Asset Management Strategy

2013 - 2023

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The City of Newcastle

1623-FEB15

The City of Newcastle Council acknowledges that we are meeting on the traditional country of the Awabakal and Worimi peoples.

We recognise and respect their cultural heritage, beliefs and continuing relationship with the land, and that they are the proud survivors of more than two hundred years of dispossession.

Council reiterates its commitment to address disadvantages and attain justice for Aboriginal and Torres Strait Islander peoples of this community.

Asset Management Strategy prepared by the Corporate Services Group of Newcastle City Council.

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This is the third revision of the Asset Management Strategy for The City of Newcastle in accordance with the NSW Integrated Planning and Reporting (IPR) Legislation.

The Strategy was prepared in collaboration with Council's planning and operational asset management staff and senior management.

This plan reflects our intentions at the time of publication. As with any plan or budget, the actual results may vary from that forecast.

View the document online at www.newcastle.nsw.gov.au.

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Contents

Document Control

Rev No	Date	Revision Details	Author	Reviewer	Approver
1	23 May 2011	Version 1	AM,JR, CL (JRA)	JR (JRA), CoN	JRA & CoN
2	27 May 2011	Version 1.1 – Updated maturity audit results	AM,JR, CL (JRA)	JR (JRA), CoN	JRA & CoN
3	19 July 2011	Version 1.2 - Sections revised by The City of Newcastle	SPS (CoN), JM, JR (JRA)	SPS, PCG, ELT (CoN)	CoN
5	May 2013	Version D2.0	EM, Corporate Planner	PCG, ELT, Manager Organisational Performance	General Manager
6	February 2015	Version D3.0	GW	KA	AG

1 Executive summary

This Asset Management Strategy (AMS) documents the objectives for asset management for The City of Newcastle and provides a summary by asset class for council managed assets. As assets only exist to support service delivery, Council's aim in producing the Asset Management Policy and Strategy is to ensure that the assets managed by Council deliver appropriate levels of service for our community sustainably into the future.

1.1 Legislation

The Division of Local Government released an updated version of the *'Integrated Planning and Reporting Guidelines for local government in NSW Planning a sustainable future'* in March 2013. No changes were made to the essential elements included in the guideline. As such, no detailed changes have been made to this strategy in relation to legislative requirements.

The Independent Local Government Review Panel in their paper '*Future Directions for NSW Local Government Twenty Essential Steps'* April 2013 suggests Councils:

- give effect to long-term financial and asset management plans prepared fully in accordance with IP&R guidelines, and certified as such by the Mayor and General Manager,
- clearly justify any proposed increases in services or new assets, based on regular service reviews and community consultation to determine appropriate levels of services, and
- incorporate substantially increased funding for infrastructure maintenance and renewal.

These suggestions have been considered during the review of this document and the development of strategic priorities and funding.

1.2 Delivery Program 2013 – 2017 and Long Term Financial Plan

The Delivery Program 2013 – 2017 forecasts a net overall funding surplus of $6.5 million for the 2014/2015 financial year. This funding position is heavily reliant on Council reserves as a funding source with a deficit operating result of $11.9 million forecast for the 2014/2015 financial year.

The Long Term Financial Plan 2015-2025 (LTFP) offers a more detailed analysis of Council's financial position and the financial impact under multiple scenarios is considered. Scenarios 2 and 3 are the preferred scenarios as supported by the community with both scenarios providing financial sustainability for Council's long term future.

The scenarios are summarised over the page:

Scenario	Description	Inputs and Assumptions
Scenario 1 Base case	This scenario is business-as-usual. Maintaining current service levels and seeking to meet all goals reflected in the delivery program and other IP&R documents.	The following inputs and assumptions apply across all scenarios unless specifically varied: **Revenue:** Rate peg is 2.4% for 2015/16 and 3% for all subsequent years. **Expense:** CPI is assumed to be at the mid-point in the RBA target range (2.5% within the 2% to 3% band). The LTFP has relied on strategic asset management inputs for sustainable asset maintenance (utilising a 10 year horizon – in line with the time horizon of the LTFP). **Asset related:** Infrastructure Backlog is sourced from 2013/14 financial statements and the sustainable asset renewal is also sourced from the Strategic Asset Management Plan (SAMP) and also is based on a 10 year horizon.
Scenario 1B Borrowing	This scenario is the same as Scenario 1 except borrowing will be utilised to address funding shortfalls.	Additional **$20m borrowing** per annum from FY18 to FY23. Total borrowing of $120m.
Scenario 1C Lower service and capital works	This scenario is the same as Scenario 1 except operating deficits and funding shortfalls of that scenario are addressed by reducing services and capital works.	**Less** services: Lower employee costs by 4% **Less services:** Lower materials and contracts costs by 4**%** **Lower maintenance**: By 15% (similar to 2013/14 ratio) **Less capital works/ asset renewal:** Reduced by **$5m pa** for FY18, FY19 and $10m pa up to FY23. **Less capital works**: Corporate reduced by **$2m pa** from FY16 to FY23.
Scenario 2 Financial Sustainability	Scenario 2 seeks to realise the objectives of the base case by seeking a SRV to address the operating deficit and funding shortfall.	**Proposed SRV across five years with the following rate increases:** 2015/16 and 2016/17 of **6.8%,** 2017/18 of **6.6%** and 2018/19 and 2019/20 of **6.5%.**
Scenario 3 Financial Sustainability & revitalisation	Scenario 3 incorporates the objectives of scenario 2 however also seeks to improve or expand Council services in line with community expectations to support the revitalisation of the city.	**Proposed SRV across five years with a rate increase** from 2015/16 to 2019/20 of **8%.** Additional expenditure on services.

Table 1 shows the operating surplus/(deficit) result for each scenario over a 10 year projections.[1]

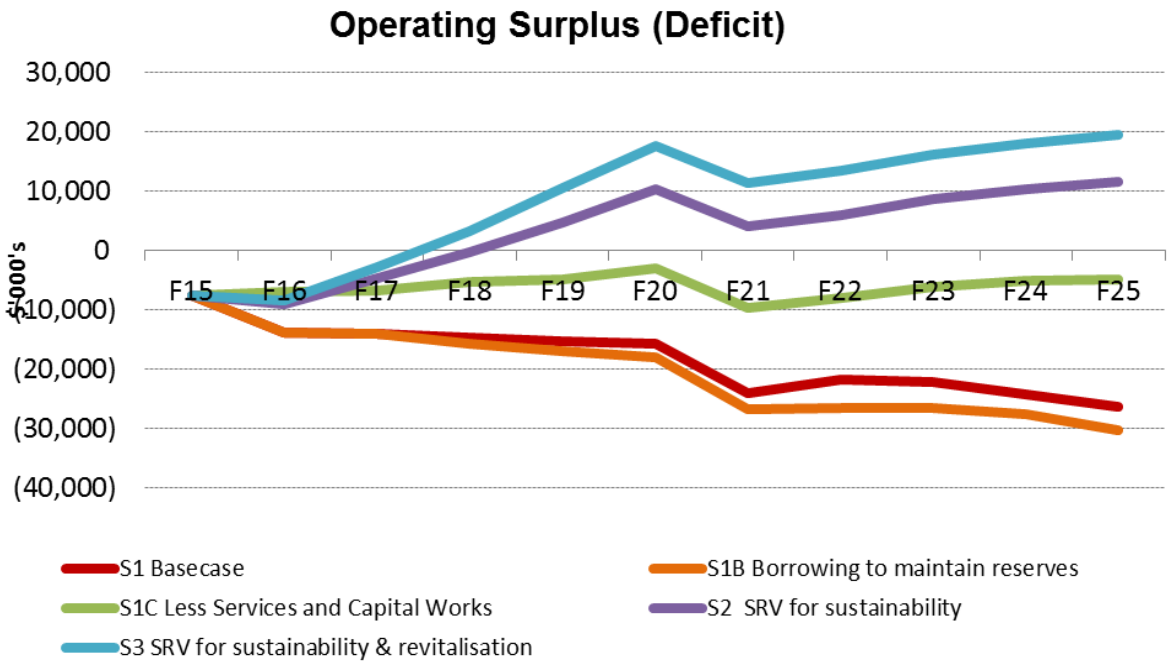


Figure 1: Net Overall Position[1]

On 18 April 2013 Council adopted 11 budget principles[2] to guide the organisation in implementing strategies to ensure the ongoing financial sustainability.

The principles which directly relate to asset management include:

Principle 3:	Maintain a minimum of 2.7% net overall funding surplus for each and every budget year from 2015/2016 until 2021/2022
Principle 4:	Identify redundant assets for disposal and for the proceeds to be placed in the land and property reserve
Principle 6:	Reduce the infrastructure backlog ratio to less than 2% over the next 10 years or $32 million (in 2012/2013 dollars)
Principle 7:	To restrict debt levels so that the net financial liabilities ratio of 40% is not exceeded in any one year between 2013/2014 and 2021/2022

[1] LTFP 2015-2025 Page 104
[2] ECL 18/04/13 – Report on Budget Principles relating to 2013/2014 Operational Plan 4 year Delivery Program and 10 year Financial Plan / 130418 Extraordinary Council Meeting Minutes

Table 2 shows the Capital funding for asset renewal for the period 2013/2014 to 2016/2017.[3]

	Operational Plan		*LTFP 2015-2025*	
	2013/14 adopted budget $'000	***2014/15 adopted budget $'000***	***2015/16 forecast budget $'000***	***2016/17 forecast budget $'000***
Capital Expenses				
Asset renewals	25,000	24,505	39,140	40,211
New / upgrade	13,314	19,239	26,000	22,450
Special Projects	7,047	11,245	6,171	6,344
Total capital spend	**45,361**	**55,989**	**71,311**	**69,005**

The breakdown of the $11.245 million for special projects for the 2014/2015 is:

- Hunter Street Revitalisation $1.431 million
- Coastal Revitalisation $9.813 million

1.3 Infrastructure backlog

The infrastructure backlog has been reduced from $117m (Special Schedule 7 of the 2011/12 financial statements) to $90.4m (Special Schedule 7 of the 2013/14 financial statements). This is a significant reduction in the asset backlog. The biggest component of this backlog is the buildings and structures category. The backlog for this category has reduced from $89m to $44m. The priority has been to dispose of non-core assets which themselves contributed to the infrastructure backlog. This has largely been completed and has been the main contributor to the reduction in the backlog.

The AMS covers the methodology for determining required (sustainable) levels of infrastructure maintenance and renewal and the determination for the infrastructure backlog. If the proposed special rate variation (SRV) does not proceed Council's financial situation would become very dire.

The comparison between the respective financial positions of scenario 1 (base case) and scenario 2 (financial sustainability reflect this). The only difference between these 2 scenarios is an SRV. By 2025 scenario 1 has a closing reserves position of $26m (compared to a closing position of $242m in 2014) and borrowing has increased from $69m to $104m and ongoing funding challenges. Scenario 2 meanwhile has $185m in reserves and only $29m in debt and a stabilised funding position. Scenario 3 (revitalisation) reflects a similar position. There is a vast difference between the base case and the SRV scenarios. The difference is approximately $234m.

Professor Percy Allen describes very succinctly the following path of the asset life cycle (Newcastle Report p48):

"*Infrastructure – Condition for a typical asset:*

[3] Delivery Plan 2013-2017 pg 42

- *condition will degrade with age*
- *degradation starts gradually and accelerates towards the end of the asset's life*
- *as the assets condition degrades the level of service it provides declines*
- *the cost to maintain the asset increase with time*
- *when service levels fall below a certain standard the condition of the asset must be improved (i.e. renewed or refurbished) and*
- *eventually the cost to maintain the asset will exceed the benefit of keeping it in service and the asset must be replaced."*

There is an optimal process to be followed in maintaining assets that minimises the cost to Council. Deviating from this optimal path of ongoing maintenance and renewal will actually add further cost to Council. If the full $234m funding shortfall resulted in reduced investment in infrastructure maintenance, renewal and backlog reduction then the financial impact to Council is likely to be significantly more than the $234m investment proposed and would require a greater response at a later date. The backlog would still require funding to address the problem and the funds required would likely result in a greater impact on the community. In the interim service levels would degrade due to assets not being in a satisfactory condition.

