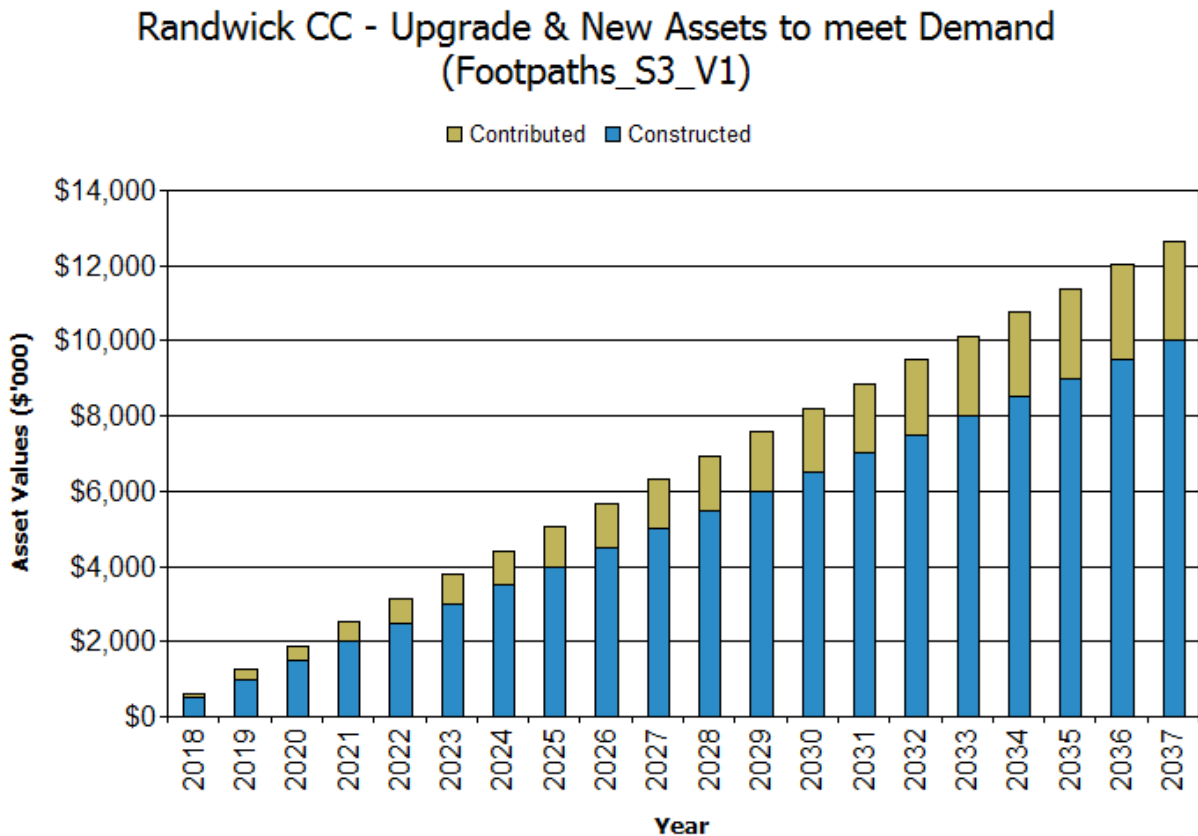


Figure Values are in current (real) dollars.

Acquiring these new assets will commit ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the long term financial plan further in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

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

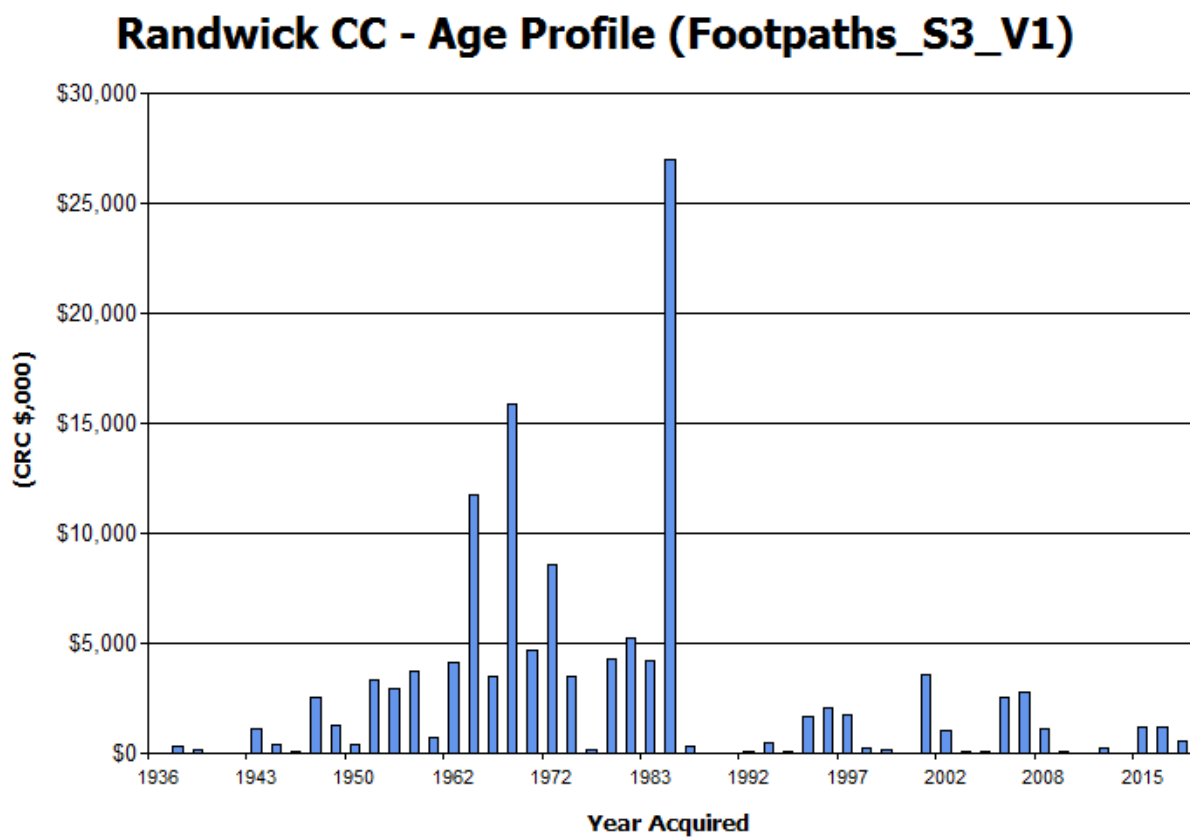
5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The age profile of the assets included in this AM Plan are shown in Figure 2.

Figure 2: Asset Age Profile



According to Figure 2, majority of footpaths had been built between 1962 and 1988 and thus anticipated major renewals would fall between the 2022 to 2090 period.

Figure Values are in current (real) dollars.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Various	Asphalt footpaths in poor condition. High risk segments are identified during inspections and included into capital works program

5.1.3 Asset condition

Council inspects 20 Per cent of entire asset network every year. The monitoring of Footpath assets is encompassed within this program.

The condition profile of our assets is shown in Figure 3.

Figure 3: Asset Condition Profile

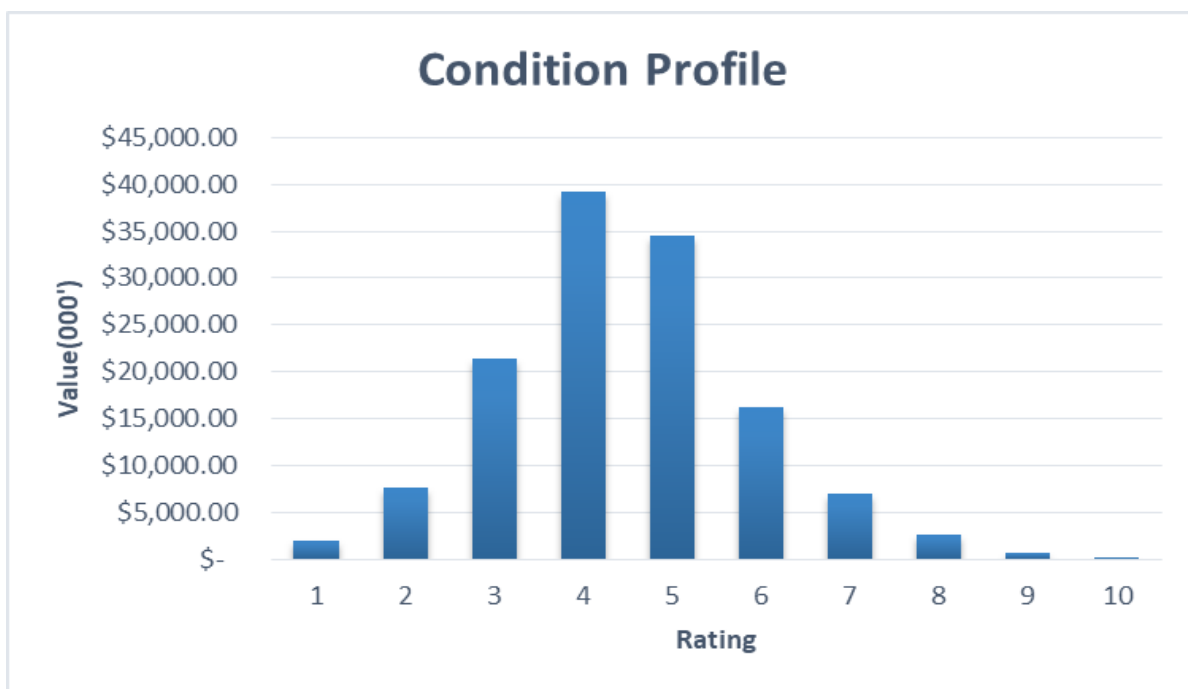


Figure 3 shows that majority of Council's Footpath Assets s are in good condition.

Figure Values are in current (real) dollars.

Condition is measured using a 1 – 10 grading system⁵ as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	Condition Index	Description of Condition
1	New	New.
2	Excellent	Discolouration.
3	Very Good	Loss of surface cement. May show small amounts of wear and tear.
4	Good	Superficial cracks evident. Minor wear and tear in joints and at edges.
5	Average	Aggregates exposed. Some wear and tear in joints and at edges. Hairline cracking evident. Joint displacements less than 10mm high. Slight chipping of pavers. May display up to 1 trip hazard every 20 meters.
6	Satisfactory	May display up to 2 trip hazards every 20 metres; evidence of edge drop offs, slight unevenness, grass grubbing, cracking, wear and/or settlement of restorations; Minor maintenance is required
7	Unsatisfactory	Defects occur regularly or in clusters; Edge drop exceeds 50mm; several trip hazards visible with signs of wear and ravelling of asphaltic concrete and/or settlement of restorations; cracks in pavers, paver rocking, evidence of grass rubbing; slipperiness problems; less than 15% of footpath requires replacement
8	Poor	Same as 7; Between 15-50% of footpath requires replacement.
9	Consider Reconstruction	Same as 7; 51-80% of footpath requires replacement
10	Imminent Failure / Failed	Same as 7; greater than 80% of footpath requires replacement.

