Cobar Shire Council



2013 Transport - Asset Management Plan

(Regional Roads and Bridges, Shire Roads and Bridges, Town and Village Streets and Bridges, Footpaths including Cobar Main Street and Kerb and Gutter, Cobar Regional Airport and village Airstrips)



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The Institute of Public Works Engineering Australia.

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1. EXECUTIVE SUMMARY

Context

The Transport network comprises:

- Regional Roads
- Bridges, Shire Roads and Bridges
- Town and Village Streets and Bridges
- Footpaths including Cobar Main Street
- Kerb and Gutter
- Cobar Regional Airport and village airstrips

These infrastructure assets have a replacement value of \$236 M.

The Asset Plan Methodology

One of the important aspects of the asset management plan is the forecast of existing asset renewal requirements. For the Cobar Shire Transport Asset Management Plan three scenarios have been considered when developing the forecast.

Scenario 1 uses the council's technical asset register and valuation data to project the renewal costs. In this scenario the acquisition year of an asset is added to the useful life of the asset to estimate the year when renewal is due. The cost to renew the asset category can be aggregated to estimate the total renewal requirements for each year of the planning period.

Scenario 2 uses capital renewal expenditure projections assessed by technical staff. This assessment uses a combination of detailed technical analysis and an estimate of the average network renewals required.

Scenario 3 is the reality of the situation when the capital renewal expenditures that can be achieved are with available funds in the Long Term Financial Plan.

The results for the 3 scenarios described are included in this asset management plan. Scenario 1 indicates that the funds to meet the forecast renewal requirements cannot be met by the current funding being planned and that the condition of the network is good. The assessment under Scenario 1 is consistent with the community feedback on the satisfaction with Infrastructure and also with the technical estimates made of the network renewals required.

Scenario 2 was prepared using the technical estimates of what renewal is required to sustain the current levels of service, and this estimated that the renewal requirements will be beyond the current funding capacity of council. This position is more consistent with the community feedback and the overall assessment of the network made by Cobar Shire engineering staff

Scenario 3 is a reflection of the actual funding available. The difference between Scenario 2 and Scenario 3 represents "what we can't do". The discussion about this "gap" will lead us into a much better informed community discussion about what are achievable and acceptable service levels, as well as giving a focus on managing risk

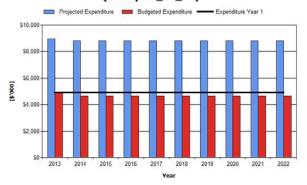
It is most probable that the technical valuation registers used in Scenario 1 are not yet developed to a level of maturity where they are reliable for producing a detailed project level renewal forecast. Ideally when this asset register is sorted by remaining life from 1 to 10 years this should be consistent with the capital renewal program. For Cobar Shire Council the refinement of the technical asset register to achieve this situation should become an important part of the asset management improvement plan, as should achieving an alignment between the technical registers and the corporate asset registers used for financial reporting

What does it Cost?

The forecast of the projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is \$88.2 M or \$8.82M on average per year. This is based on the Scenario 2 methodology as it is currently the most reliable estimate.

Estimated available funding for this period is \$46.8M or \$4.68M on average per year which is 53% of the cost to provide the service. This is a funding shortfall of -\$4.14M on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

Cobar SC - Projected and Budget Expenditure for (Transport_S2_V1)



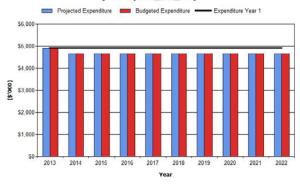
What we will do

We plan to provide Transport services for the following:

- Operation, maintenance, renewal and upgrade of transport infrastructure to meet service levels set by council in annual budgets.
- Upgrades funded within the 10 year planning period.

This will be provided to the extent of the current budget.

Cobar SC - Projected and Budget Expenditure for (Transport_S3_V1)



What we cannot do

We do not have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

 Significant proportion of the required renewals of transport infrastructure

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- The bitumen sealed road network cannot be sustained at the current service level
- The gravel road network cannot be sustained at the current service level
- The requirements for Road Pavement rehabilitation cannot be met
- We will endeavour to manage these risks within available funding by prioritising works within the funding available, monitoring bridges, applying closures, load limits and speed restrictions as required.
- Assess the condition of critical areas of the network
- Prioritise network upgrades based on risk

Confidence Levels

This AM Plan is based on Low/Medium level of confidence information.

The Next Steps

The actions resulting from this asset management plan are:

The actions resulting from this asset management plan are:

- Maintain the current assets in a safe condition
- Continue to assess condition
- Define maintenance standards and levels of service that can be delivered at various funding levels
- Review treatments used considering low cost options. E.g. consider where in the road hierarchy it may be appropriate to provide dry grading as an alternative to wet grading.
- Improve the analysis of options so that an informed discussion can be had with the community about priorities and future levels of service and funding
- Prioritise renewal and upgrade works based on risk

Questions you may have

What is this plan about?

This asset management plan covers the transport infrastructure assets that serve the Cobar Shire Council community's Transport needs. These assets include:

- Regional Roads
- Bridges, Shire Roads and Bridges
- Town and Village Streets and Bridges
- Footpaths including Cobar Main Street
- Kerb and Gutter
- Cobar Regional Airport and village airstrips

The provision of this infrastructure enables people to have access to property and services and is crucial to the social and economic activity of the region.