The key asset in the backlog remains Newcastle City Hall. Restorartion of the sandstone cladding is estimated at $21millio and the most urgent component is the restoration of the clock tower. This work is currently underway with Council obtaining a $7.5million low interest loan via the local infrastructure renewal scheme (LIRS).

Merewether Baths was another significant asset with a backlog of works. A $2.5million LIRS loan was also obtained to renew this asset and the work was completed in November 2014 ahead of schedule and within budget.

Realistically with gross assets of $1.6 billion constituting predominantly roads, pathways and drainage assets there are limits to the scale of assets that can be sold and consequently there is limited opportunity to significantly reduce the backlog through further asset sales. It is insufficient maintenance of these core infrastructure assets (i.e. roads, pathways and drainage) which has been the main contributor to the backlog. As budgets became constrained Council reduced expenditure on infrastructure maintenance. (Scenario 1C reflects the impact of this practice continuing).

The future asset disposal plan will not result in significant reduction in the asset backlog (as these assets are generally in a satisfactory condition). The sale of the assets will however provide some proceeds which can fund work on asset renewal, however the sale funds will fall well short of the level required to fund the required reduction in the asset backlog.

All scenarios of the LTFP, except 1C (lower service and capital investment) incorporate the capital works necessary to reach (and exceed) the 2% target by 2022-2023 (the 10 year target). But only secnarios 2 and 3 will achieve this objective in a financially sustainable way.

The AMS reflects important data that flows into the LTFP including the required levels of asset maintenance and renewal to stabilise the backlog and the methodology for assessing whether assets are in a satisfactory condition and a quantification of the asset backlog. Asset renewal projects have also been identified.

The data in this AMS has been incorporated into the LTFP to enable a sustainable projection to be projected of how the infrastructure backlog can be reduced to the 2% target. An extract from the LTFP financial model reflects this analysis:

Asset Backlog *For the year ended 30 June*	Actual 2013 $'000	Actual 2014 $'000	Forecast 2015 $'000	Forecast 2016 $'000	Forecast 2017 $'000	Forecast 2018 $'000
Opening Asset Backlog	-	-	90,438	95,181	99,144	89,931
Asset Maintenance & Renewal	-	-	49,314	63,549	65,158	71,324
Maintenance	-	12,466	15,333	15,625	15,921	16,224
Employee Costs	-	-	7,667	7,812	7,961	8,112
Materials & Contracts	-	-	7,667	7,812	7,961	8,112
Asset Renewal	-	-	33,981	47,925	49,237	55,100
Capitalised	9,681	14,827	27,752	39,140	40,211	45,000
Expensed	-	-	6,229	8,785	9,025	10,100
Maintenance & Renewal Required to Stabilise Backlog	47,253	43,858	54,057	55,138	55,945	56,697
Maintenance Required	17,253	14,466	15,241	15,545	15,773	15,985
Asset Renewal required - Capitalised	30,000	29,392	30,104	30,706	31,156	31,574
Asset Renewal required - Expensed			8,712	8,886	9,016	9,138
Net reduction (increase) in Asset Backlog	-	7,242	(4,743)	8,411	9,213	14,627
Indexation Factor			0	0	0	0

Asset Backlog *For the year ended 30 June*	Forecast 2019 $'000	Forecast 2020 $'000	Forecast 2021 $'000	Forecast 2022 $'000	Forecast 2023 $'000	Forecast 2024 $'000	Forecast 2025 $'000
Opening Asset Backlog	75,304	58,840	41,780	38,994	31,148	25,741	19,766
Asset Maintenance & Renewal	74,081	75,620	78,146	77,290	75,829	77,435	79,049
Maintenance	16,532	16,846	19,373	19,741	20,116	20,499	20,888
Employee Costs	8,266	8,423	9,687	9,871	10,058	10,249	10,444
Materials & Contracts	8,266	8,423	9,687	9,871	10,058	10,249	10,444
Asset Renewal	57,549	58,773	58,773	57,549	55,712	56,937	58,161
Capitalised	47,000	48,000	48,000	47,000	45,500	46,500	47,500
Expensed	10,549	10,773	10,773	10,549	10,212	10,437	10,661
Maintenance & Renewal Required to Stabilise Backlog	57,617	58,560	68,466	69,444	70,422	71,460	72,503
Maintenance Required	16,244	16,510	19,303	19,579	19,854	20,147	20,441
Asset Renewal required - Capitalised	32,087	32,612	38,129	38,674	39,218	39,796	40,377
Asset Renewal required - Expensed	9,286	9,438	11,034	11,192	11,350	11,517	11,685
Net reduction (increase) in Asset Backlog	16,464	17,060	9,680	7,846	5,407	5,975	6,547
Indexation Factor	0	0	0	0	0	0	0
Backlog revaluation adjustment	-	-	6,894	-	-	-	-
Closing Asset Backlog (Surplus)	58,840	41,780	38,994	31,148	25,741	19,766	13,219

Figure 2: Capital Works Funding

1.4 Current funding status

The capital expenditure program has been set and prioritised based on a rigorous process of consultation that has enabled Council to assess needs and develop sound business cases for each project. There is however, a strong focus on reducing Council's asset backlog to less than 2% by 2023 and therefore a majority of the available funding for capital works has been directed to asset renewal.

Also based on the budget principles, Council discontinued loan borrowing for infrastructure renewal. Instead, funding for the MAPP will be achieved through generation of internal funds from operations, capital grants and contributions, asset sales and reserve funds.

1.5 Asset policy

The Asset Management Policy (**Attachment 1)** sets out the framework for the management of Council assets throughout the asset life cycle

As required by IP&R legislation, the Asset Management Steering Group completed a review of the Asset Management Policy and adopted a revised Policy in August 2012. Further information on Council's Asset Management Policy is included in **Chapter 2.2**.

1.6 Asset classifications

Council currently manages an asset portfolio of $1.6 billion, delivering services across eight core asset classes. Asset classes refer to the grouping of like asset categories such as pavement under the asset class of roads[4]. The asset classes utilised are:

Core Assets

- Buildings and structures
- Natural assets
- Parks and recreation
- Stormwater drainage
- Transport

Facilities

- Art Gallery collection
- Library collection
- Museum collection

1.7 Current condition of assets

The condition of assets covered within the AMS for the four core asset classifications have been assessed using a condition rating system

- 0 – new asset to
- 10 – asset has failed and is no longer serviceable and should not remain in service. There would be an extreme risk in leaving the asset in service.[5]

[4] Asset Management Policy, 2013

[5] The Newcastle Report: issues for sustainability A report on the financial sustainability of Newcastle City Council, Review Today Pty Ltd, 2007 pg 49

Intervention levels for these asset classes and the % of assets exceeding the intervention level are shown in the following table:

Asset Class	Intervention Level	% of Asset Class below intervention level
Buildings and structures	Condition 6.5	10%
Natural	Condition 8 - 9	5%
Traffic and transport	Condition 7 - 8	20%
Drainage	Condition 8	5%

The community's satisfaction levels regarding asset condition is mostly satisfied. As can be seen from the Community Survey snapshot 2014 (pg31) asset intensive services are ranked around the middle of the list of satisfaction ratings.

The survey snapshot includes the following services:

- *Roads are in good condition: 49% are satisfied or very satisfied*
- *Swimming pools: 45% are satisfied or very satisfied*
- *Footpaths are in good condition: 44% are satisfied or very satisfied*
- *Providing cycleways: 31% are satisfied or very satisfied.*

These ratings would indicate Council is applying appropriate standards in the determination of satisfactory condition as deemed by the community however, needs to be more responsive in addressing assets which have degraded beyond Council's standards, but may still appear to be providing satisfactory service at this point in time. These assets would be incorporated in the backlog.

1.8 Asset revaluation

Council's infrastructure assets are valued every five years to ensure valuations are reflective of the likely replacement cost. Council is currently undertaking an asset valuation exercise for roads, drainage, bridges and footpaths. This will be completed by June 2015 and the impact will be reflected in the 2015/16 financial year. Council will also be undertaking a review of what is the useful life of Council assets in conjunction with the asset revaluation exercise.

The preliminary view based on progress in the asset revaluation exercise is:

- the review of assets will result in assets being added to the register that currently are not included (no adjustment has been made for this and therefore this element of the adjustment is understated)
- total replacement cost is likely to increase above CPI over the last five years (initial analysis of some core asset classes for the revaluation indicates total cost of replacement could increase by approximately 3.46% per annum). This has been used to approximate the revaluation and
- the capitalised component of the total replacement cost is likely to reduce as stricter guidelines are followed on what costs can be capitalised as part of the value of the asset. In future a strict "greenfields" view will be followed as part of determining fair value of assets.

1.9 Risk management

Adoption of the AMS assists Council in meeting the requirements of the IP&R guidelines for NSW (2010) and to ensure that Council's asset portfolio will continue to meet the needs of our community in a sustainable and responsible manner.

1.10 Workforce planning

According to the Independent Local Government Review Panel

> *'Skills shortages are of growing concern and in a highly competitive labour market local government needs to give a high priority to developing the talents of its workforce and finding new ways to attract and retain skilled personnel'.*[6]

Further the *Government Skills Australia 2012 Environmental Scan* identified engineers, planners, and surveyors among the most difficult for local government to recruit.[7] The City of Newcastle's *Workforce Management Plan* (2013) has identified that the proximity of Newcastle to the Hunter Valley mines and other heavy industry located in the Upper Hunter has placed increased demands on particular skills such as engineering and trades. Engineering has long been an issue in terms of recruitment due to the competitive market for wages locally.

Another issue for local government affecting *'hard to fill roles'* is the ageing workforce creating *'significant challenges in filling the employment gaps as older employees retire and leave the workforce.*[8]*'* At Council:

- 27% of our current workforce is aged 50 years or older and will likely exit over the next 15 years through retirement,
- 20% of the staff that are aged 50 years or older are in *'hard to fill'* roles and
- 16% of the workforce will also then move into the aged 50 years or older age bracket over the next five years.

[6] Future Directions for NSW Local Government: Twenty Essential Steps, April 2013, Independent Local Government Review Panel
[7] Future-Proofing Local Government: National Workforce Strategy 2013-2020, ACELG/Local Government Managers Australia, April 2013
[8] National Skills Shortage Strategy for Local Government – May 2007, p9

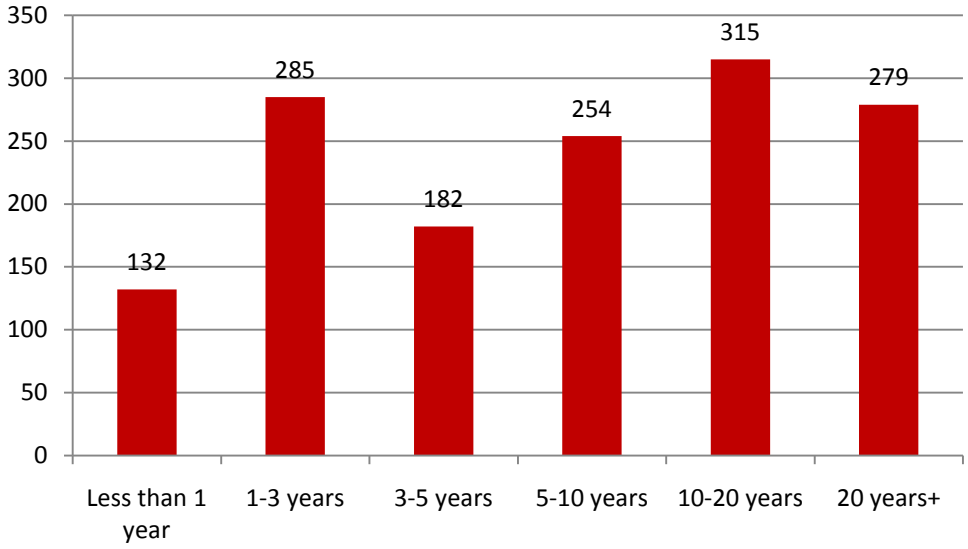


Figure 3: Years of service

The average length of service across Council is approximately 10years.