5.2 Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. cleaning, street sweeping, utilities costs and street lighting.

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, e.g. road patching.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating.

Maintenance expenditure is shown in Table 5.2.1.

Table 5.2.1: Maintenance Expenditure Trends

Year	Maintenance Budget \$
2016	\$1,211,000
2017	\$1,211,000
2018	\$1,211,000

⁵ IPWEA, 2015, IIMM, Sec 2.5.4, p 2 | 80.

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

Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2007 dollar values (i.e. real values).

Figure 4: Projected Operations and Maintenance Expenditure

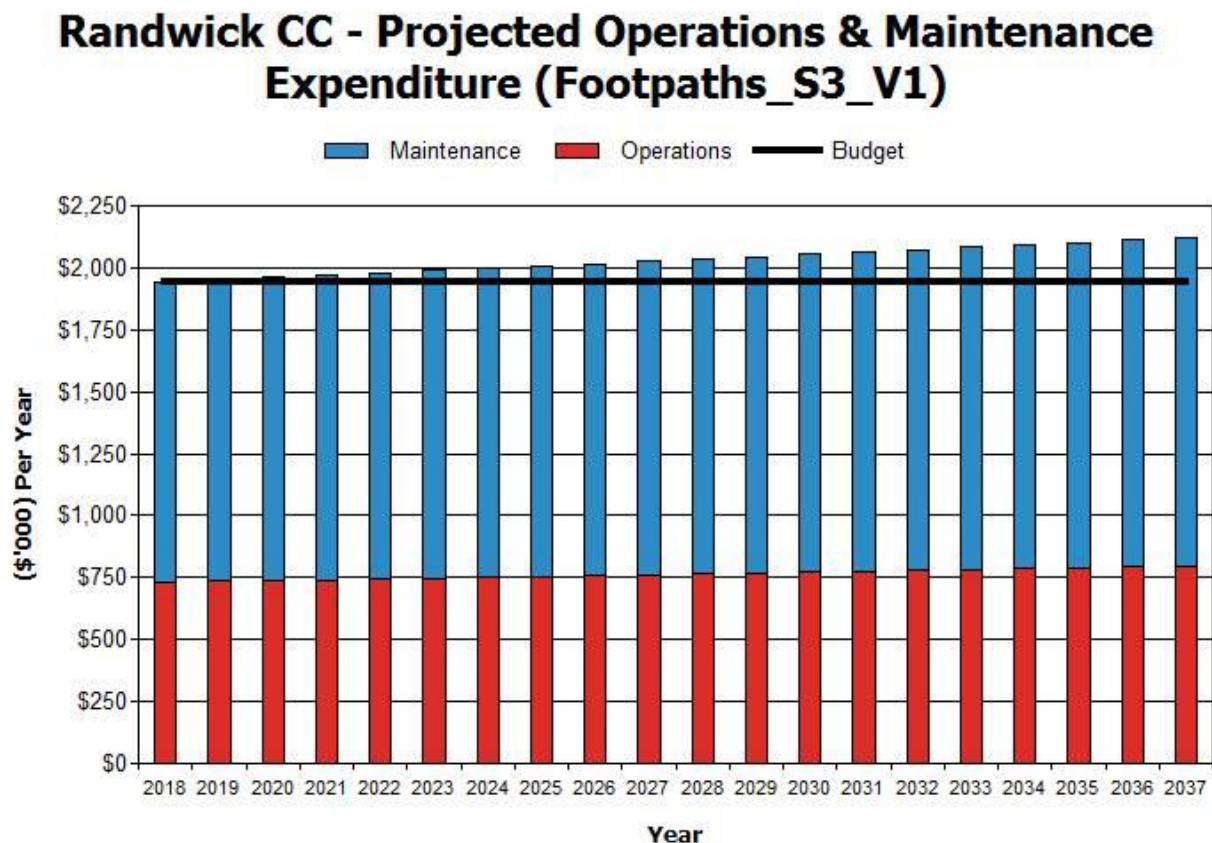


Figure Values are in current (real) dollars.

Currently Council is maintaining sufficient funding level for footpath maintenance and operations.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 7.

5.3 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an upgrade/expansion or new work expenditure resulting in additional future operations and maintenance costs.

Assets requiring renewal/replacement are identified from a combination of costs using acquisition year and useful life to determine the renewal year and capital renewal expenditure projections from external condition modelling systems.

5.3.1 Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate; (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. roughness of a road).⁶

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

- Have a high consequence of failure;
- Have high use and subsequent impact on users would be greatest;
- Have a total value representing the greatest net value;
- Have the highest average age relative to their expected lives;
- Are identified in the AM Plan as key cost factors;
- Have high operational or maintenance costs;
- Have replacement with a modern equivalent asset that would provide the equivalent service at a savings⁷.

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
Community - Function	10%
Community - Quality	5%
Technical - Condition	30%
Technical – Risk of Failure	40%
Technical – Operating/Maintenance and lifecycle costs	15%
Total	100%

5.3.2 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time when the asset stock increases. The expenditure is required is shown in Fig 5. Note that all amounts are shown in current (real) dollars.

The projected capital renewal and replacement program is shown in Appendix B.

⁶ IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

⁷ Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

Figure 5: Projected Capital Renewal and Replacement Expenditure

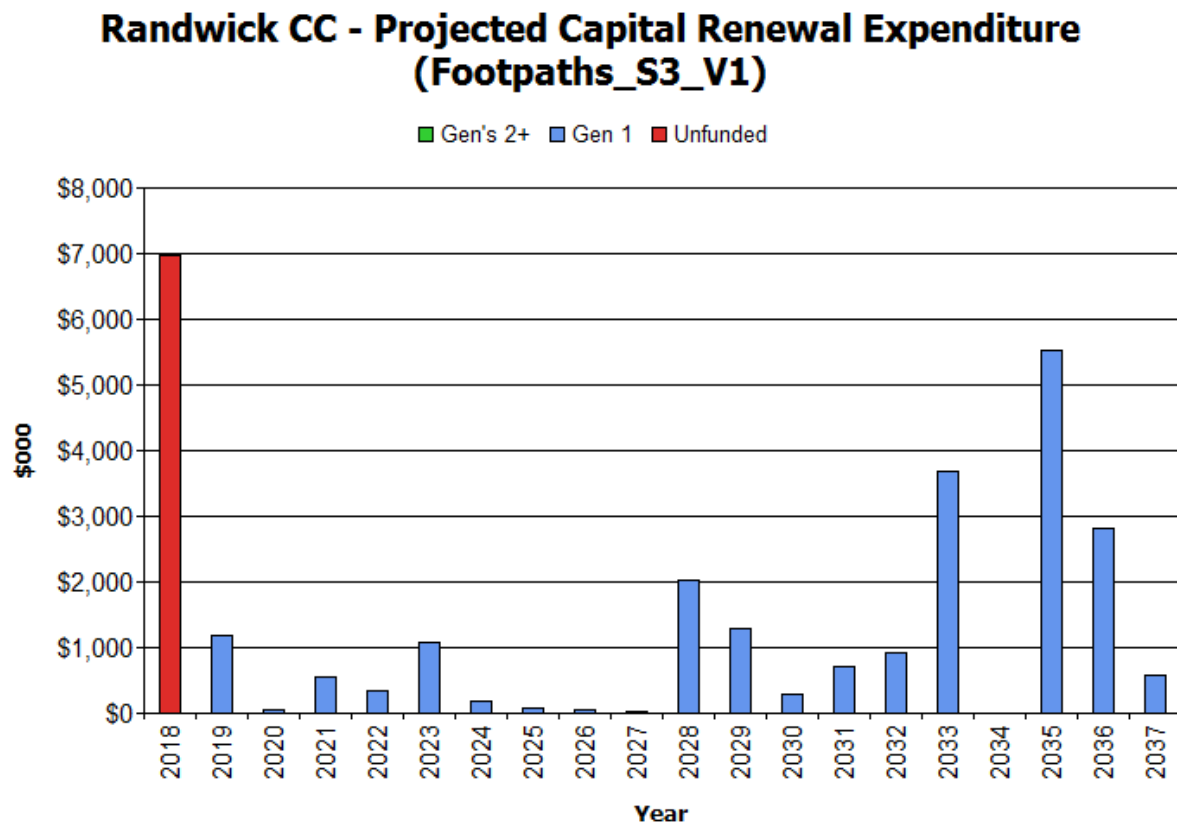


Figure Values are in current (real) dollars.

It is expected that the backlog noted in 2018 could be renewed under current funding levels between 2018 and 2021. Significant renewal expenditure required for 2033, 2035 and 2036 could also be spaced out under current budget levels between 2024 and 2031.

Deferred renewal and replacement, i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the capital works program will be accommodated in the long term financial plan. This is further discussed in Section 7.

5.4 Creation/Acquisition/Upgrade Plan

New works are those that create a new asset that did not previously exist, or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost. These additional assets are considered in Section 4.4.

5.4.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

Table 5.4.1: New Assets Priority Ranking Criteria

Criteria	Weighting
Safety	35%
Community Expectation	15%
Lifecycle Costs	25%
Community Benefits (Usage, population, future development)	25%
Total	100%

5.4.2 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

Figure 6: Projected Capital Upgrade/New Asset Expenditure

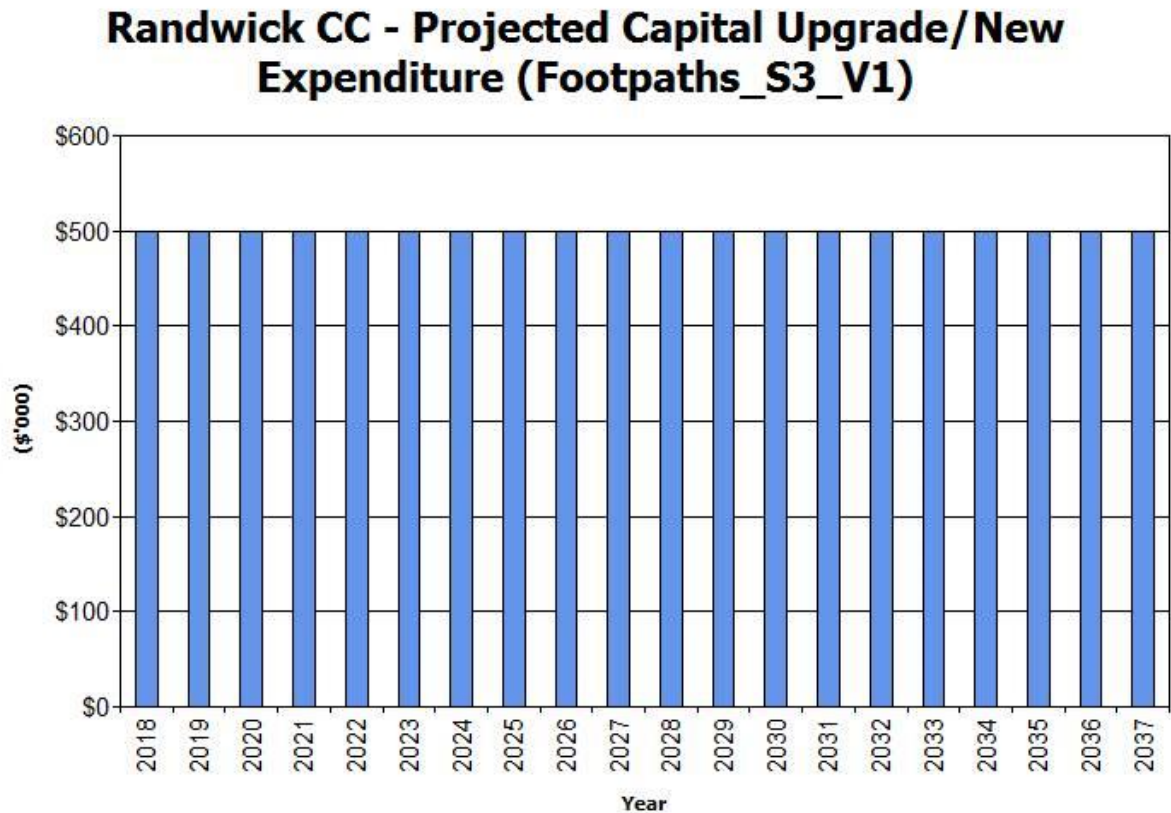


Figure Values are in current (real) dollars.

Expenditure on new assets and services in the capital works program will be accommodated in the long term financial plan but only to the extent of the available funds

Acquiring these new assets will commit the funding of ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required.

5.4.3 Summary of asset expenditure requirements

The financial projections from this asset plan are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

The bars in the graphs represent the anticipated budget needs required to achieve lowest lifecycle costs, the budget line indicates what is currently available. The gap between these informs the discussion on achieving the balance between services, costs and risk to achieve the best value outcome.

Figure 7: Projected Operating and Capital Expenditure

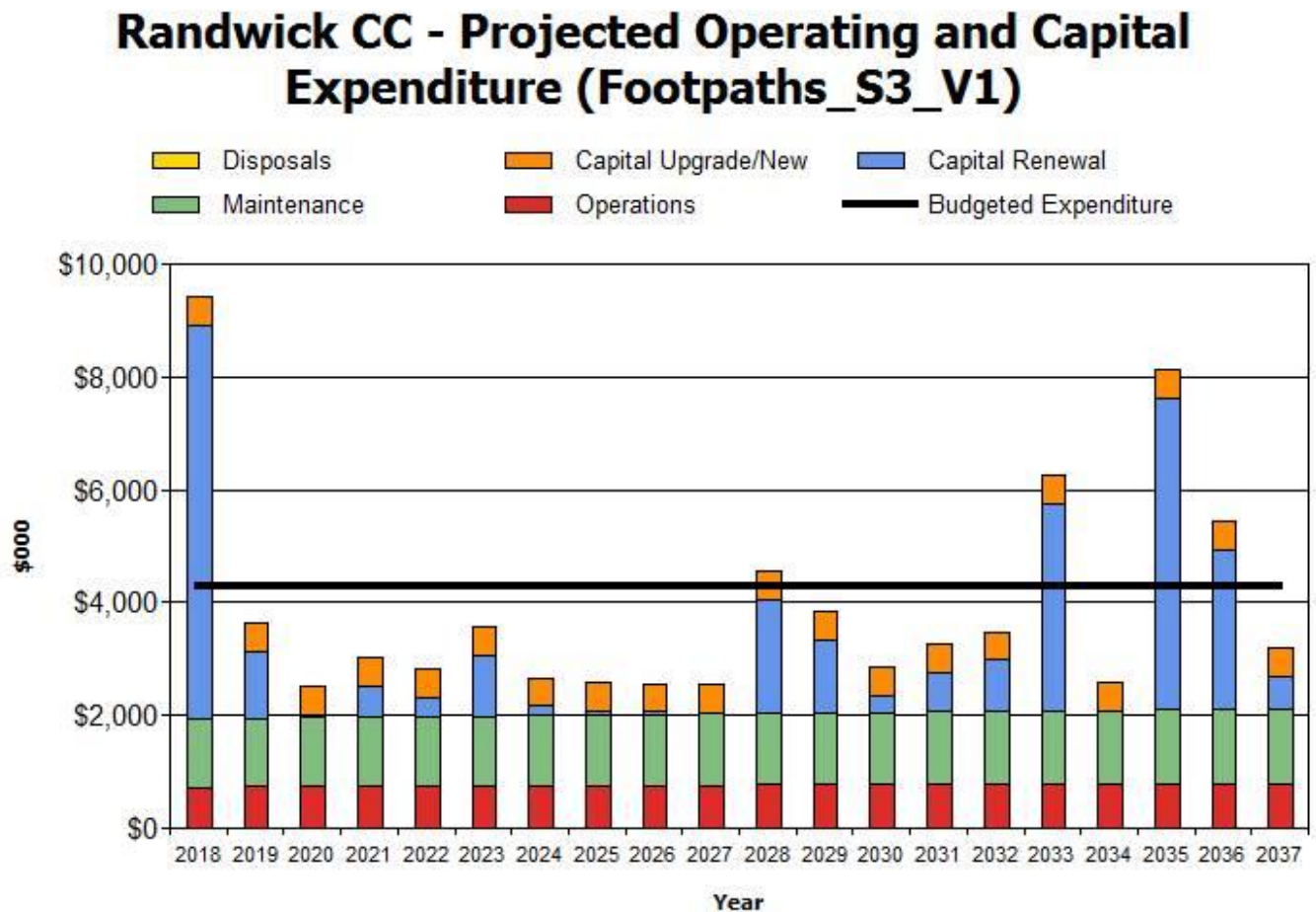


Figure Values are in current (real) dollars.

According to figure 7, Council allocates sufficient funding for operating and capital works required to maintain the current Footpath service levels.

6. RISK MANAGEMENT PLAN

The purpose of infrastructure risk management is to document the results and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2009 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2009 as: ‘coordinated activities to direct and control with regard to risk’⁸.

An assessment of risks⁹ associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a ‘financial shock’. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.

Critical assets have been identified and their typical failure mode and the impact on service delivery are as follows:

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Footpaths	Displacement, damage or distresses	Loss or reduction of service, restricted access, casualties to users or property damage
Ramps	Displacement, damage or distresses	Loss or reduction of service, restricted access, casualties to users or property damage
Stairs	Displacement, damage or distresses	Loss or reduction of service, restricted access, casualties to users or property damage
Bridges	Displacement, damage or distresses	Loss or reduction of service, restricted access, casualties to users or property damage

By identifying critical assets and failure modes investigative activities, condition inspection programs, maintenance and capital expenditure plans can be targeted at the critical areas.

6.2 Risk Assessment

The risk management process used in this project is shown in Figure 6.2 below.

It is an analysis and problem solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of the ISO risk assessment standard ISO 31000:2009.

⁸ ISO 31000:2009, p 2

⁹ 4.3.1 Hazard/Risk Identification, Assessment and Control

Fig 6.2 Risk Management Process – Footpath

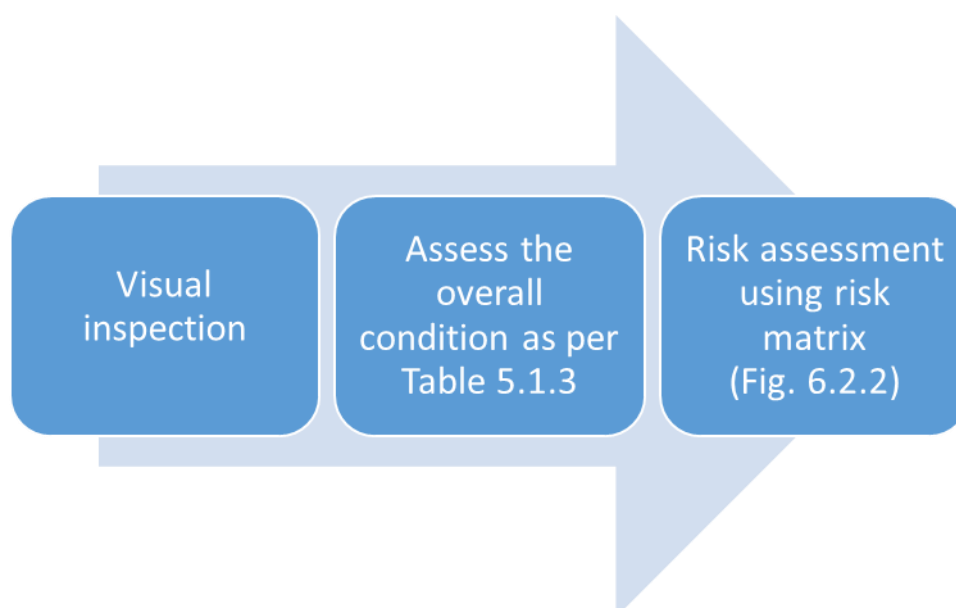


Figure 6.2.2-Risk table

Risk Assessment

Risk Factors	Consequence	Likelihood
Personal Injury		<i>Please note likelihood is based on condition assessment</i>
Financial Implications		
Environmental		
Political		

Consequence	Risk Descriptions
<i>Catastrophic</i>	Death, toxic release off site with detrimental effect, huge financial loss (>\$100,000), sustained comprehensive negative national media coverage with major loss in community trust
<i>Major</i>	Extensive injuries, loss of production capability, off site release with no detrimental effects, major financial loss (>\$50,000 & <\$100,000), Ongoing negative media coverage in local and metro press with minimal community trust
<i>Moderate</i>	Medical treatment required, on-site release contained with outside assistance, high financial loss (>\$10,000 & <\$50,000), Short period negative media coverage with rigorous community discussion
<i>Minor</i>	First aid treatment, on-site release immediately contained, medium financial loss (>\$1000 & <\$10,000), little or no impact on community's perception of Council
<i>Insignificant</i>	No injuries, low financial loss (<\$1000), no effect to normal operations

Figure 6.2.3 Risk Matrix

	CONSEQUENCE				
LIKELIHOOD	Insignificant	Minor	Moderate	Major	Catastrophic
	-2	-3	-7	-13	-20
Almost Certain (5)	Medium (10)	High (15)	High (35)	Extreme (65)	Extreme (100)
Likely (4)	Medium (8)	Medium (12)	High (28)	High (52)	Extreme (80)
Possible (3)	Low (6)	Medium (9)	High (21)	High (39)	Extreme (60)
Unlikely (2)	Low (4)	Low (6)	Medium (14)	High (26)	High (40)
Rare (1)	Low (2)	Low (3)	Medium (7)	Medium (13)	High (20)

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

An assessment of risks¹⁰ associated with service delivery from infrastructure assets has identified the critical risks that will result in significant loss, 'financial shock' or a reduction in service.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment cost after the selected treatment plan is implemented is shown in Table 6.2. These risks and costs are reported to management and Councillors.