Where it has been identified that additional people resources will be required to deliver on the priorities contained within the AMS, it is most likely these resources will be brought into Council as either fixed term contracts or labour hire, both of which sit outside our approved EFT (staff establishment).

The critical positions in relation to asset management are:

- Infrastructure Project Manager
- Infrastructure Project Officer
- Senior Civil Project Officers; and
- Civil Project Officers.

Where critical roles were identified within service units, further work will be undertaken, with managers, to develop succession plans for these roles as appropriate.

Further, risk assessments show a shortage in resources in relation to finalisation of data sets for all asset classes.

Council has completed a detailed review of the issues and challenges of meeting our future workforce needs. A *Human Resource Strategy* has been developed to meet both our workforce planning needs and our broader employee and organisation needs now and into the future.

The *Human Resource Strategy*[9] aims to ensure human resources processes, policies and objectives support the needs of the organisation to help it achieve its mission, vision and values. The strategy will also help Council deliver the Newcastle 2030 Community Strategic Plan and objectives.

[9] Appendix 2 – Workforce Management Plan 2013

2 Asset Management Framework

This is the third edition of the Asset Management Strategy prepared by The City of Newcastle in accordance with the requirements set by the Division of Local Government (DLG) *Integrated Planning and Reporting (IPR) Guidelines 2010* for NSW. Local councils in NSW are required to undertake their planning and reporting activities in accordance with the *Local Government Act 1993* and the *Local Government (General) Regulation 2005*.

2.1 Integrated planning and reporting

In accordance with the legislative requirements, Council has developed the following plans:

- Community Strategic Plan (CSP) (externally focused) endorsed by Council 25 June 2013
- Delivery Program 2013-2017 incorporating the Operational Plan and Fees and Charges for 2014/2015 adopted by Council 18 June 2013.
- Resource strategies (endorsed by the Executive Leadership Team June 2013):
  - *Asset management plans and Strategy (this plan)*
  - Long Term Financial Plan (LTFP)
  - Workforce Management Plan (WMP)
  - Information and Communication Technology Strategic Plan (ICTSP).

The CSP identifies the community's main priorities and expectations for the future in the context of social, environmental, economic and governance themes.

The purpose of the resourcing strategies is to support and inform integrated, sustainable, long term planning towards meeting the strategies and objectives of the CSP.

The asset management plan is to be read in conjunction with the documentation listed above.

Figure 3 shows Council's framework for implementation of Integrated Planning and Reporting.

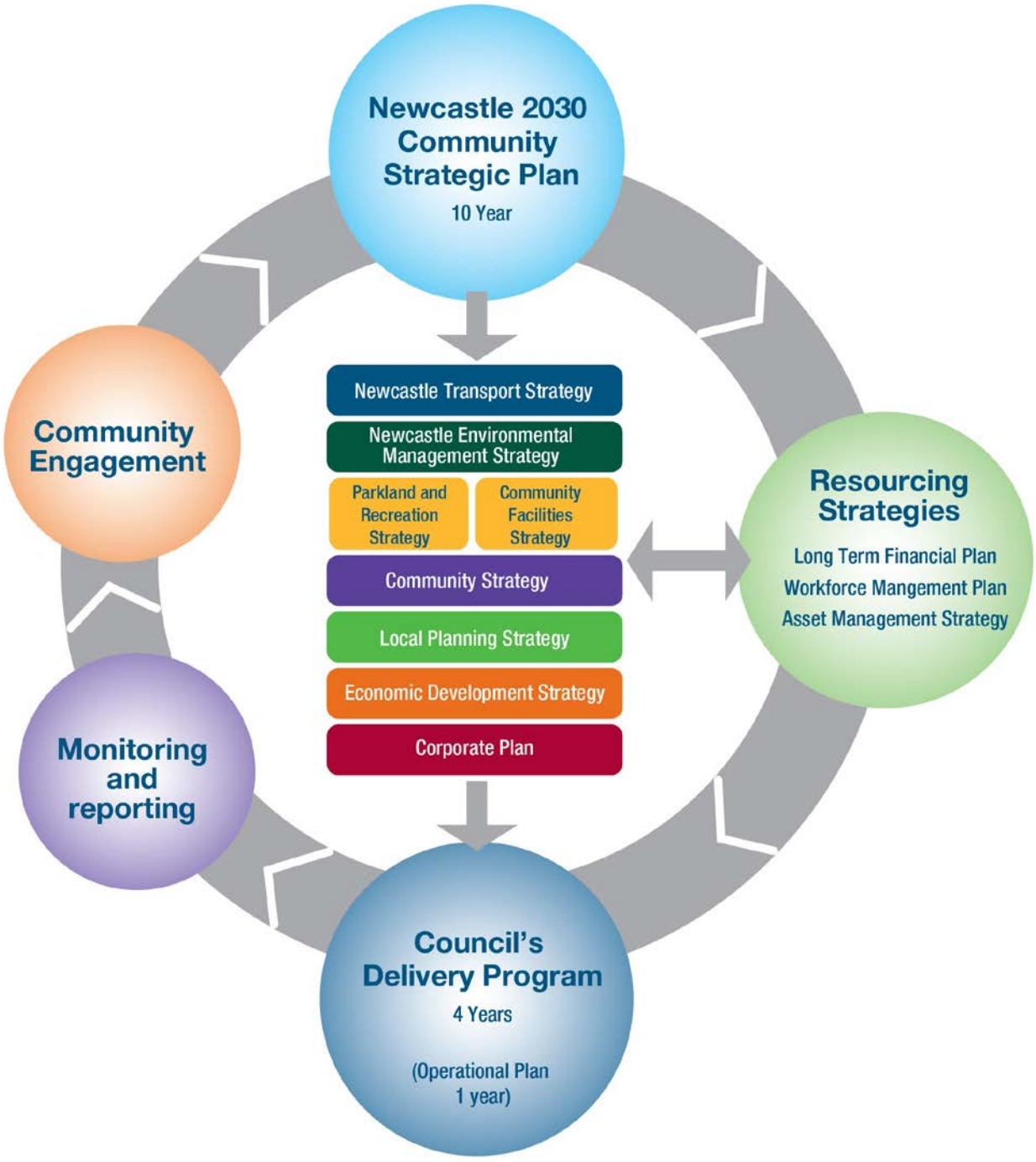


Figure 3: The City of Newcastle Integrated Planning and Reporting Framework

2.2 Key areas of asset management planning

An asset management framework should generally include an Asset Management Policy, Strategy and Plan.

Asset management planning aims to optimise services to the community at a cost and risk that is acceptable. To assist in undertaking this, Council developed various sustainability planning tools as required under IP&R framework as follows:

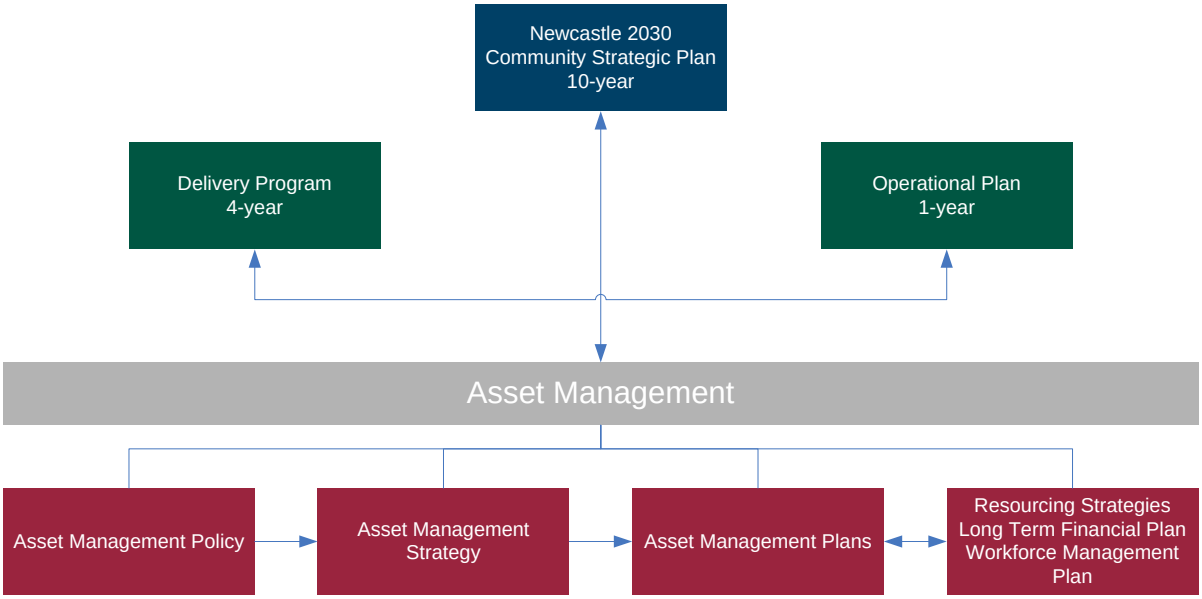


Figure 3.1 – Asset Management Planning Hierarchy

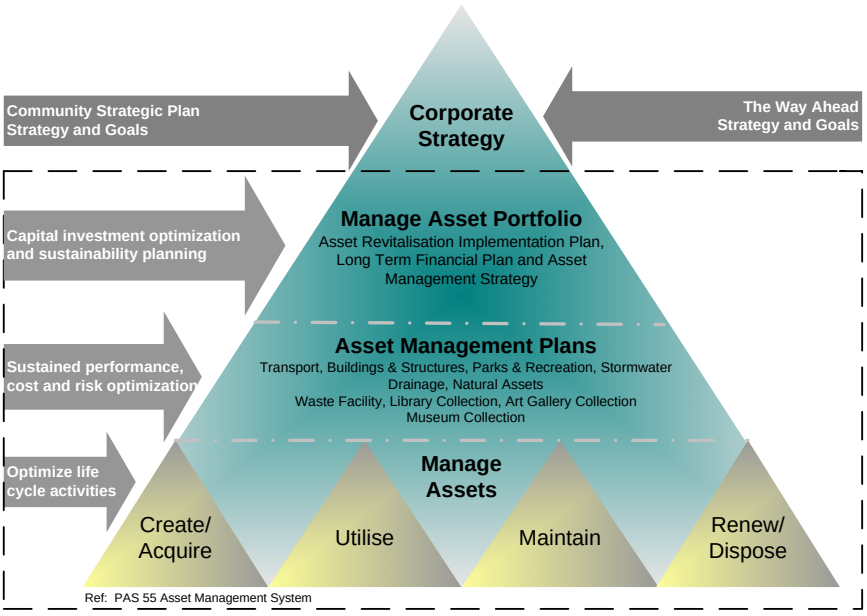


Figure 3.2 – Asset Management Framework

The following key areas of asset management will guide Council's future asset management 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 -** Council will balance financial, environmental and social aspects to achieve best value for the community and aim to meet the community's needs and expectations regarding assets and asset infrastructure services.

4 **Decision support systems and knowledge –** systems will be integrated with core packages enabling the measurement, monitoring, evaluation, and reporting on the performance of assets to enable better and more informed decisions in line with Council's Information and Communication Technology Strategic Plan.

5 **Service levels –** Asset service levels in addition to condition based levels will be clearly defined and reflect the needs of the community through ongoing community consultation, meet corporate policy objectives and balance capital investment, operational safety and costs.

6 **Long Term Financial Plan (LTFP) –** Asset practices, plans and systems will enable the development of long term financial plans for asset classes.

7 **Workforce Management Plan (WMP) –** Human resources will be identified and allocated to meet service level requirements.

8 **Asset planning strategies –** Council is committed to integrating long term sustainability objectives into asset planning and project delivery. Council recognises the need to strategically plan to meet the service delivery needs of stake holders.