Table 6.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Community Consultation Risk	Community will not have involvement in footpath service standards.	Medium	Ongoing community consultation	Low	Staff Time & Contractor Cost
Health and Safety	Injury to users of footpath assets as a result inadequate footpath assets.	High	Continued programme of upgrading or creating assets where identified.	Low	Staff Time, Material &/or Contractor Cost, Media Coverage

¹⁰ 4.3.1 Hazard/Risk Identification, Assessment and Control

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Environmental Impact	By products / run off as a result of construction and maintenance.	High	Enforcement of environmental conditions and guidelines with continuous supervision of footpath works.	Low	Staff Time, Material &/or Contractor Cost, Media Coverage
Injury to asset users	Injury to users of footpath assets as a result of poor condition.	Medium	Continued programme of lifecycle replacement of footpath assets. Continued planned preventative maintenance regime.	Low	Staff Time, Material &/or Contractor Cost. Capital Works Program.
Lack of qualified resources	Risk that qualified resources will not be available.	Low	Established commitment from internal and external resources for footpaths.	Low	Staff Time

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

7. FINANCIAL SUMMARY

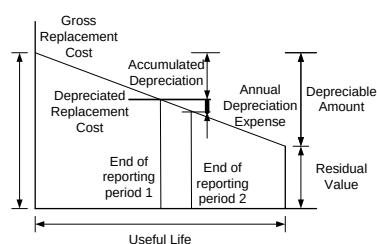
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset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

7.1 Financial Statements and Projections

7.1.1 Asset valuations

The best available estimate of the value of assets included in this Asset Management Plan are shown below. Assets are valued at detailed unit rates applied to the unit(s) of the asset.

Gross Replacement Cost	\$131,234,000
Depreciable Amount	\$131,234,000
Depreciated Replacement Cost ¹¹	\$87,613,000
Annual Average Asset Consumption	\$1,846,000 (1.4%)



7.1.1 Sustainability of service delivery

Two key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the:

- asset renewal funding ratio; and
- medium term budgeted expenditures/projected expenditure (over 10 years of the planning period).

¹¹ Also reported as Written Down Value, Carrying or Net Book Value.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio¹² 156 percent

The Asset Renewal Funding Ratio is the most important indicator and indicates that over the next 10 years of the forecasting that we expect to have 156 percent of the funds will be provided for the optimal renewal and replacement of assets.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$3,032,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$3,792,000 on average per year giving a 10 year funding surplus of \$762,000 per year. This indicates 125 percent of the projected expenditures will provide the services documented in the asset management plan. This excludes upgrade/new assets.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10-year life of the Long Term Financial Plan.

7.1.2 Projected expenditures for long term financial plan

Table 7.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2017/2018 real values.

Table 7.1.2: Projected Expenditures for Long Term Financial Plan (\$000)

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2018	\$731	\$1,211	\$6,964	\$500	\$0
2019	\$735	\$1,217	\$1,190	\$500	\$0
2020	\$738	\$1,223	\$40	\$500	\$0
2021	\$742	\$1,228	\$560	\$500	\$0
2022	\$745	\$1,234	\$345	\$500	\$0
2023	\$749	\$1,240	\$1,076	\$500	\$0
2024	\$752	\$1,246	\$171	\$500	\$0

¹² AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2025	\$756	\$1,252	\$71	\$500	\$0
2026	\$759	\$1,258	\$42	\$500	\$0
2027	\$763	\$1,263	\$15	\$500	\$0
2028	\$766	\$1,269	\$2,022	\$500	\$0
2029	\$770	\$1,275	\$1,287	\$500	\$0
2030	\$773	\$1,281	\$299	\$500	\$0
2031	\$777	\$1,287	\$704	\$500	\$0
2032	\$780	\$1,293	\$910	\$500	\$0
2033	\$784	\$1,299	\$3,678	\$500	\$0
2034	\$787	\$1,304	\$0	\$500	\$0
2035	\$791	\$1,310	\$5,530	\$500	\$0
2036	\$794	\$1,316	\$2,826	\$500	\$0
2037	\$798	\$1,322	\$576	\$500	\$0

7.2 Funding Strategy

Funding for assets is provided from the budget and long term financial plan.

The financial strategy of the entity determines how funding will be provided, whereas the asset management plan communicates how and when this will be spent, along with the service and risk consequences of differing options.

7.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added.

Additional assets will generally add to the operations and maintenance needs in the longer term, as well as the need for future renewal. Additional assets will also add to future depreciation forecasts.

7.4 Key Assumptions Made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

Table 7.4: Key Assumptions made in AM Plan and Risks of Change

- Asset values and dimensions are correct;
Change to asset values and dimensions will have an effect on resources required to operate, maintain and renew the Footpath assets.
- 20% of Council's Footpath assets will be inspected annually (100% every 5 years) and footpath asset condition updated accordingly;
Monitoring of change of condition may show change in the asset's useful life which may have a subsequent change of funding required to maintain level of service.
- The estimates used for current rates of renewal will remain constant at current 2017 values for the next 10 years.
Possible increase in renewal costs may reduce level of works budgeted with possible reduction in the footpath service level.

7.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale¹³ in accordance with Table 7.5.

Table 7.5: Data Confidence Grading System

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

¹³ IPWEA, 2015, IIMM, Table 2.4.6, p 2 | 71.

Confidence Grade	Description
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is considered to be Highly Reliable.

8. PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices¹⁴

8.1.1 Accounting and financial data sources

In 2010 Council implemented the financial system, Technology One. This system contains a Works and Assets Module in which works orders or tasks can be raised and costing's tracked against a particular asset.

Council's finance system is managed by its Finance section. The system is reported on and audited annually. The audited report is present to Council, who then refers the report onto the Department of Local Government.

Council's Engineering Services team provides input into the asset registers including condition, useful life, unit rates, capitalisation data and physical attributes.

8.1.2 Asset management data sources

Randwick Council's Asset Register is currently located within the Tech 1 software package. This dataset contains all of the information to physically describe the asset including its makeup, age, condition, useful life, CRC and other financial data. The register is also linked to other systems including GIS.

The Tech 1 software used for asset management is currently controlled/managed by Council's Finance section.

Data maintenance is undertaken by Council's Asset Management section who review data/assets on an annual program and advise the Finance section of any updates, new or disposed assets as they arise.

Council is currently reviewing options for Strategic Asset Management Systems. The selected system will draw information from the Tech 1 asset registers.

¹⁴ ISO 55000 Refers to this the Asset Management System

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.1.

Table 8.1: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Conduct regular footpath safety inspections in high use shopping areas.	Infrastructure Services	Public Space Officers	Ongoing
2	Update newly segmented footpath asset data into Technology 1	Engineering Services	Asset Team + Finance Team	2017-2018
3	Complete 20% footpath condition audit yearly	Engineering Services	Asset team + contractors	Annually
4	Conduct footpath revaluation	Asset Team + Finance Team	Asset Team + Finance Team	

8.3 Monitoring and Review Procedures

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

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the long term financial plan.

The AM Plan has a life of 4 years and is due for complete revision and updating within the financial year of each Randwick Council election.

8.4 Performance Measures

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

The degree to which the required projected expenditures identified in this asset management plan are incorporated into the long term financial plan,

The degree to which 1-5 year detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the asset management plan,

The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Strategic Plan and associated plans,

The Asset Renewal Funding Ratio achieving the target of 1.0.

9. REFERENCES

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

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IPWEA, 2012 LTFP Practice Note 6 PN Long Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney

10. APPENDICES

Appendix A Projected 10 year Capital Renewal and Replacement Works Program

Appendix B LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix A Projected 10-year Capital Renewal and Replacement Works Program

Randwick CC - Report 6 - Appendix 10 year Renewal & Replacement Program (Footpaths_S3_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
FPL018AD	Footpath	Alfreda Street	Brook Street	Arden Street	-50	1968	\$9,676	25
FPL018AE	Footpath	Alfreda Street	Brook Street	Arden Street	-50	1968	\$5,173	25
FPL018AB	Footpath	Alfreda Street	Brook Street	Arden Street	-50	1968	\$23,390	25
Subtotal							\$38,239	
FPL038BC	Footpath	Arden Street	Brandon Street	Clovelly Road	-45	1973	\$12,629	25
FPL038MA	Footpath	Arden Street	Malabar Road	Rainbow Street	-45	1973	\$28,638	25
FPL041AC	Footpath	Ascot Street	Anzac Parade	Doncaster Avenue	-45	1973	\$4,584	25
FPL041AD	Footpath	Ascot Street	Anzac Parade	Doncaster Avenue	-45	1973	\$3,225	25
FPL041AE	Footpath	ASCOT ST	Anzac Parade	Doncaster Avenue E	-45	1973	\$7,156	25
FPL035AA	Other	Arcadia Street	Major Street	Beach Street	-45	1973	\$16,544	25
Subtotal							\$72,775	
FPL031ND	Footpath	Anzac Parade	Boyce Road	Maroubra Road	-44	1974	\$17,182	25
FPL041AF	Footpath	Ascot Street	Anzac Parade	Doncaster Avenue	-44	1974	\$12,625	25
Subtotal							\$29,807	
FPL042AA	Footpath	Asher Street	Waltham Street	Havelock Avenue	-43	1975	\$13,298	25
Subtotal							\$13,298	
FPR156AE	Footpath	Carlton Street	Anzac Parade	Doncaster Avenue	-40	1978	\$10,489	25
FPR365AA	Footpath	Havelock Avenue	Arden Street	Carr Street	-40	1978	\$24,423	25
Subtotal							\$34,911	
FPL063AA	Footpath	Barry Street	Clovelly Road	Greville Street	-38	1980	\$6,904	25
FPL063AB	Footpath	Barry Street	Clovelly Road	Greville Street	-38	1980	\$15,448	25
FPL063AC	Footpath	Barry Street	Clovelly Road	Greville Street	-38	1980	\$1,923	25
FPL098AA	Footpath	Boronia Street	Anzac Parade	Duke Street	-38	1980	\$36,039	25
FPL098AD	Footpath	Boronia Street	Anzac Parade	Duke Street	-38	1980	\$8,562	25

FPL098AF	Footpath	Boronia Street	Anzac Parade	Duke Street	-38	1980	\$9,658	25
FPL107AB	Footpath	Bowral Street	Anzac Parade	Doncaster Avenue	-38	1980	\$13,486	25
FPL107AE	Footpath	Bowral Street	Anzac Parade	Doncaster Avenue	-38	1980	\$5,459	25
FPL060GB	Footpath	Hay Lane	Hay Street	Barker Street	-38	1980	\$1,889	25
Subtotal							\$99,368	
FPL048FB	Footpath	Avoca Street	Barker Street	Rainbow Street	-37	1981	\$31,200	25
FPL060HB	Footpath	Barker Street	Jane Street	Avoca Street	-37	1981	\$5,677	25
FPL068BB	Footpath	Beach Street	Neptune Street	Carr Street	-37	1981	\$146,932	25
FPL098AH	Footpath	Boronia Street	Anzac Parade	Duke Street	-37	1981	\$39,976	25
FPL107AC	Footpath	Bowral Street	Anzac Parade	Doncaster Avenue	-37	1981	\$5,795	25
FPL1013AA	Footpath	Little Lane	Little Street	The End	-37	1981	\$0	25
FPL1021BA	Footpath	Power Lane	Castle Lane	Clovelly Road	-37	1981	\$3,692	25
FPL1021AA	Footpath	Power Lane	Earl Street	Castle Lane	-37	1981	\$12,497	25
Subtotal							\$245,767	
FPL048FD	Footpath	Avoca Street	Barker Street	Rainbow Street	-36	1982	\$41,385	25
FPL119DA	Footpath	Brook Street	Carr Street	Coogee Bay Road	-36	1982	\$2,620	25
Subtotal							\$44,005	
FPL119IC	Footpath	Brook Street	Division Street	Clovelly Road	-31	1987	\$8,938	25
FPL119IE	Footpath	Brook Street	Division Street	Clovelly Road	-31	1987	\$3,880	25
FPL119IG	Footpath	Brook Street	Division Street	Clovelly Road	-31	1987	\$3,862	25
FPL156AE	Footpath	Carlton Street	Anzac Parade	Doncaster Avenue	-31	1987	\$12,073	25
FPL165BA	Footpath	Castle Lane	Carter Street	Stephen Street	-31	1987	\$7,951	25
FPL165BB	Footpath	Castle Lane	Carter Street	Stephen Street	-31	1987	\$6,634	25
FPL169AA	Footpath	Challis Lane	Wentworth Street	Earl Street	-31	1987	\$17,563	25
FPL191CD	Footpath	Clovelly Road	Avoca Street	Frenchmans Road	-31	1987	\$19,780	25
FPL257BB	Footpath	Earl Street	Clovelly Road	Challis Street	-31	1987	\$6,292	25
FPL267AA	Footpath	Elizabeth Street	Alison Road	Silver Street	-31	1987	\$7,917	25
FPL285CB	Footpath	Ferguson Street	Fitzgerald Avenue	Wade Street	-31	1987	\$81,648	25
FPL248AA	Footpath	Samuel Terry	Todman Avenue	Lenthall Street	-31	1987	\$8,881	25

FPL248AB	Footpath	Avenue Samuel Terry Avenue	Todman Avenue	Lenthall Street	-31	1987	\$14,940	25
FPL248AC	Footpath	Avenue Samuel Terry Avenue	Todman Avenue	Lenthall Street	-31	1987	\$27,049	25
Subtotal							\$227,407	
FPL035AA	Footpath	Arcadia Street	Major Street	Beach Street	-30	1988	\$795	40
FPL156AD	Footpath	Carlton Street	Anzac Parade	Doncaster Avenue	-30	1988	\$20,529	25
FPL159CD	Footpath	Carr Street	Brook Street	Mount Street	-30	1988	\$4,459	25
FPL161AG	Footpath	Carrington Road	Carr Street	Coogee Bay Road	-30	1988	\$14,912	25
FPL163AA	Footpath	Carter Lane	Castle Lane	The End	-30	1988	\$2,383	25
FPL191GB	Footpath	Clovelly Road	Arden Street	Beach Street	-30	1988	\$21,965	25
FPL191AA	Footpath	Clovelly Road	Darley Road	Earl Street	-30	1988	\$26,573	25
FPL191AB	Footpath	Clovelly Road	Darley Road	Earl Street	-30	1988	\$33,517	25
FPL191BA	Footpath	Clovelly Road	Earl Street	Avoca Street	-30	1988	\$23,781	25
FPL197AH	Footpath	Coogee Bay Road	Belmore Road	Carrington Road	-30	1988	\$78,341	25
FPL197DA	Footpath	Coogee Bay Road	Mount Street	Brook Street	-30	1988	\$33,844	25
FPL218AA	Footpath	Dangar Lane	Darley Road	White Street	-30	1988	\$5,551	25
FPL218AB	Footpath	Dangar Lane	Darley Road	White Street	-30	1988	\$18,432	25
FPL137AA	Footpath	Darley Lane	Clovelly Road	Avoca Street	-30	1988	\$21,293	25
FPL221AA	Footpath	Darley Road	Alison Road	Evans Street	-30	1988	\$96,385	25
FPL249AC	Footpath	Dudley Street	Beach Street	Arden Street	-30	1988	\$11,305	25
FPL258BA	Footpath	Earl Lane	Challis Street	Challis Lane	-30	1988	\$11,049	25
FPL258AA	Footpath	Earl Lane	Stephen Street	Challis Street	-30	1988	\$18,882	25
FPL266BB	Footpath	Elaroo Avenue	Adina Avenue	YARRA RD	-30	1988	\$8,854	25
FPL285AC	Footpath	Ferguson Street	Maroubra Road	Wise Street	-30	1988	\$7,884	25
FPL285AD	Footpath	Ferguson Street	Maroubra Road	Wise Street	-30	1988	\$48,514	25
FPL285BB	Footpath	Ferguson Street	Wise Street	Fitzgerald Ave	-30	1988	\$21,093	25
FPL313CE	Footpath	Frenchmans Road	Kemmis Street	Carrington Road	-30	1988	\$8,304	25
FPL334AD	Footpath	Goodwood Street	39 Goodwood Street	Doncaster Ave	-30	1988	\$17,544	25
FPL334AA	Footpath	Goodwood Street	Anzac Parade	29 Goodwood Street	-30	1988	\$16,571	25
FPL334AC	Footpath	Goodwood Street	ElsmereLSMERE ST	39 Goodwood	-30	1988	\$9,487	25

FPL365AB	Footpath	Havelock Avenue	Arden Street	Street Carr Street	-30	1988	\$2,640	25
Subtotal							\$584,890	
FPL128BB	Footpath	Bundock Street	Malabar Road	Hendy Avenue	-29	1989	\$39,719	25
FPL152CA	Footpath	Canberra Street	Oberon Street	Howard Street	-29	1989	\$32,959	25
FPL159CA	Footpath	Carr Street	Brook Street	Mount Street	-29	1989	\$17,776	25
FPL165AB	Footpath	Castle Lane	Clovelly Road	Carter Street	-29	1989	\$5,583	25
FPL191IA	Footpath	Clovelly Road	Flood Street	Donnellan Circuit	-29	1989	\$9,299	25
FPL191IB	Footpath	Clovelly Road	Flood Street	Donnellan Circuit	-29	1989	\$19,273	25
FPL218BA	Footpath	Dangar Lane	White Street	Tramway Lane	-29	1989	\$20,943	25
FPL267AC	Footpath	Elizabeth Street	Alison Road	Silver Street	-29	1989	\$36,177	25
FPL122CA	Footpath	Huddart Lane	Dangar Street	Dangar Lane	-29	1989	\$6,442	25
Subtotal							\$188,170	
FPL018AA	Footpath	Alfreda Street	Brook Street	Arden Street	-25	1993	\$96,452	50
FPL020HA	Footpath	Alison Road	Avoca Street	Belmore Road	-25	1993	\$50,759	50
FPL024AA	Footpath	Alma Road	Anzac Parade	Garden Street	-25	1993	\$65,140	50
FPR128AB	Footpath	Bundock Street	Malabar Road	Hendy Avenue	-25	1993	\$24,787	40
FPR664AA	Other	Searle Avenue	Frenchmans Road	Clovelly Road	-25	1993	\$93,415	40
Subtotal							\$330,553	
FPL020HB	Footpath	Alison Road	Avoca Street	Belmore Road	-24	1994	\$260,928	50
FPR156AD	Footpath	Carlton St	Anzac Pde	Doncaster Ave	-24	1994	\$17,751	25
FPR165BA	Footpath	Castle Lane	Carter Street	Stephen Street	-24	1994	\$14,658	25
FPR165AB	Footpath	Castle Lane	Clovelly Road	Carter Street	-24	1994	\$7,872	25
FPR169AA	Footpath	Challis Lane	Wentworth Street	Earl Street	-24	1994	\$7,628	25
FPR218AB	Footpath	Dangar Lane	Darley Road	White Street	-24	1994	\$13,312	25
FPR218BA	Footpath	Dangar Lane	White Street	Tramway Lane	-24	1994	\$27,141	25
FPR137AB	Footpath	Darley Lane	Clovelly Road	Avoca Street	-24	1994	\$20,646	25
FPR223AD	Footpath	Darling St	Anzac Pde	Doncaster Ave	-24	1994	\$1,371	25
FPR249BC	Footpath	Dudley Street	Arden Street	Brook Street	-24	1994	\$3,481	25
FPR334AC	Footpath	Goodwood St	3 Goodwood St	Doncaster Ave	-24	1994	\$18,632	25