9 **Asset management practices –** Council will adopt a consistent and standard methodology to the management of all infrastructure asset groups including the development of infrastructure asset and risk management plans for all asset groups.

10 **Responsibility –** Individual aspects of the management and use of Council assets will be clearly defined by means of a responsibility matrix or decision chart providing transparency in asset planning and utilisation of Council assets, assisting stakeholders with informed decision making regarding asset utilisation.

2.3 Asset Management Policy

A review of the Asset Management Policy (AMP) has been completed as required under the IP&R legislation and was adopted by Council on 7 August 2012 (**Attachment 1)**.

The AMP sets out the purpose of this AMS and associated asset management plans being to:

- move towards meeting the community needs and expectations for all asset and asset infrastructure services
- provide greater transparency in asset planning, enabling informed input from all stakeholders
- implement continuous improvement asset management practices
- achieve greater resource allocation efficiency through selection of appropriate asset levels of service to meet demand and develop integrated corporate information systems
- manage risk to people and property
- comply with state and federal legislation pertaining to assets; and
- protect and enhance the environment for the future.

Council also has an endorsed the City Wide Maintenance Policy (Amended 2008) **Attachment 2**, which sets out the procedures for inspecting, prioritising and scheduling the repair of hazards and defects for council managed road and tree assets. The policy is currently under review.

2.4 Asset Management Strategy

The purpose of the AMS is to provide direction for managing infrastructure assets. The AMS will continue to evolve as the strategic objectives of Council and legislation 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 the asset management plans and the asset management development program (AMDP).

The AMDP form and approach is under review by the Director of Infrastructure. It is likely that the following categories will be considered in the prioritisation of this work:

- Legislative requirement
- Council resolution
- Strategic alignment
- Synergy with other funding budget
- Workforce planning
- Risk and audit
- Task interdependencies
- Benefits realisation/business case

2.4.1 Strategic objectives

Number	Objective	Status
1	Identify appropriate asset classes to enable the planning, acquisition, operation, maintenance and disposal of assets under Council management by June 2014	Complete
2	Ensure council managed assets meet community needs and expectations and Council service needs into the future through the development of appropriate service levels for all asset classes by June 2017	Not yet commenced
3	Reduce Council's infrastructure backlog through the strategic allocation of human and financial resources, and informed decision making regarding acquisitions and disposal and whole of life costing by 30% by June 2017	Commenced
4	Ensure risks to people and property are identified, documented and managed throughout the life cycle of the asset by 2015	Commenced
5	Develop and document core Asset Management roles and competencies by June 2015	Not yet commenced
6	Develop an asset management system to record, monitor, analyse and forecast asset requirements by June 2016	Commenced

2.4.2 Key Definitions

Capital expenditure – new[10]	Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.
Capital expenditure – renewal	Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.
Capital expenditure – upgrade	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 the organisation's asset base eg widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting field.
Maintenance	All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.

[10] International Infrastructure Management Manual – Version 4 2011

2.5 Asset management plans

Asset management plans have been developed for each asset class. Asset management plans are defined in the AMP as a plan developed for the management of one or more assets that combines multi-disciplinary management techniques (including technical and financial) over the life cycle of the asset in the most cost effective manner to provide a specified level of service.

2.6 Risks critical to Council's operations

Objective	Risk	Risk Management Strategy
Identify appropriate asset classes to enable the planning, acquisition, operation, maintenance and disposal of assets under Council management by June 2015	City-wide Maintenance Policy out of date currently 2008	Update Policy when requirements change and get Council adoption.
Ensure council managed assets meet community needs and expectations and Council service needs into the future through the development of appropriate service levels for all asset classes by June 2017	Failure to consult with the community on service levels leading to adoption of service levels that are not linked to community expectations	Continual review of the Community Strategic Plan
	Failure to meet development requirements for regional facilities.	
	Failure to maintain buildings to a defined standard	
Reduce Council's infrastructure backlog through the strategic allocation of human and financial resources, and informed decision making regarding acquisitions and disposal and whole of life costing by 30% by June 2017	Failure to dispose of redundant assets	Focus renewal projects on backlog infrastructure
	Failure to acquire new land	
	No consistent strategy for the disposal/renewal of infrastructure beyond useful life within the Newcastle LGA	
Ensure risks to people and property are identified, documented and managed throughout the life cycle of the asset by 2015	Loss of valuable heritage items due to neglect	Review all project outcomes from a heritage perspective
Develop and document core Asset Management roles and competencies by June 2014		
Develop an asset management system to record, monitor, analyse and forecast asset requirements by June 2016	Change in technology preventing access to digital collection	Implement ERP with Asset Management predictive modeling function
	Lack of corporate electronic asset management system	

3 Our Assets

Council manages a range of infrastructure to provide services to our community including:

4.1 Art Gallery collection

4.1.1 Purpose

Detailed asset management plan has not been completed for the Art Gallery collection due to asset being appreciating in nature.

4.1.2 Asset Value

Collection's current value is $75.2 million

4.1.3 Risk Assessment

Detailed risk assessment has not been conducted due to collection being valued every five years for condition and valuation amount.

4.2 Buildings and Structures

4.2.1 Purpose

The purpose of the buildings and structures asset management plan is to establish a framework for managing buildings and structures assets in a continuous improvement environment throughout the asset's life cycle. This involves achieving a balance between delivering asset services to meet community needs and Council's ability to manage and resource the asset portfolio.

4.2.2 Asset value

The sustainability ratio of 1.0 is the target for the organisational maintenance and renewal of council's assets of their life cycle. A ratio less than 1.0 indicates under-funding of this asset class.

Life cycle and 10 year maintenance and renewal figures are based on figures from 2012 indexed by 3.46% compounded for three years to provide a present value.

Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement cost $'000	Sustainability Ratio
Life cycle	$5,461	$4,416	$9,877	$468,973	1.06
10 Year	$5,461	$1,883	$7,344		1.42
Actual					
1 year	$3,182	$7,248	$10,430		

4.2.3 Risk assessment

Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
Provide structurally safe assets	Failure to provide safe car park – structural failure of car park elements	H	Structurally strengthen and upgrade car park mechanical and

Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
			electrical services
Accurate corporate asset management	Failure to provide accurate corporate asset management – lack of corporate electronic asset management system	H	Inform IT of systems and direct in the development of the ERP system
	Failure to provide accurate corporate asset management – failure to implement required magnitude of the system	H	Inform IT of systems and direct in the development of the ERP system

4.3 Library collection

4.3.1 Purpose

The purpose of the library collections asset management plan is to establish a framework for managing Library related assets in a continuous improvement environment throughout the asset's life cycle. This involves achieving a balance between delivering asset services to meet community needs and Council's ability to manage and resource the asset portfolio accordingly.

Council provides library collections to support the delivery of public library services. The Library's collections consists of both book and other materials including but not limited to, serials, DVDs, CDs, newspapers, maps, objects, digital resources and electronic information.

4.3.2 Asset value

Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement cost $'000	Sustainability Ratio
Life cycle	$1,260	$1,300	$2,560	$19,463	0.85
1 year	$1,260	$1,100	$2,360		0.46

4.3.3 Risk assessment

Key risks associated with Library asset management are:

Asset at Risk	What can happen	Risk rating (VH, H)	Risk treatment plan
Local Studies (but all collections to some extent)	Inadequate preservation	High	Increase rate of preservation.
Local Studies (but all collections to some extent))	Loss of fragile material due to deterioration	High	Install specialised environmental control/air conditioning; move collection to location that has required environmental controls (such a space does not currently exist); increase rate of preservation.

4.4 Museum collection

4.4.1 Purpose

To ensure collection development is consistent with community needs.

4.4.2 Asset Value

Collection's current value is $3.2 million.

4.4.3 Risk Assessment

Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
Maintain a model of best practice that meets international museum standards in collection development, conservation, display access and interpretation	Collection development, management and display – failure to acquire museum quality works of art that meet the acquisition policy criteria – building – lack of collection storage that is adequate for efficient and risk free storage, location and movement.	H	
	Collection access – failure for arts professionals and the community to gain consistent, adequate and relevant access to the collection – political perception – relevance of the arts, importance of Gallery within Council.	H	
	Collection access – failure for arts professionals and the community to gain consistent, adequate and relevant access to the collection – Access – inadequate online access to collection	H	

4.5 Natural Aassets

4.5.1 Purpose

The purpose of the natural asset management plan is to establish a framework for managing the assets in a continuous improvement environment throughout the asset's life cycle. This involves achieving a balance between delivering asset services to meet community needs and Council's ability to manage and resource the asset portfolio accordingly.

4.5.2 Asset value

Life cycle and 10 Year maintenance and renewal figures are base figures from 2015.

Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement cost $'000	Sustainability Ratio
Life cycle	$2,105	$4,386	$6,491	$352,584	0.60
10 Year	$2,105	$4,943	$7,048		0.55
Actual					
1 year	$2,096	$1,795	$3,891		

4.5.3 Risk assessment

Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
To maintain and renew natural assets to deliver council services so that the overall average condition of the natural asset register does not deteriorate between SAMP iterations	Failure to maintain natural assets to a defined standard – lack of corporate electronic asset management system (including GIS mapping platform, reporting, works order, mobile solution inclusion etc functionality)	H	Inform IT systems of requirements for asset management functionality of corporate system and actively participate in further provider assessments. Work with systems as best we can in mean time.
	Incomplete data sets for natural assets – insufficient resources to finalise this data capture work	H	Inform ELT of consequences of reducing resources and ensure current advice is as accurate as current resourcing levels and software will allow.
	Incomplete data sets for natural assets – lack of attributable data from new assets	H	Involve a wide range of Asset Program stakeholders who are likely to use the final data sets and D & B/Strategy are briefed on requirement for agreed asset data attributes from development sector
To acquire natural assets to deliver council services so that the overall average condition of the natural asset register does not deteriorate between SAMP iterations	Failure to acquire natural assets to meet Council standards – no strategy for the acquisition of new natural assets	H	Identify issue of natural asset acquisition requirements within Strategic asset management plan documentation and ensure strategy notified of issue for inclusion in planning documentation/process.

4.6 Parks and recreation

4.6.2 Asset Value

The sustainability ratio of 1.0 is the target for the organisational maintenance and renewal of council's assets of their life cycle. A ratio less than 1.0 indicates under-funding of this asset class.

.Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement Cost $'000	Sustainability Ratio
Life cycle	$8,837	$3,626	$12,463	$130,299	
10 Year	$8,837	$6,783	$15,620		

4.6.3 Risk Assessment

Data not available.

4.7 Stormwater drainage

4.7.1 Purpose

The aim of stormwater drainage asset management plan is to establish the necessary framework to enable sustainable and incremental alignment of Council's asset base with the community's service provision needs, as identified in the Community Strategic Plan (CSP).

The stormwater drainage assets within the Newcastle Local Government Area (LGA) covered by the plan include pipes, pits, culverts and stormwater quality improvement device.

4.7.2 Asset value

.Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement cost $'000	Sustainability Ratio
Life cycle	$925	$3,837	$4,762	$352,464	0.33
10 Year	$925	$3,148	$4,073		0.39
Proposed					
2013/2014					
Actual					
1 year	$461	$1,126	$1,587		

4.7.3 Risk Assessment

Objective	Risk event description	Risk Rating (VH, H)	Risk Treatment Plan
To maintain and renew Stormwater Drainage to deliver council services so that the overall average condition of the asset is maintained	Failure to maintain stormwater drainage to a defined standard – lack of corporate asset management system	H	Inform IT systems/management and work with project group to develop next option. Meanwhile continue to use existing datasets that are not

Objective	Risk event description	Risk Rating (VH, H)	Risk Treatment Plan
			updated from field inspections/works as executed outcomes
	Failure to implement required scope of the system to accommodate overall asset classes size and functionality for service to be delivered	H	Infrastructure Management Services and other related service units, inform IT of all parts/specification/functionality required for an effective Corporate Asset Management System
	Incomplete data sets for stormwater drainage assets - Insufficient resources to finalise data capture for this work	H	Inform ELT of consequences of reducing resources
	Incomplete data sets for stormwater drainage assets – lack of attribute data, inclusive of GIS details, from new assets	H	Data would be provided from DA process but would require resources to manage process and involve a wide range of stakeholders including asset program (IMS) stakeholders/development and building who are likely to specify DA conditions and/or use the final data sets.
To acquire stormwater drainage to deliver council services so that the overall average condition of the stormwater	Failure to acquire suitable stormwater drainage assets – Council is not involved in the design of the drainage where new stormwater assets are acquired	H	Inform Future City of deficiency and prepare and implement process flowchart.