FPR334AB	Footpath	Goodwood St	8 Goodwood St	3 Goodwood St	-24	1994	\$31,148	25
FPR369AB	Footpath	Helena Street	Avoca Street	Canberra Street	-24	1994	\$4,100	25
FPR423BB	Footpath	Judge Street	Albi Place	The End	-24	1994	\$15,614	25
FPR442BA	Footpath	King St	The End	Wentworth St	-24	1994	\$29,420	25
FPR495AB	Footpath	Malabar Road	Rainbow Street	Arden Street	-24	1994	\$6,511	25
FPR715AA	Footpath	The Avenue	Alison Road	Frances Street	-24	1994	\$36,848	25
FPR741AA	Footpath	Vicar Street	Coogee Bay Road	The End	-24	1994	\$26,389	25
Subtotal							\$543,450	
FPL119AB	Footpath	Bond Street	Bona Vista Avenue	Duncan Street	-23	1995	\$2,530	40
Subtotal							\$2,530	
FPL529DB	Footpath	Milroy Ave	Lenthall St	The End	-22	1996	\$21,172	25
FPL049BB	Other	Avoca Lane	Kara Street	Dine Lane	-22	1996	\$4,853	40
FPL077AA	Other	Bella Street	Pine Street	The End	-22	1996	\$19,619	40
Subtotal							\$45,645	
FPL119AB	Footpath	Maroubra Road	Duncan Street	Malabar Road	-21	1997	\$1,511	40
FPL581BC	Footpath	Oberon Street	Dundas Street	Arden Street	-21	1997	\$11,188	25
FPL581EC	Footpath	Oberon Street	Mount Street	Perouse Road	-21	1997	\$19,309	25
FPL591AC	Footpath	Oswald Street	Courland Street	Clyde Street	-21	1997	\$17,185	25
FPL645AD	Footpath	Pauling Avenue	Ritchard Avenue	Alison Road	-21	1997	\$44,893	25
FPL635ED	Footpath	Rainbow Street	Hendy Avenue	Mount Street	-21	1997	\$492	25
FPL657AB	Footpath	Runic Ln	Runic Ln Parking Area	Runic Ln Parking Area	-21	1997	\$30,234	25
Subtotal							\$124,813	
FPL031NA	Footpath	Anzac Pde	Boyce Rd	Maroubra Rd	-20	1998	\$49,121	50
FPL031OB	Footpath	Anzac Pde	Maroubra Rd	Haig St	-20	1998	\$171,190	50
FPL031OC	Footpath	Anzac Pde	Maroubra Rd	Haig St	-20	1998	\$45,205	50
FPL038GA	Footpath	Arden Street	Bream Street	Dolphin Street	-20	1998	\$103,494	50
FPL038JA	Footpath	Arden Street	Carr Street	Dudley Street	-20	1998	\$45,951	50
FPL039BB	Footpath	Arthur Street	Botany Street	Belmore Road	-20	1998	\$55,432	50
FPL423AA	Footpath	Judge Street	Coogee Bay Road	The End	-20	1998	\$29,683	25
FPL449AA	Footpath	Koorngai Ave	Yarra Rd	Baragool Ave	-20	1998	\$44,072	25
FPL449AB	Footpath	Koorngai	Yarra Rd	Baragool	-20	1998	\$22,650	25

FPL449AC	Footpath	Ave Koorngai Ave	Yarra Rd	Ave Baragool Ave	-20	1998	\$8,884	25
FPL529DA	Footpath	Milroy Ave	Lenthall St	The End	-20	1998	\$15,712	25
FPL612BB	Footpath	Perouse Road	Howard Street	Barker Street	-20	1998	\$65,207	25
Subtotal							\$656,600	
FPL031OA	Footpath	Anzac Pde	Maroubra Rd	Haig St	-18	2000	\$82,381	50
Subtotal							\$82,381	
FPR130IA	Footpath	Bunnerong Rd	Franklin St	Botany Rd	-15	2003	\$67,400	50
FPL162AC	Footpath	Carter Street	Avoca Street	Castle Street	-15	2003	\$29,352	40
FPR320AA	Footpath	Cedar Pl	Argyle Cres	The End	-15	2003	\$29,921	50
FPR745AA	Footpath	Villier St	Todman Av	Addison St	-15	2003	\$28,159	50
Subtotal							\$154,832	
FPL048EA	Footpath	Avoca Street	Belmore Road	Barker Street	-13	2005	\$78,971	50
FPL053AB	Footpath	Balfour Rd	Salisbury Rd	Duke St	-13	2005	\$63,711	50
FPL060AB	Footpath	Barker St	Cottenham Ave	Day Ln	-13	2005	\$42,655	50
FPL108FA	Footpath	Boyce Rd	The End	Hannan St	-13	2005	\$51,657	50
FPL062AB	Footpath	Gloucester Pl	Todman Ave	The End	-13	2005	\$34,930	50
Subtotal							\$271,924	
FPL053CA	Footpath	Balfour Rd	Todman Av	Addison St	-12	2006	\$126,701	50
FPL068CA	Footpath	Beach Street	The End	Arcadia Street	-12	2006	\$48,772	50
FPL079AC	Footpath	Belmore Road	Alison Road	Avoca Street	-12	2006	\$219,919	50
FPL079AD	Footpath	Belmore Road	Alison Road	Avoca Street	-12	2006	\$150,507	50
FPL113AA	Footpath	Bream Street	Beach Street	Arden Street	-12	2006	\$54,754	50
FPL113EB	Footpath	Bream Street	Melody Street	Carrington Road	-12	2006	\$65,001	50
FPL964AA	Footpath	Clove Lane	Darley Lane	Earl Street	-12	2006	\$7,524	25
FPL808AA	Footpath	Glanfield St	Bunnerong Rd	Glanfield St	-12	2006	\$448,646	25
FPL766AA	Footpath	Wentworth Lane	Wentworth Street	Dangar Lane	-12	2006	\$5,545	25
FPL765AG	Footpath	Wentworth Street	King Street	Darley Road	-12	2006	\$14,164	25
Subtotal							\$1,141,533	
FPR017AB	Footpath	Alexandria Parade	Wisdom Street	Ahearn Avenue	-11	2007	\$11,188	25
FPR031HD	Footpath	Anzac Pde	Sturt St	Botany St	-11	2007	\$19,259	25
FPL060AA	Footpath	Barker St	Cottenham Ave	Day Ln	-11	2007	\$88,623	50
FPL108DB	Footpath	Boyce Rd	Garden St	Anzac Pde	-11	2007	\$115,194	50
FPOFREC	Footpath	Frenchmans Bay Res			-11	2007	\$12,231	25
FPL715AA	Footpath	The Avenue	Alison Road	Frances Street	-11	2007	\$39,246	25

FPL754AC	Footpath	Waltham Street	Arden Street	Brook Street	-11	2007	\$25,399	25
FPL756AB	Footpath	Waratah Avenue	Botany Street	Belmore Road	-11	2007	\$1,849	25
FPL756AD	Footpath	Waratah Avenue	Botany Street	Belmore Road	-11	2007	\$2,112	25
Subtotal							\$315,101	
FPR020JA	Footpath	Alison Rd	Botany St	Wansey Rd	-10	2008	\$87,183	25
FPR031LB	Footpath	Anzac Pde	Gale Rd	Alma Rd	-10	2008	\$10,917	25
FPL818AC	Footpath	Prince Of Wales Dr	Bumborah Point Rd	Gates	-10	2008	\$6,430	25
Subtotal							\$104,529	
FPR198BC		Coogee Street	Courland Street	Judge Street	-9	2009	\$0	40
FPR267AB	Footpath	Elizabeth Street	Alison Road	Silver Street	-9	2009	\$8,061	40
FPR635GA	Footpath	Rainbow Street	Arden Street	Dundas Street	-9	2009	\$6,021	40
FPR635EC	Footpath	Rainbow Street	Hendy Avenue	Mount Street	-9	2009	\$3,861	40
FPR664AB	Other	Searle Avenue	Frenchmans Road	Clovelly Road	-9	2009	\$41,105	40
Subtotal							\$59,049	
FPR159DC	Footpath	Carr Street	Mount Street	Byron Street	-8	2010	\$6,138	25
FPR169AB	Footpath	Challis Lane	Wentworth Street	Earl Street	-8	2010	\$10,847	25
FPR171AC	Footpath	Chapman Avenue	Fenton Avenue	Maxwell Avenue	-8	2010	\$6,910	25
FPR982AB	Footpath	Clonard Wy	Little Bay Rd	Little Bay Rd	-8	2010	\$39,938	25
FPR964AA	Footpath	Clove Lane	Darley Lane	Earl Street	-8	2010	\$9,008	25
FPR191AA	Footpath	Clovelly Road	Darley Road	Earl Street	-8	2010	\$64,802	25
FPR191JB	Footpath	Clovelly Road	Donnellan Circuit	Victory Street	-8	2010	\$57,299	25
FPR197DA	Footpath	Coogee Bay Road	Mount Street	Brook Street	-8	2010	\$31,237	25
FPR197DC	Footpath	Coogee Bay Road	Mount Street	Brook Street	-8	2010	\$9,663	25
FPR197DE	Footpath	Coogee Bay Road	Mount Street	Brook Street	-8	2010	\$5,210	25
FPR218AA	Footpath	Dangar Lane	Darley Road	White Street	-8	2010	\$10,686	25
FPR137AA	Footpath	Darley Lane	Clovelly Road	Avoca Street	-8	2010	\$10,241	25
FPR221CC	Footpath	Darley Road	Market Street	Carrington Road	-8	2010	\$6,956	25
FPR221CE	Footpath	Darley Road	Market Street	Carrington Road	-8	2010	\$19,115	25
FPR221CF	Footpath	Darley Road	Market Street	Carrington Road	-8	2010	\$6,985	25
FPR240BD	Footpath	Doncaster Ave	Day Ave	Anzac Pde	-8	2010	\$5,474	25
FPR258AA	Footpath	Earl Lane	Stephen Street	Challis Street	-8	2010	\$18,766	25

FPR318GB	Footpath	Garden St	Green St	Maroubra Rd	-8	2010	\$5,155	25
FPR325AB	Footpath	George Street	Albert Street	Alison Road	-8	2010	\$8,197	25
FPR330AB	Footpath	Glen Avenue	Alison Road	The End	-8	2010	\$5,202	25
FPR433AA	Footpath	Kemmis Street	Clovelly Road	Frenchmans Road	-8	2010	\$30,482	25
FPR495AF	Footpath	Malabar Road	Rainbow Street	Arden Street	-8	2010	\$1,103	25
FPR500DC	Footpath	Marine Pde	Maroubra Rd	Fitzgerald Ave	-8	2010	\$24,520	25
FPR516CA	Footpath	Melody Street	Coogee Bay Road	Dolphin Street	-8	2010	\$14,599	25
FPR518AB	Footpath	Melrose Parade	Tower Street	The End	-8	2010	\$13,852	25
FPR635FF	Footpath	Rainbow Street	Mount Street	Arden Street	-8	2010	\$981	25
FPR766AA	Footpath	Wentworth Lane	Wentworth Street	Dangar Lane	-8	2010	\$5,571	25
FPR306BA	Other	Frances Street	Church Street	Cook Street	-8	2010	\$6,008	25
Subtotal							\$434,945	
FPL159AB	Footpath	Carr Street	Beach Street	Arden Street	-6	2012	\$84,091	50
FPL279AC	Footpath	Evelyn Street	Denning Street	Malabar Road	-6	2012	\$18,534	50
FPW694HC	Footpath	Storey Street	Amour Avenue	Malabar Road	-6	2012	\$4,273	25
FPW471AA	Footpath	Walkway	French St	Little St	-6	2012	\$27,447	25
FPW423BA	Footpath	Walkway	Judge Street	Clyde Street	-6	2012	\$14,298	25
Subtotal							\$148,642	
FPL152BAA	Footpath	Canberra Street	Rainbow Street	Oberon Street	-5	2013	\$53,250	50
FPL161CB	Footpath	Carrington Road	Dolphin Street	Coogee Street	-5	2013	\$11,505	50
FPL161CC	Footpath	Carrington Road	Dolphin Street	Coogee Street	-5	2013	\$12,625	50
FPL197ED	Footpath	Coogee Bay Road	Brook Street	Arden Street	-5	2013	\$22,503	50
FPL214AE	Footpath	Dacre St	Raglan St	Franklin St	-5	2013	\$1,151	50
FPL214AF	Footpath	Dacre St	Raglan St	Franklin St	-5	2013	\$1,294	50
FPL279AA	Footpath	Evelyn Street	Denning Street	Malabar Road	-5	2013	\$75,263	50
FPL308AA	Footpath	Franklin St	Bunnerong Rd	Blaxland St	-5	2013	\$46,086	50
FPL316CD	Footpath	Gale Rd	Hannan St	Anzac Pde	-5	2013	\$23,310	50
FPL350AA	Footpath	Haig Street	Anzac Parade	Mons Avenue	-5	2013	\$18,060	50
FPL365AA	Footpath	Havelock Avenue	Arden Street	Carr Street	-5	2013	\$142,015	50
FPL252AA	Footpath	Jacaranda Place	Elphinstone Road	The End	-5	2013	\$23,544	50
FPL252AB	Footpath	Jacaranda Place	Elphinstone Road	The End	-5	2013	\$13,636	50
FPL636CA	Footpath	Rainbow	Oberon Street	Howard	-5	2013	\$857	40

FPL642AB	Footpath	Lane Reserve Lane	Oberon Lane	Street Clarke Lane	-5	2013	\$9,424	40
Subtotal							\$454,523	
FPL130AA	Footpath	Bunnerong Rd	Gardeners Rd	Sturt St	-4	2014	\$27,490	50
FPL238BA	Footpath	Dolphin Street	Arden Street	Brook Street	-4	2014	\$91,810	50
FPL238AA	Footpath	Dolphin Street	The End	Arden Street	-4	2014	\$39,715	50
FPL369AG	Footpath	Helena Street	Avoca Street	Canberra Street	-4	2014	\$17,039	50
Subtotal							\$176,055	
FPL000AA	Footpath	Bernie Kelly Drive	Marine Parade	The End	-2	2016	\$2,332	80
Subtotal							\$2,332	
FPR127BC	Footpath	Bumborah Point Rd	Friendship Rd	Botany Rd	-1	2017	\$61,135	80
FPR128AA	Footpath	Bundock Street	Malabar Road	Hendy Avenue	-1	2017	\$16,937	80
FPR130ID	Footpath	Bunnerong Rd	Franklin St	Botany Rd	-1	2017	\$6,277	80
FPR132AA	Footpath	Burbong St	Anzac Pde	Avoca St	-1	2017	\$30,356	80
FPR161BG	Footpath	Carrington Road	Coogee Bay Road	Dolphin Street	-1	2017	\$9,043	80
FPR161FA	Footpath	Carrington Road	Marcel Avenue	Clovelly Road	-1	2017	\$10,985	80
FPR200FA	Footpath	Cooper Street	Boyce Road	Maroubra Road	-1	2017	\$3,573	80
FPR229BC	Footpath	Denning Street	Evelyn Street	Garie Place	-1	2017	\$6,440	80
FPR232AA	Footpath	Dick Street	Carrington Road	Glebe Street	-1	2017	\$23,164	80
FPR952AA	Footpath	Fewings Street	Greville Street	Susan Lane	-1	2017	\$5,026	80
FPR302AB	Footpath	Forrest St	Eyre St	Anzac Pde	-1	2017	\$29,236	80
FPW393BA	Footpath	Howard Street	Titania Street	Perouse Road	-1	2017	\$3,727	40
FPR470AB	Footpath	Lion Lane	Oberon Street	Lion Lane	-1	2017	\$3,198	80
FPR487AD	Footpath	Mckeeon St	Marine Pde	Duncan St	-1	2017	\$29,641	80
FPR548FE	Footpath	Moverly Rd	Henning St	Elphinstone Rd	-1	2017	\$38,932	80
FPR548GA	Footpath	Moverly Road	Elphinstone Road	Malabar Road	-1	2017	\$11,699	80
FPR772AA	Footpath	Willis St	Oval Ln	Barker St	-1	2017	\$46,390	80
Subtotal							\$335,759	
FPL005AA	Footpath	Aboud Ave	Gardeners Rd	Tresidder Ave	1	2019	\$64,894	80
FPL006AA	Footpath	Ada Street	Don Juan Avenue	The End	1	2019	\$5,130	80
FPL006AB	Footpath	Ada Street	Don Juan	The End	1	2019	\$11,369	80

FPL007AA	Footpath	Adams Ave	Avenue Nix Ave	Prince Edward St	1	2019	\$2,897	80
FPL007AC	Footpath	Adams Ave	Nix Ave	Prince Edward St	1	2019	\$3,481	80
FPL008BA	Footpath	Addison St	Kensington Rd	Anzac Pde	1	2019	\$17,441	80
FPL008BB	Footpath	Addison St	Kensington Rd	Anzac Pde	1	2019	\$23,891	80
FPL008AA	Footpath	Addison St	Tunstall Ave	Kensington Rd	1	2019	\$24,368	80
FPR287AA	Footpath	Argyle Cres	Henning Ave	The End	1	2019	\$19,007	50
FPR287AB	Footpath	Argyle Crescent	Henning Avenue	The End	1	2019	\$108,617	50
FPR287AC	Footpath	Argyle Crescent	Henning Avenue	The End	1	2019	\$9,300	50
FPR197DD	Footpath	Coogee Bay Road	Mount Street	Brook Street	1	2019	\$73,219	50
FPR285AA	Footpath	Ferguson St	Maroubra Rd	Wise St	1	2019	\$14,214	50
FPR316DA	Footpath	Gale Rd	Anzac Pde	Garden St	1	2019	\$34,663	50
FPR318GE	Footpath	Garden Street	Green Street	Maroubra Road	1	2019	\$13,737	50
FPR808CB	Footpath	Glanfield St	Glanfield St	The End	1	2019	\$122,681	50
FPR350AA	Footpath	Haig St	Anzac Pde	Mons Ave	1	2019	\$107,254	50
FPR252BA	Footpath	Jacaranda Place	Elphinstone Road	The End	1	2019	\$9,714	50
FPR448BA	Footpath	Koorinda Ave	Cottenham Ave	Mooramie Ave	1	2019	\$64,237	50
FPR503FA	Footpath	Maroubra Rd	Garden St	Anzac Pde	1	2019	\$202,731	50
FPR483AA	Footpath	Mcdougall St	Baker St	Lenthall St	1	2019	\$211,177	50
FPR571AA	Footpath	Norbar Ln	Kennedy St	Norton Ln	1	2019	\$9,405	50
FPR704AA	Footpath	St Luke Street	Coogee Bay Road	Dolphin Street	1	2019	\$20,214	50
FPR756AC	Footpath	Waratah Avenue	Botany Street	Belmore Road	1	2019	\$16,760	50
Subtotal							\$1,190,401	
FPL007AB	Footpath	Adams Ave	Nix Ave	Prince Edward St	2	2020	\$12,958	80
FPL009AA	Footpath	Adina Ave	Yarra Rd	Canara Ave	2	2020	\$1,289	80
FPR038CA	Footpath	Arden Street	Clovelly Road	Division Street	2	2020	\$8,671	25
FPR042AA	Footpath	Asher Street	Waltham Street	Havelock Avenue	2	2020	\$14,501	25
FPR053AB	Footpath	BALFOUR RD	SALISBURY RD	DUKE ST	2	2020	\$2,973	25
Subtotal							\$40,393	
FPL007AD	Footpath	Adams Ave	Nix Ave	Prince Edward St	3	2021	\$7,647	80
FPR045AB	Footpath	Athol	Denning Street	Malabar Road	3	2021	\$3,060	25
FPR048EA	Footpath	Avoca Street	Belmore Road	Barker Street	3	2021	\$95,158	25
FPR048BD	Footpath	Avoca Street	Clovelly Road	Cowper Street	3	2021	\$27,784	25
FPR053AD	Footpath	Balfour Rd	Salisbury Rd	Duke St	3	2021	\$3,551	25