4.8 Transport

4.8.1 Purpose

The purpose of the transport asset management plan is to establish a framework for managing transport related assets in a continuous improvement environment throughout the asset's life cycle. This involves achieving a balance between delivering asset services to meet community needs and Council's ability to manage and resource the asset portfolio.

4.8.2 Asset value

The sustainability ratio of 1.0 is the target for the organisational maintenance and renewal of council's assets of their life cycle. A ratio less than 1.0 indicates under-funding of this asset class.

Life cycle and 10 year maintenance and renewal figures are based on figures from 2010 indexed by 3.46% compounded for three years to provide a present value.

Predicted	Maintenance $'000	Renewal $'000	Total $'000	Replacement cost $'000	Sustainability Ratio
Life cycle	$8,808	$22,551	$31,359	$1,130,420	0.46
10 Year	$8,808	$19,334	$28,142		0.51
Actual					
1 year	$7,890	$6,453	$14,343		

4.8.3 Risk assessment

Key risks associated with traffic and transport asset management are:

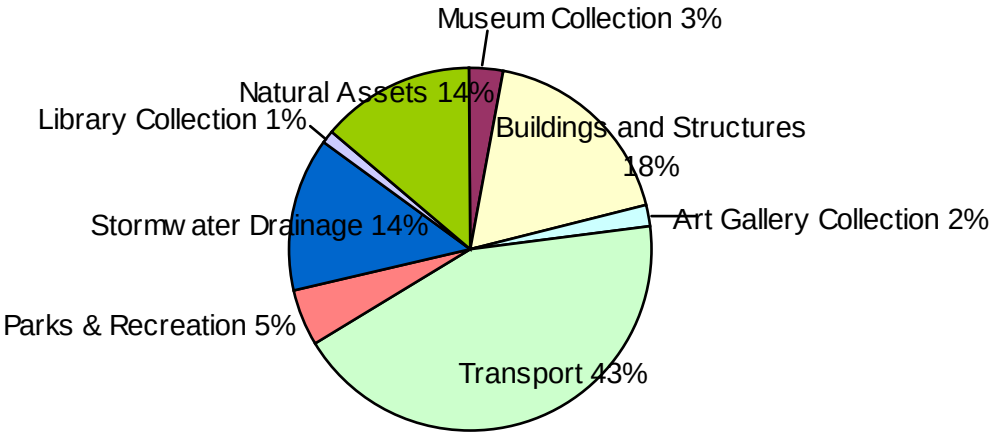
Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
Transport	Failure to meet service level obligations contained in Council's City Wide Maintenance Policy for roads, parks and beaches resulting in increased public liability claims and negative court determinations. Increased liability from reduced maintenance output	H	Undertake review of Council road maintenance operations in respect of City Wide Maintenance Service Levels and timeframes. Outcomes to be communicated to ELT.
	Damage to Council road pavements by NSW Transport bus route changes. There are no avenues for compensation for damages	H	Council oppose any further changes to any bus routes in the LGA without geotechnical confirmation in writing that pavement can withstand intended weight and usage. If required Council physically block streets to prevent access.
	Damage to Council infrastructure by utility authorities	H	Request utility authorities undertake pavement testing of streets by geotechnical engineer and provide results to Council before Council agrees to type of machinery proposed. Companies to be requested to provide pre and post dilapidation

Objective	Risk event description	Risk rating (VH, H)	Risk treatment plan
			reports.
	Lack of corporate electronic asset management system – failure to implement required magnitude of the system	H	Inform IT of all parts of the ERP system required
To renew transport assets to deliver council services	Failure to upgrade road infrastructure to meet community service standards	H	Build all road renewal and upgrade programs to be responsive to community set level based on risk and priority
To dispose of road assets that are of no further use to the community or council	Failure to dispose of redundant road infrastructure – inability to transfer roads to State government authorities for maintenance and renewal, where local community receives no value or use.	H	Inform ELT of outstanding liabilities.
To acquire transport assets to deliver council services	Failure to gazette road reserves	H	Inform strategy of deficiency and wait. Undertake road reserve creation in accordance with current legislation.
Meeting statutory objectives regarding transport assets	Failure to upgrade transport stops and shelters to accessible standards in legislated timeframe	H	Inform ELT of consequences of non-compliance
To meet statutory requirements, reporting under LG Act, environmental contamination	Failure to provide legislative requirement for Road Register under Roads Act and Local Government Act	H	Inclusion being considered by Authority Working Group in prioritising additional register in Authority for IT consideration and costing. Land information transferred to Authority, road ownership is the land under roads, should be located in same database. Inform IT of deficiency in integrated systems and work to integrate systems in the ERP solution

5. Current State of Assets

5.1 Replacement value

The total replacement value of Council's assets is $2.611 billion[11] as shown in Figure 5.1.



5.2 Remaining life

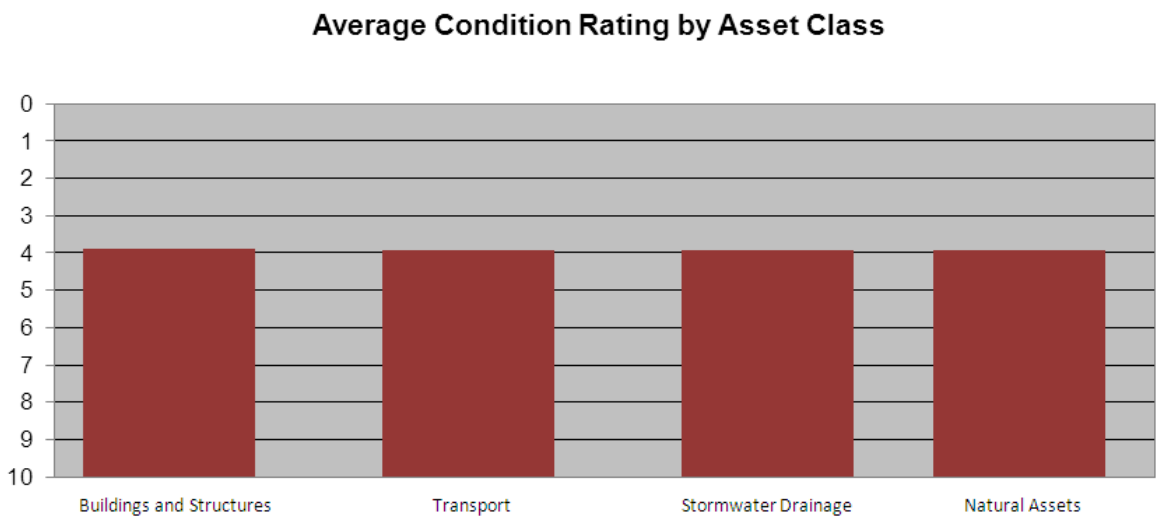
Council holds assets in a database with a defined condition 0-10 scale, with 0 being new and 10 completely failed and unusable. The associated remaining life is a non linear scale with a linkage between condition and reaming life. The following is a sample of the remaining life verses condition for some significant asset classes.

Condition	Roads	Footpaths	Kerb and Gutter	Stormwater Pipes	Buildings	Bridges	River Walls	Retaining Walls	Creeks	Trees	Wetlands	Seawalls and river walls
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1	0.95	0.95	0.93	0.99	0.88	0.95	0.88	0.93	0.94	0.96	0.96	0.96
2	0.85	0.84	0.80	0.89	0.76	0.85	0.76	0.80	0.78	0.90	0.90	0.90
3	0.72	0.70	0.63	0.77	0.64	0.72	0.64	0.63	0.61	0.85	0.85	0.85
4	0.57	0.52	0.44	0.63	0.52	0.56	0.52	0.44	0.44	0.75	0.75	0.75
5	0.42	0.28	0.28	0.47	0.40	0.39	0.40	0.28	0.28	0.59	0.60	0.60
6	0.26	0.15	0.18	0.31	0.29	0.23	0.29	0.18	0.18	0.44	0.44	0.44
7	0.13	0.06	0.08	0.19	0.18	0.11	0.18	0.08	0.11	0.29	0.29	0.29
8	0.05	0.03	0.03	0.08	0.07	0.03	0.07	0.03	0.06	0.14	0.14	0.14
9	0.01	0.01	0.01	0.03	0.02	0.01	0.02	0.01	0.02	0.07	0.07	0.07
10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

[11] Delivery Plan 2013, The City of Newcastle

5.3 Asset condition

Figure 5.3 shows the average condition rating by asset type for significant asset classes based on value ($).



5.4 Life cycle costs

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term.

If the life cycle expenditure is less than the life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available, will assist the organisation in providing services to the community in a financially sustainable manner. This is the purpose of integrating Council's Asset Management Plans (AMPs), LTFP and WMP.

A shortfall between life cycle cost and life cycle expenditure gives an indication of the life cycle gap to be addressed in the respective AMP and LTFP.

The life cycle gap and sustainability indicator for services covered by this strategy are summarised over page.

Life cycle sustainability ratio

Service	Life cycle cost ($/yr)	Life cycle sustainability index
Art Gallery		
Buildings and Structures	$9,877	
Library collection	$2,560	0.85
Museum collection		
Natural assets	$6,491	0.60
Parks and recreation	$12,463	
Stormwater drainage	$4,762	0.33
Transport	$31,359	0.46

The total maintenance and capital renewal expenditure required to provide and maintain Council's infrastructure assets in the next 10 years, is estimated below.

Maintenance and renewal expenditure and life cycle sustainability ratio

Projected Renewal and Maintenance are drawn from the LTFP scenario 3

Service	Total 10 yr Planned Renewal ($000)	Total 10 yr Planned Maintenance ($000)
Buildings and structures	$44,160	$54,610
Drainage	$38,370	$9,250
Natural	$43,860	$21,050
Parks and recreation	$36,260	$88,370
Transport	$225,510	$88,080
Waste	$3,253	$3,350
All Services	$388,160	$261,360

Sustainability analysis for the Art Gallery, Library and Museum collection asset management plans was not conducted for this iteration due to the unique nature of asset life cycle management required for a collection piece as opposed to a built asset. The asset management process used for the life cycle analysis of assets facilitated analysis at the program level. This approach does not allow adequate treatment of collections, where the individual collection pieces all have unique life cycle characteristics.

While this will be further investigated in future plans, the ongoing cost of managing such collections was integrated into Council's future budget commitments via the LTFP. Additionally the Art Gallery, Library and Museum collection asset management plans were still created to commence the long term planning process and notably to articulate service alignment of the collection with objectives defined in Council's CSP.

5.5 New assets – special projects

Through asset renewal, Council aims to increase the level of service currently being provided to the community. Nine key civic projects were proposed in Scenario 4 of Council's Delivery Program 2012/2013 - 2015/2016 and supported by a 5% special rate variation approved by IPART on 4 June 2012. Due to the sale of related infrastructure the nine key civic projects have been reduced to seven new projects. These seven special projects have been integrated and aligned with the respective assets within the as.

These seven key civic projects and total capital expenditure per project are:

Hunter Street revitalisation	$16.7 m
Coastal revitalisation	$35.9 m
Blackbutt Reserve upgrade over 10 years	$8.7 m
Provision of new cycleways over 10 years	$15.7 m
Projects of lower priority which will result in either works to exceed 10 year horizon or deferred until sufficient external funding is sourced and Council approval obtained:	
Improving our swimming pools	$27.5 m
Libraries upgrade program over 10 years	$42.9 m
Newcastle Art Gallery expansion over 10 years	$21.0 m

Specific project detail and project selection criteria used to prioritise candidate projects can be found in Section 7 of the LTFP.

5.6 Outlook

5.6.1 10 year strategic outlook

Council is committed to reducing the current infrastructure backlog to within the Treasury Corporation’s sustainability benchmark of 2% of gross assets by 2022/2023.

As per the 2013/2014 Financial Statements the backlog level is at $90.4 million. Substantial funding for capital renewal is required over the long term to achieve a sustainable level of asset backlog and maintenance. To achieve this Council would heavily deplete reserve funds which could not be sustained long term. Council's LTFP advises of financial strategies to remedy this outcome. Scenarios 2 and 3 of the LTFP, which both include a special rate increase, provide sustainable options for Council.

5.6.2 Longer term strategic outlook (whole of life asset costing)

General Fund - Council is not able to fund infrastructure life cycle costs at current required levels. The life cycle sustainability ratio is 0.77; however, data and estimated projections need to improve in accordance with the AMDP.

6 Internal asset management capability

Council makes judgements that balance demands for services taking into account economic, environmental, social and cultural aspirations. Improving the quality of supporting information and the effectiveness of communicating that information is the objective of the AMDP. The plan provides an informed and transparent link between resources applied to asset management and the reliability and risk associated with current limitations to the associated decision support information and processes.

Underpinning the AMDP is Council's internal audit processes. This process will review the current maturity of Council's asset management processes, systems and data and associated risk, and ensure the appropriate actions are in place and adequately resourced.

The AMS is a fluid document that helps to guide the activities and decision making of the organisation into the future. It will be reviewed on a regular basis to ensure applicability in the changing environment and maintain continuous alignment with community objectives.

6.1 Current Asset Management Capacity and Maturity

The Strategic Asset Management Framework, including Asset Management Policy, Asset Management Strategy and Asset Management Plans, was audited by the Department of Local Government in December 2011. The Department found that:

- *Council has prepared an Asset Management Policy, Strategy and individual plans*
- *It is not clear how the Asset Management Strategy links to the Community Strategic Plan. However, key civic infrastructure projects are identified in the Delivery Program*
- *The Asset Management Plans identify the required service standards, and risks are clearly identified along with relevant risk management strategies*
- *Links between Asset Management Planning and Long-Term Financial Plan could be strengthened by identifying how the adopted financial scenario will impact upon asset planning.*

The report also stated as a strength that:

- *Asset Management Plans are well presented and include details of required service levels. The work done for risk identification and management is exemplary.*

The audit outcomes show that Council has met minimum core asset management requirements.

At an intermediate level, Council has completed a review of the Asset Management Policy and the updated version was adopted by Council in August 2012. Further work is required in the areas of:

- Implementation of action plans for each asset management class
- Resourcing for core areas in asset management; and
- Identification of key responsibilities and timeframes for review.

To move to an Advanced Asset Management state will require Council to:

- Strengthen links between the Asset Management Plans and the Long-Term Financial Plan by identifying how the adopted financial scenario will impact upon asset planning
- Develop links between Council's Workforce Management Plan and Asset Management Plans to ensure that adequate human resources are planned and allocated for the management of Council's core assets
- Implement a life cycle approach to the management of infrastructure assets by implementing an improved and integrated asset operation system. This is included in the enterprise resource planning (One Council) implementation, the works and assets module should allow life cycle planning to occur including integrating asset management practices into key Council strategies including asset acquisition and disposal.

Council's current asset management maturity will require increased funding to improve:

The current level of asset management awareness is of a high standard and focuses on delivering Council's adopted program. Each service area has developed processes to deliver the adopted program of works however there is no overall system to manage assets or the works program. However, as stated above, this is being addressed by the One Council implementation. This will assist internal asset management capacity and improve long term planning capability.

6.2 Status of key improvement strategies

The following asset management capability improvement strategies are interspersed throughout this document in relevant sections. They are summarised below in the order that they appear, not by priority.

Status	Strategy		Actions
✓	***Key Strategy 1***	Annual review of the Asset Management Policy (Appendix 5)	Completed and adopted by Council August 2012
→	***Key Strategy 2***	Implementing, monitoring and reporting to the Executive Leadership Team on the development of asset management at Council will be the responsibility of the Asset Management Steering Group (AMSG), once established.	Ongoing.
→	***Key Strategy 3***	Continue to develop and update AMPs for the major asset groups in accordance with the improvement plans identified in these documents	Ongoing review undertaken March 2013
→	***Key Strategy 4***	Identify infrastructure expenditure by both: • expenditure category ie the asset group it is associated with eg road pavement • expenditure type – operating, maintenance, capital renewal, capital upgrade or capital expansion	Commenced & Ongoing
→	***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.	Commenced
→	***Key Strategy 6***	Annual review of asset risk management plans for all major asset classes. These will be included in a maturity assessment and risks reviewed by an audit committee and accepted by Council.	Risk Assessments completed for Traffic, Parks and Recreations, Buildings and Structures, Museum and Art Gallery. Natural Assets and Library still to be completed.
←	***Key Strategy 7***	Continue to review the completeness and	Due to issues with the Corporate Asset Management System, this

Status	Strategy		Actions
		accuracy of the data for all major infrastructure classes	project has been delayed.
	Key Strategy 8	Use a knowledge management strategy to ensure that appropriate and optimal decision support information is available to clearly communicate the cumulative consequences of decisions	
→	***Key Strategy 9***	Continue development of the corporate asset register meeting both technical and financial reporting requirements	To be implemented through the development of the Council Enterprise Resource Management project.
→	***Key Strategy 10***	Develop and adopt an Asset Accounting and Capitalisation Policy that assists in meeting the intention of Fair Value Reporting (AASB116) in accordance with the Australian Infrastructure Financial Management Guidelines (AIFMG)	
→	***Key Strategy 11***	Continue development and enhancement of a funding model which addresses the need for sustainable renewal of infrastructure and which identifies all asset life cycle costs	Ongoing. Project management system updated to include asset life cycle costs. Review of Asset Revitalisation and Improvement Plan re asset acquisition and disposal. Renewal costs under review as part of AMP development
→	***Key Strategy 12***	Ongoing development and integration of the LTFP for all Council functions to consider both the future anticipated income projections, and the future expenditure requirements to sustain services. Council's LTFP will consider the expenditures identified in the AMPs, providing input into the Operational Plan budget	
←	***Key Strategy 13***	Continue to develop and improve the information on the relationship between the asset service levels and cost, so that future community consultation will be well	Behind Target. Service Level reviews not yet commenced. Rescheduled to commence 2015

Status	Strategy		Actions
		informed of the options and financial implications	
●	***Key Strategy 14***	Undertake a detailed assessment of the resources required to implement this Strategy so that a program of improvement and milestones can be implemented and monitored through the LTFP and WMP	Not yet commenced.

6.3 Asset management development program (for achieving core and advanced asset management)

Each AMP contains an implementation plan scheduling timeframes for identified areas of improvement for each asset plan which will be collated into an Asset Management Development Program.

7 Background

7.1 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 two to three 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 Division of Local Government IP&R Framework, agreed levels of service performance will have an accompanying LTFP that aims to fully fund 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.

Council has already commenced analysing long term funding requirements for infrastructure, and the organisational focus on providing sustainable infrastructure is at a high level.

This Strategy is a continuation of a process of improving asset management practice. This will be required if Council is to successfully implement the visions identified in Council's CSP and Delivery Program. The support of business and the community will also be essential in developing and implementing long term strategies for Council.

7.2 Legislative Requirements

7.2.1 NSW Integrated Planning and Reporting

Local Councils in NSW are required to undertake their planning and reporting activities in accordance with the *Local Government Act 1993* and the *Local Government (General) Regulation 2005*. The Act provides that the Deputy Director General (Local Government), Department of Premier and Cabinet can issue guidelines that must be followed by local Councils when undertaking their planning and reporting activities.

An IP&R Manual has been developed to provide Councils with information and guidance to assist their transition to the new planning and reporting framework. A local government's documents must comply with the regulation and the different types of documents a local government must maintain are listed in clause 104. Guidance is detailed in the legislation under the purpose, principles for local government and the financial sustainability criteria and specific financial requirements.

In particular, local governments will effectively plan for future sustainability through longer term planning by developing 10 year plans, publishing these and reviewing progress annually.

Major elements of IP&R developed under the legislation include:

Community Strategic Plan (CSP)

Newcastle 2030 is a long term plan developed to guide and inform policies and actions throughout the city for the next decade. The vision defines the direction for the city's future growth. It represents what residents value in the city and what they would like improved and thus becomes a guide for action. It outlines what the city is striving to achieve, the strategies being utilised to achieve it and the outcomes that will indicate the goals have been reached.

The CSP contains:

- seven strategic directions for Newcastle to strive towards
- 23 objectives to achieve over the next 10 years
- strategies for achieving goal aims.

The seven strategic directions are the vital connections in a visionary plan to meet the social, economic and environmental goals we need to build a resilient city. An adaptable community is better equipped for the challenges of the future with a long term vision bolstered by clear, sustainable guidelines.

Long-term resourcing strategies

The CSP provides a vehicle for expressing long-term community aspirations. However, these will not be achieved without sufficient resources – time, money, assets and people – to actually carry them out. The resourcing strategies are as follows:

- Long Term Financial Plan
- Workforce Management Plan
- Asset Management Plans (unified by this Asset Strategy).

Council has also compiled a fourth resource strategy supplementing the suite of documents, the Information and Communication Technology Strategic Plan (ICTSP).

The resource strategy identifies what activity is required and how it will be resourced to support the CSP objectives. Some issues will clearly be the responsibility of Council, some will be the responsibility of other levels of government and some will rely on input from community groups or individuals. The resource strategies focus in detail on matters that are the responsibility of Council and look generally at matters that are the responsibility of others.

Achieving and maintaining sustainability in Local Government requires consideration of services, service levels, associated costs and associated risks.

7.2.2 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/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. Then on 21 March 2007, the LGPMC endorsed the Frameworks for implementation in the context of their relationships with their local government sectors[12].

The National Framework consists of three main frameworks:

- Framework 1 - Criteria for Assessing Financial Sustainability
- *Framework 2 - Asset Planning and Management*
- Framework 3 - Financial Planning and Reporting.

In May 2009, the LGMC release Framework 2 - Asset Planning and Management Framework. The framework consists of seven elements. These are:

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 a 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 elected 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.

Each State and Territory agreed and was expected to implement the National Frameworks in consultation with Local Government, with a target date of 31 December 2010

[12] LGPMC, 2007, Local Government Financial Sustainability, 2007, Nationally Consistent Framework

The changes to the NSW *Local Government Act 1993* through the introduction of Integrated Planning and Reporting released in October 2010 and the implementation through IP&R are consistent with the national frameworks.

7.2.3 Recommendations from audit and implementation plan

Table 5.16 below lists recommendations as per original audit results. Since the audit in 2010, some of the following recommendations have been implemented or are underway. These are highlighted in blue.