FPL451AA	Footpath	Kurrawa Avenue	Carr Street	The End	3	2021	\$16,604	50
FPL492AB	Footpath	Magill Street	The End	Botany Street	3	2021	\$20,788	50
FPL483AA	Footpath	Mcdougall St	Baker St	Lenthall St	3	2021	\$187,617	50
FPL523AA	Footpath	Middle St	Anzac Pde	Harbourne Rd	3	2021	\$87,109	50
FPL635AA	Footpath	Rainbow St	Harbourne St	Rainbow St	3	2021	\$74,102	50
FPL678AA	Footpath	Silver Street	Belmore Road	Botany Street	3	2021	\$33,287	50
FPL702BB	Footpath	Surfside Avenue	Park Street	Keith Street	3	2021	\$3,603	40
Subtotal							\$560,309	
FPR038JB	Footpath	Arden Street	Carr Street	Dudley Street	4	2022	\$16,494	25
FPR048CB	Footpath	Avoca Street	Cowper Street	Alison Road	4	2022	\$17,515	25
FPL502AB	Footpath	Market Street	Avoca Street	The End	4	2022	\$52,145	50
FPL503GA	Footpath	Maroubra Rd	Anzac Pde	Hannan St	4	2022	\$121,415	50
FPL523BA	Footpath	Middle St	Harbourne Rd	Forsyth St	4	2022	\$109,671	50
FPL563AC	Footpath	Neptune Street	Wolseley Road	Beach Street	4	2022	\$19,676	50
FPW311AB	Footpath	Walkway	Duncan Ln	Duncan St	4	2022	\$7,710	25
Subtotal							\$344,626	
FPL025AA	Footpath	Abbe Receveur Pl	Grose St	The End	5	2023	\$26,174	80
FPL009CB	Footpath	Adina Ave	Elaroo Ave	The End	5	2023	\$1,741	80
FPL011AA	Footpath	Ahearn Avenue	Alexandria Parade	The End	5	2023	\$23,924	80
FPL012AA	Footpath	Ainslie St	Paton St	Avoca St	5	2023	\$39,129	80
FPL013AB	Footpath	Albert Street	Pitt Street	Avoca Street	5	2023	\$9,458	80
FPL013AD	Footpath	Albert Street	Pitt Street	Avoca Street	5	2023	\$19,365	80
FPL014AA	Footpath	Albi Place	Judge Street	The End	5	2023	\$10,912	80
FPL015AA	Footpath	Albion Street	Carrington Road	Pine Street	5	2023	\$20,078	80
FPL015AB	Footpath	Albion Street	Carrington Road	Pine Street	5	2023	\$12,645	80
FPL015AC	Footpath	Albion Street	Carrington Road	Pine Street	5	2023	\$21,400	80
FPL015AD	Footpath	Albion Street	Carrington Road	Pine Street	5	2023	\$10,237	80
FPL015AE	Footpath	Albion Street	Carrington Road	Pine Street	5	2023	\$26,022	80
FPL016AA	Footpath	Alexander Street	Dudley Street	Oberon Street	5	2023	\$39,018	80
FPL017AA	Footpath	Alexandria Parade	Wisdom Street	Ahearn Avenue	5	2023	\$17,544	80
FPL017AB	Footpath	Alexandria Parade	Wisdom Street	Ahearn Avenue	5	2023	\$719	80
FPL017AC	Footpath	Alexandria Parade	Wisdom Street	Ahearn Avenue	5	2023	\$1,438	80
FPL017AE	Footpath	Alexandria	Wisdom Street	Ahearn	5	2023	\$2,455	80

FPL018AC	Footpath	Parade Alfreda Street	Brook Street	Avenue Arden Street	5	2023	\$7,349	80
FPL020IA	Footpath	Alison Rd	Belmore Rd	Botany St	5	2023	\$56,265	80
FPL020JA	Footpath	Alison Rd	Botany St	Wansey Rd	5	2023	\$17,604	80
FPL020JB	Footpath	Alison Rd	Botany St	Wansey Rd	5	2023	\$38,522	80
FPL020JC	Footpath	Alison Rd	Botany St	Wansey Rd	5	2023	\$19,260	80
FPL020BA	Footpath	Alison Road	Arden Street	Brook Street	5	2023	\$7,914	80
FPL020BB	Footpath	Alison Road	Arden Street	Brook Street	5	2023	\$7,041	80
FPL020BC	Footpath	Alison Road	Arden Street	Brook Street	5	2023	\$7,613	80
FPL020BD	Footpath	Alison Road	Arden Street	Brook Street	5	2023	\$15,406	80
FPL020IA	Footpath	Alison Road	Belmore Road	Botany Street	5	2023	\$14,598	80
FPL020IB	Footpath	Alison Road	Belmore Road	Botany Street	5	2023	\$54,284	80
FPL020FA	Footpath	Alison Road	Carrington Road	Pitt Street	5	2023	\$10,905	80
FPL020FB	Footpath	Alison Road	Carrington Road	Pitt Street	5	2023	\$39,721	80
FPL020FC	Footpath	Alison Road	Carrington Road	Pitt Street	5	2023	\$21,526	80
FPL020FD	Footpath	Alison Road	Carrington Road	Pitt Street	5	2023	\$41,890	80
FPL020DA	Footpath	Alison Road	Leeton Avenue	Mount Street	5	2023	\$15,405	80
FPL020EA	Footpath	Alison Road	Mount Street	Carrington Road	5	2023	\$39,777	80
FPL020EB	Footpath	Alison Road	Mount Street	Carrington Road	5	2023	\$3,409	80
FPL020EC	Footpath	Alison Road	Mount Street	Carrington Road	5	2023	\$16,205	80
FPL020ED	Footpath	Alison Road	Mount Street	Carrington Road	5	2023	\$8,713	80
FPL020EE	Footpath	Alison Road	Mount Street	Carrington Road	5	2023	\$1,116	80
FPL020GA	Footpath	Alison Road	Pitt Street	Avoca Street	5	2023	\$14,737	80
FPL020GB	Footpath	Alison Road	Pitt Street	Avoca Street	5	2023	\$16,706	80
FPL020GC	Footpath	Alison Road	Pitt Street	Avoca Street	5	2023	\$41,050	80
FPL023AA	Footpath	Allan Avenue	Keith Street	The End	5	2023	\$16,369	80
FPL024BC	Footpath	Alma Road	Garden Street	Cooper Street	5	2023	\$8,176	80
FPL027AA	Footpath	Amour Avenue	Storey Street	Johnston Parade	5	2023	\$33,671	80
FPL027AB	Footpath	Amour Avenue	Storey Street	Johnston Parade	5	2023	\$12,904	80
FPL513AA	Footpath	Meeks St	Anzac Pde	Harbourne Rd	5	2023	\$68,969	50
FPL527AD	Footpath	Military Rd	Bumborah Point Rd	Bunnerong Rd	5	2023	\$60,800	50
FPL677AA	Footpath	Short Street	Avoca Street	Belmore Road	5	2023	\$75,360	50
Subtotal							\$1,075,525	
FPL010AA	Footpath	Aeolia Street	Perouse Road	Aeolia Lane	6	2024	\$16,268	80
FPL013AC	Footpath	Albert Street	Pitt Street	Avoca Street	6	2024	\$10,555	80

FPL017AD	Footpath	Alexandria Parade	Wisdom Street	Ahearn Avenue	6	2024	\$6,033	80
FPL020AB	Footpath	Alison Road	Beach Road	Arden Street	6	2024	\$5,636	80
FPL020CA	Footpath	Alison Road	Brook Street	Leeton Avenue	6	2024	\$22,312	80
FPL022AB	Footpath	Alkoo Ave	Woonah St	Mirrabooka Cres	6	2024	\$8,864	80
FPL024EA	Footpath	Alma Rd	Width Change	Bell Street	6	2024	\$8,105	80
FPL024AC	Footpath	Alma Road	Anzac Parade	Garden Street	6	2024	\$9,213	80
FPL024CA	Footpath	Alma Road	Cooper Street	Flower Street	6	2024	\$68,584	80
FPL024BA	Footpath	Alma Road	Garden Street	Cooper Street	6	2024	\$8,019	80
FPL024BB	Footpath	Alma Road	Garden Street	Cooper Street	6	2024	\$7,894	80
Subtotal							\$171,483	
FPL022AA	Footpath	Alkoo Ave	Woonah St	Mirrabooka Cres	7	2025	\$24,119	80
FPL024AB	Footpath	Alma Road	Anzac Parade	Garden Street	7	2025	\$42,460	80
FPW108CA	Footpath	Boyce Road	Cooper Street	Garden Street	7	2025	\$2,054	40
FPR723AC	Footpath	Lion Street	Oberon Street	Howard Street	7	2025	\$1,340	40
FPR619AA	Footpath	Pitt Street	Alison Road	The End	7	2025	\$1,429	40
Subtotal							\$71,402	
FRR075BB	Footpath	Bell St	Boyce Rd	The End	8	2026	\$4,895	25
FPW241AA	Footpath	Don Juan Avenue	Coogee Bay Road	The End	8	2026	\$3,127	25
FPR241AA	Footpath	Don Juan Avenue	Coogee Bay Road	The End	8	2026	\$6,982	25
FPR955AA	Footpath	Stanley Street	Avoca Street	Monmouth Street	8	2026	\$22,721	25
FPR740AA	Footpath	Varna Street	Fern Street	Arden Street	8	2026	\$4,180	25
Subtotal							\$41,906	
FPW238FA	Footpath	Dolphin Street	Carrington Road	Judge Street	9	2027	\$9,040	50
FPR1021AA	Footpath	Power Lane	Earl Street	Castle Lane	9	2027	\$1,254	25
FPR1021AB	Footpath	Power Lane	Earl Street	Castle Lane	9	2027	\$4,918	25
Subtotal							\$15,212	
Program Total							\$10,475,089	

Appendix B Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management		Randwick CC																		
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Footpaths_S3_V1		Asset Management Plan																		
First year of expenditure projections 2018 (financial yr ending)		 																		
Asset values at start of planning period Current replacement cost \$131,234 (000) Depreciable amount \$131,234 (000) Depreciated replacement cost \$87,613 (000) Annual depreciation expense \$1,846 (000)		Operations and Maintenance Costs for New Assets Additional operations costs 0.56% Additional maintenance 0.92% Additional depreciation 1.41% Planned renewal budget (information only) You may use these values calculated from your data or overwrite the links.																		
Planned Expenditures from LTFP 20 Year Expenditure Projections Note: Enter all values in current 2018 values		Existing %ages calculated from data in worksheet 0.56% of CRC (10 yr average) 0.92% of CRC (10 yr average) 1.41% of Dep Amt 1.41% of CRC (Year 1 comparison)																		
Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)																				
Operations											Average of first 10 year Expenditure Outlays from LTFP									
Operations budget	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731	\$731
Maintenance											Average of first 10 years Expenditure Outlays required from IRMP									
Reactive maintenance budget	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181	\$181
Planned maintenance budget	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211	\$1,211
Capital											Average of first 10 years Capital Renewal & Upgrade Forecasts									
Planned renewal budget	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850	\$1,850
Planned upgrade/new budget	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals																				
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DPC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)																				
Additional Expenditure Outlays required and not included above	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)																			
Capital Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
User Comments #2																				
Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)																				
Forecast Capital Renewal from Forms 2A & 2B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Forecast Capital Upgrade from Form 2C	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500

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