PA_UID	Theme	Asset Management Practice Area	Recommendation
1.1.0	Strategic Longer-Term Plan	Strategic Longer-Term Plan	Prepare AMPs and Strategy in a consistent format.
1.3.1	Annual Report	Financial Reporting Framework	Implement asset accounting policies as per AIFMG for valuation, revaluation, asset capitalisation and processes for keeping the register up to date. Review proposed policies and procedures with Councils auditor.
2.2.2	Strategy & Planning	AMPs	AMP for fleet and plant should be prepared using a consistent format eg NAMS.PLUS. Strategy should be used to balance LTFP to AMP scenarios.
2.2.2	Strategy & Planning	AMPs	Need consistent AMPs (based on service provision) for: roads/transport, drainage, buildings, parks and recreation, urban trees, bushland, watercourses and wetlands, coastal (heath land, cliffs, beaches etc), cultural (Library, Museum, Art Gallery) - service plans (AMPs) are essential to identify the service cost risk and benefits.
2.3.4	Governance & Management	Capital Investment decisions	Implement systems and data to report on life cycle costs.
2.5.02	Data & Systems	Asset Management data integrity	Data integrity reporting should accompany revaluation and sustainability reports.
2.5.04	Data & Systems	Financial reporting functionality	Business process review needed to determine processes for asset renewal and capitalisation at the asset level of

PA_UID	Theme	Asset Management Practice Area	Recommendation
			detail as per AIFMG (per individual asset)
2.5.06	Data & Systems	Condition & performance. functionality	Fleet management system should be implemented - system must have specialist fleet management functionality.
2.5.09	Data & Systems	Unit costs	Asset register unit rates should be checked for consistency with Buildsoft unit rates to ensure that forward renewal projections from the asset register reflect actual renewal cost.
2.6.1	Skills & Processes	Data management skills	Fleet - complete update to skills audit.
2.6.2	Skills & Processes	Data management framework	Establish a knowledge management strategy to guide and document the process of moving from current levels of fragmentation.
2.6.3	Skills & Processes	Asset management planning skills	Project Control Group recommended to guide the approach to produce AMPs

8 Current asset analysis – The City of Newcastle

8.1 Renewal, operating and maintenance Costs

Figure 8.1 below shows the required amount of maintenance and asset renewal required to successfully reduce Council's infrastructure backlog to IPART's benchmark of 2% by 2023 as per Scenario 3 of the LTFP.

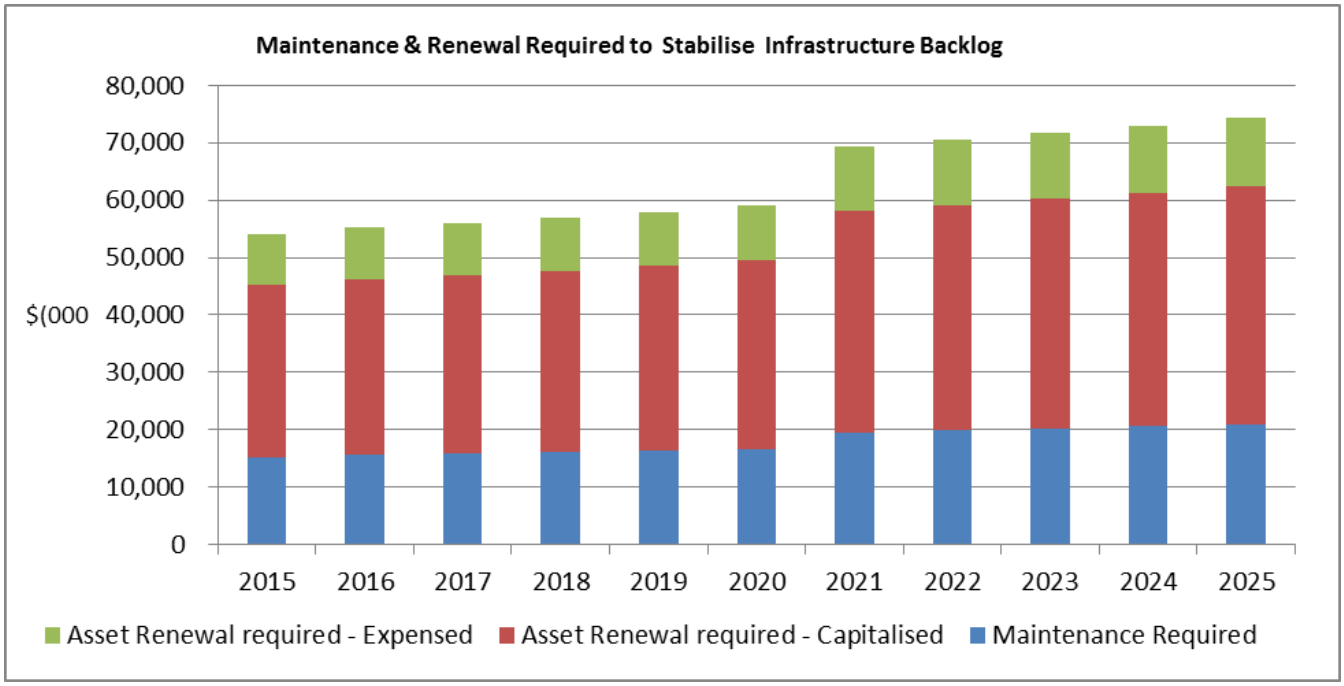


Figure 8.2 below shows the amount of maintenance and asset renewal forecast in Scenario 3 of the LTFP

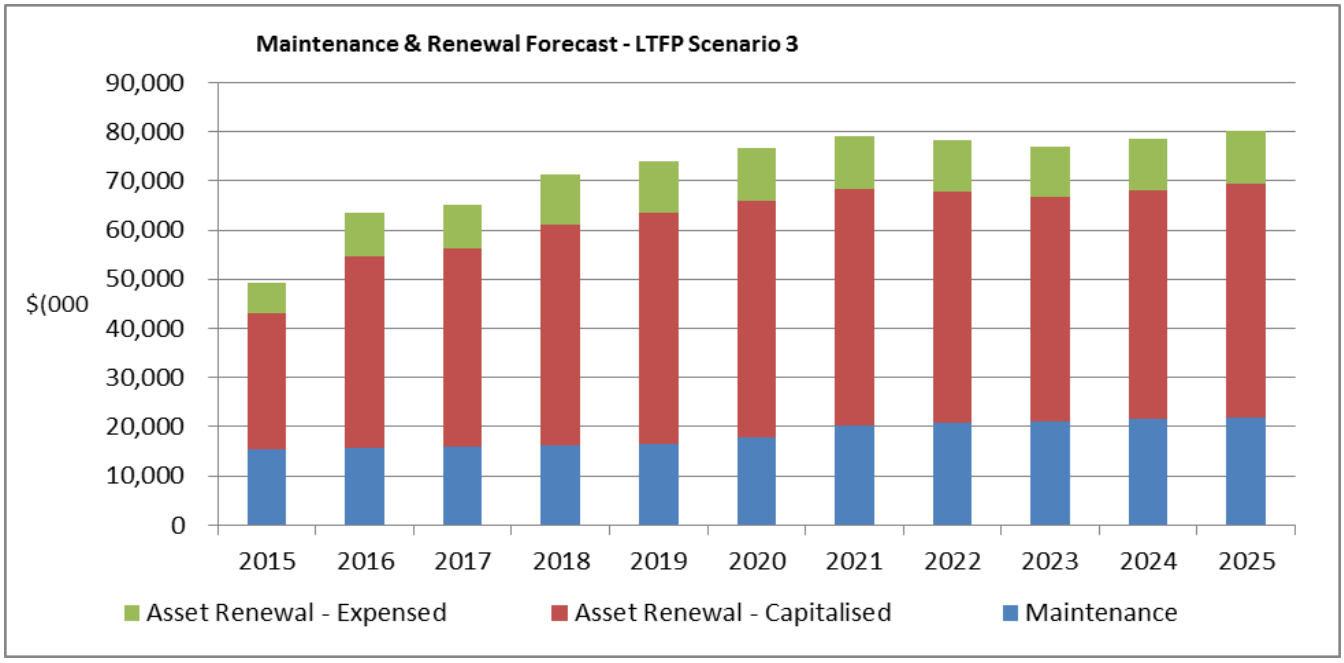
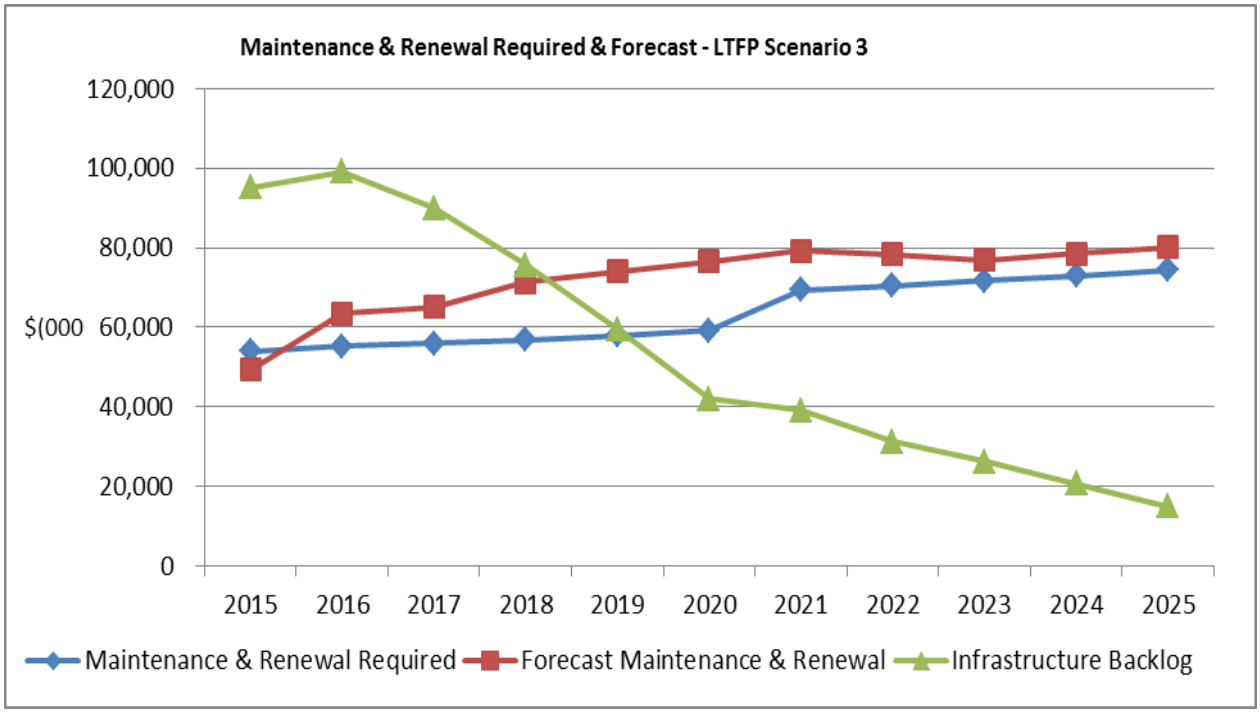


Figure 6.3 below shows the comparison between the required renewal and maintenance to stabilised Council's Infrastructure and the forecast maintenance and renewal. The graph below also highlights the effect on the backlog over the projected 10 years.



9 Systems and asset knowledge management

9.1 System and asset knowledge management plan views

Council is required to manage a considerable amount of information and data pertaining to its asset stock in order to provide services to the community in an effective and efficient manner.

As the capability of the ONE COUNCIL improves, further data will be added. This will aid in corporate decision making. Information quality is crucial to enabling informed decisions to be made. As such continual review of asset data is required to ensure it is accurate and complete.

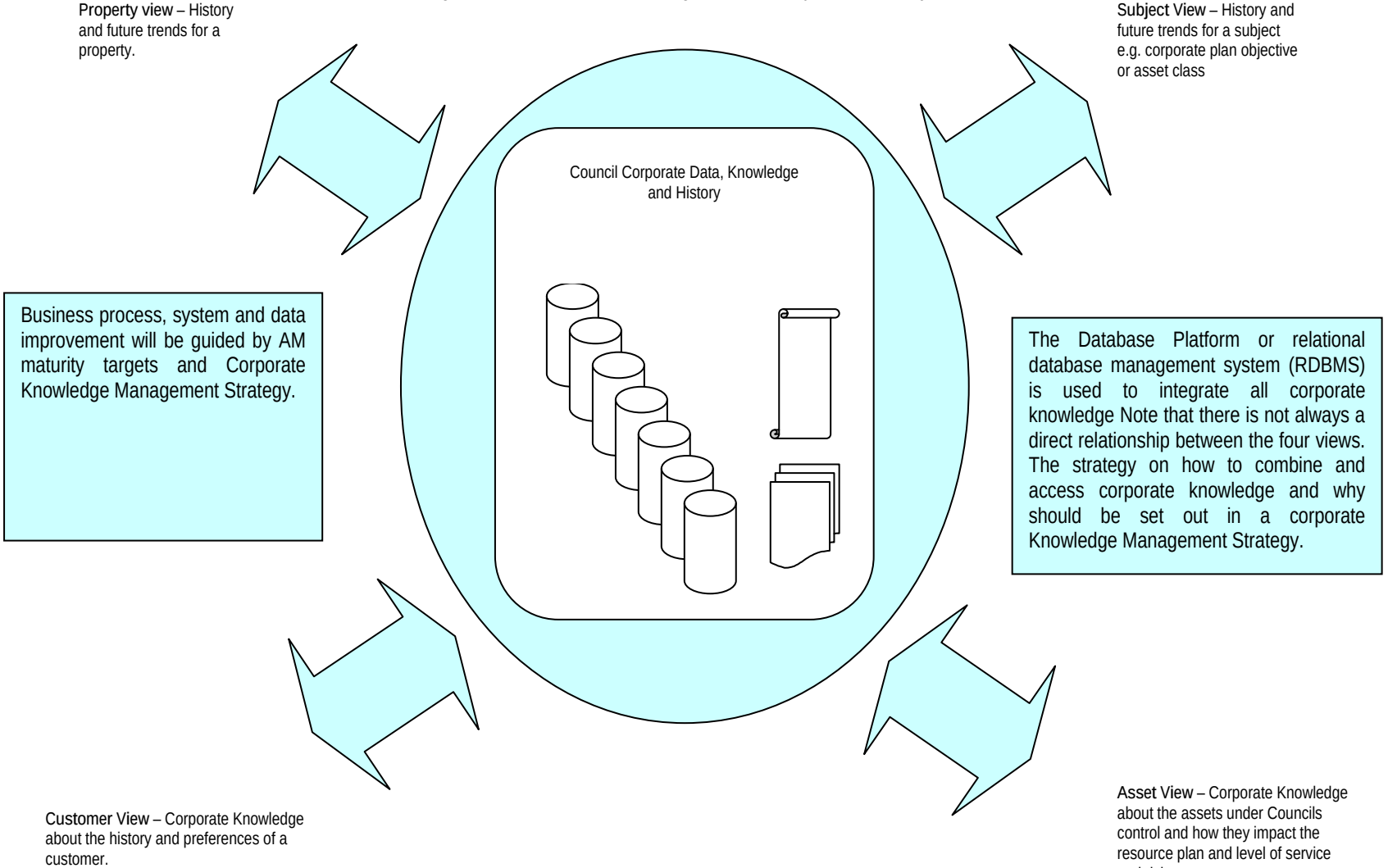
Key Strategy 7
Continue to review the completeness and accuracy of the data for all major infrastructure classes.

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

- property view (Financial Systems and Geographical Information Systems (GIS))
- customer view (rates, customer action request systems)
- subject view (financial, Delivery Program and records management systems)
- asset view (asset management software, GIS).

These four views of the desired model for managing knowledge are shown diagrammatically in Figure 9.1 following.

Figure 9.1 The four strategic views of corporate knowledge
The business model to enable service level, risk and performance reporting by asset class or by Long Term Community Plan service areas. The key objective is to provide costs, service level targets and achievement for each Long Term Community Plan service objective



The asset knowledge needed to achieve asset management improvement currently exists in core corporate systems as well as in stand alone databases, spreadsheets, documents, specialist systems and local knowledge as shown in Figure 9.1.

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 requires 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 Delivery Program 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 Council's operation
- provide an information platform for measuring the performance of the current strategies and tactics used for service delivery.

9.2 Steps in the asset knowledge management plan

The three key aspects of the Asset Knowledge Management Plan (AKMP) are:

- Single asset register using the corporate Relational Data Base Management System (RDBMS). Information system environments should be standardised or be compatible with Council's corporate database platform.
- Integrate and manage core Information.
- Information on assets should be integrated into a corporate database.

Business functions that need data from multiple applications need to open each application to access the data, adversely affecting both business and technology performance. Ideally identification, management and integration of core data in a RDMS environment with GIS front end, is recommended to allow business users to access all data on a topic or view.

An AKMP 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 (eg finance, property, records, service requests and works management)

The need for corporate wisdom should be the driver for integration of knowledge. Corporate wisdom enables informed policy making and optimises the allocation of scarce resources. It identifies areas of strength and weakness and opportunities for advancement.

9.3 Integrate current systems into a single asset register

Council has commenced incorporating asset data into a single corporate register via the One Council project. This is a significant project and is important to future asset management improvements. Whilst technical progress has been achieved, the process has become one of system implementation and data collection. The One Council is in the early stages of implementation and consequently all asset data has not been entered at this point in time.

Given the new reporting requirements planned for NSW IPR Councils, an examination of the ownership and coordination of all asset knowledge management applications is essential. This assessment should be made with the reporting and management priorities being at the forefront of the review.

9.4 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, as illustrated in Figure 9.4 below. For example, clicking on a property on the GIS should display all information, current and historical, pertaining to that property. The current systems do not easily provide information to understand and discern trends on customer preference, needs, trends on asset usage and management, maintenance and renewal trends and performance on policy objectives. This is being address by the One Council project.

Figure 9.4 Knowledge management strategy for integrating asset knowledge.

The historical focus for managing information systems has been to satisfy operational needs. This is a valid strategy and remains important to 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 the 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 AKMP 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 Delivery Program aims. This is regarded as the primary driver for developing a corporate standard database platform.

Implementation of the software system/s and the AKMP is a substantial task and will require adequate resource allocation throughout the planning and implementation phases.

Key Strategy 8
Use a knowledge management strategy to ensure that appropriate and optimal decision support information is available to clearly communicate the cumulative consequences of decisions.

9.5 Financial reporting and systems

The information used for decision support and asset management planning should be based on the same core data that is also used for financial reporting. At present, not all Council's asset related data is linked, as such, tracking changes related to individual assets is difficult, or not possible at all.

To achieve the accounting requirements required under AASB116 and IPR, an asset register that meets both technical and financial reporting requirements is a primary requirement.

This register must be managed under corporate business rules to maintain its integrity; hence an asset specific accounting policy is required.

Key Strategy 9
Continue development of the corporate asset register meeting both technical and financial reporting requirements (utilising ERP)

Key Strategy 10
Develop and adopt an Asset Accounting and Capitalisation Policy that assists in meeting the intention of Fair Value Reporting (AASB116) in accordance with the Australian Infrastructure Financial Management Guidelines (AIFMG).

10 Life cycle costing and funding models

10.1 Life cycle costing

Life cycle costing for infrastructure is the sum of two components, the annual maintenance expenditure necessary 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 life (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 Council's position on funding of asset maintenance and renewal. 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.

10.2 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 Council's expenditures to be identified as operating, maintenance, capital renewal, capital upgrade or capital expansion.

The purpose of the AMP 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 Council currently spends on operations and maintenance as well as capital renewal, upgrade and expansion. Unless this detail of expenditure is available the assessment of sustainability will not be adequately informed.

10.3 Funding models

Council will continue to develop and enhance the funding model, addressing the sustainable renewal of assets identified in the introduction. The funding model can include 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
- agreed deficit funding.

Key Strategy 11
Continue development and enhancement of a funding model which addresses the need for sustainable renewal of infrastructure and which identifies all asset life cycle costs.

Key Strategy 12
Ongoing development and integration of the 10 year LTFP for all Council functions to consider both the future anticipated income projections, and the future expenditure requirements to sustain services.
Council's LTFP will consider the expenditures identified in the Asset Management Plans, providing input into the annual Council budget.

10.4 Linking service levels and cost

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

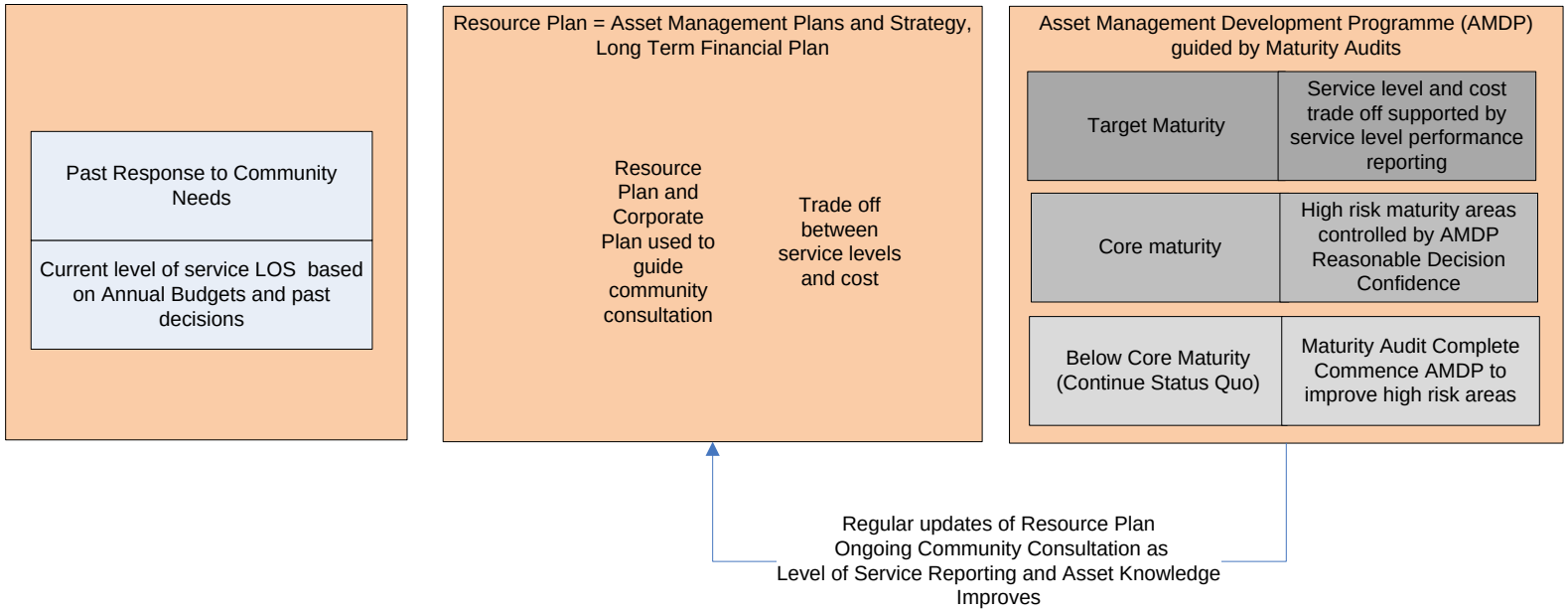
The linking of service levels and the cost of service delivery is an essential component of strategic asset management. It is essential that Council knows the true costs of service delivery, priorities placed by the community on infrastructure, the service levels that are desired by the community and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

The first AMPs prepared by Council are core level AMPs. These plans are prepared at an asset network level and aim to document the costs of maintaining the current level of service provided by the existing infrastructure.

Key Strategy 13
Continue to develop and improve the information on the relationship between the asset service levels and cost, so that future community consultation will be well informed of the options and financial implications.

Council will further develop these service levels in AMPs for each major asset group and link these service levels to the Delivery Program. This will provide the link between service levels and costs of service delivery and provide a tool for community consultation for services. The link will also enable Council to make decisions on service levels and costs while setting budgets and rate levels. Internal performance reporting will also require alignment with asset services levels to ensure organisational activity delivers on community expectations. These links are illustrated in Figure 8.1 below.

Figure 8.1 Service Level and Cost Relationship Understanding and Reporting Will Improve with AM Maturity



10.5 Organisational capacity and resourcing

It is recommended that the implementation of the AMS be coordinated by a PCG reporting to an AMSG to ensure adequate resource allocation and integration with other resource planning initiatives.

Key Strategy 14
Implement a Project Control Group to oversee the resources required to implement this Asset Management Strategy and AMDP so that a program of improvement and milestones can be implemented and monitored.

11 Appendices