What is an Asset Management Plan?

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

An asset management plan provides detailed information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

A proportion of the organisation's Transport network was constructed by developers and from government grants, often provided and accepted without ongoing operations, maintenance and replacement needs.

As these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to provide the required Transport network renewal and upgrades.

What options do we have?

Resolving the funding shortfall involves several steps:

- Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
- Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
- 3. Identifying and managing risks associated with providing services from infrastructure,
- 4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
- 6. Consulting with the community to ensure that transport systems services and costs meet community needs and are affordable,
- 7. Developing partnership with other bodies, where available to provide services,
- Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found.

What can we do?

We can develop options, costs and priorities for future Transport services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

2. INTRODUCTION

2.1 Background

Within the Cobar Shire Council jurisdiction area there is significant network of transport infrastructure including shire roads, town roads kerb and gutter, footpaths and airport assets. This asset management plans builds on the work already undertaken in the 2011 Transport Asset Management Plan.

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual¹.

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- NSW DLG Integrated Planning Guidelines and Manual 2010
- Cobar Shire Council Rating and Valuation for Roads, Bridges, Kerb and Gutter, Footpath & airfields, June 2010;
- Draft Policy Inspection and Maintenance State, Regional and Shire Roads, October 2007.

This asset management plan covers the following infrastructure assets:

Regional Roads and Bridges 620km

- Sealed Roads 283.9km
- Unsealed Roads (Gravel Surface) 75.6 km
- Unsealed Roads (Natural Surface) -255.5 km
- Bridges -4

Shire Roads and Bridges- 1630km

- Sealed Roads 142km
- Unsealed Roads (Gravel Surface) 212.8 km
- Unsealed Roads (Natural Surface) 1275. 1km
- Bridges 5

Town and Village Streets

- Sealed Roads -61.6km
- Unsealed Roads (Gravel Surface) -0.9 km
- Footpaths including Cobar Main Street
- Unpaved -86. 8km
- Paved -1.6 km
- Concrete -17.6km (also contained within the unpaved footpaths)
- Kerb and Gutter -67.4 km

Cobar Regional Airport & Village Airstrips

- Paved Runway 1.7 km
- Unpaved Runways 6.22 km

¹ IPWEA, 2011, Sec 4.2.6, Example of an Asset Management Plan Structure, pp 4 | 24 – 27.

Cobar Shire Council – Transport Asset Management Plan 2013

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This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to support a broad range of services to the community

Table 2.1: Assets covered by this Plan

Asset Category	Dimension	Replacement Value
Regional Roads - Sealed	283.9km	\$57.30
Regional Roads –Unsealed Roads (Gravel Surface)	75.6km	\$13.66
Regional Roads -Unsealed Roads (Natural Surface)	255.5km	\$13.26
Regional Roads -Bridges	4	\$1.19
Shire Roads –Sealed	142km	\$27.91
Shire Roads – Unsealed Roads (Gravel Surface)	212.8km	\$33.25
Shire Roads –Unsealed Roads (Natural Surface)	1275.1km	\$62.15
Shire Roads –Bridges	5	\$1.58
Town and Village Streets - Sealed	61.6km	\$13.56
Town and Village Streets – Unsealed (Gravel Surface)	0.9km	\$0.10
Footpaths – Unpaved	86.8km	\$0.00
Footpaths – Paved	1.6km	\$1.09
Footpaths – Concrete	17.6km	\$2.28
Kerb and Gutter	67.4km	\$6.63
Airport & Airstrips	7.92km	\$2.42
TOTAL		\$236.38

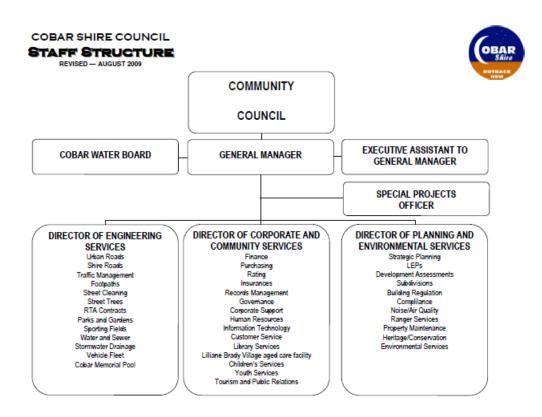
Additional values capitalised since last assessment \$2.48M

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan		
Elected Members and Senior Managements	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.		
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and LTFP.		
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards. AM and GIS support and admin.		
Field Services Staff	Provide local knowledge level detail on all road assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.		
Asset Management Consultants	Provide support for the development of asset management plans and the implementation of effective asset management principles within Council Also independently endorse asset revaluation methodology.		
External Parties	Community residents & businesses; Tourist and Visitors (as occasional users); Neighbouring Council's; Road Users; Emergency services; Developers & Utility companies; Local Businesses and; Federal and State Government authorities & agencies such as RTA, local law enforcement and land use/development planning. Mines NSW Police		

Our organisation's organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

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

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.²

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² Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

2.3 Plan Framework

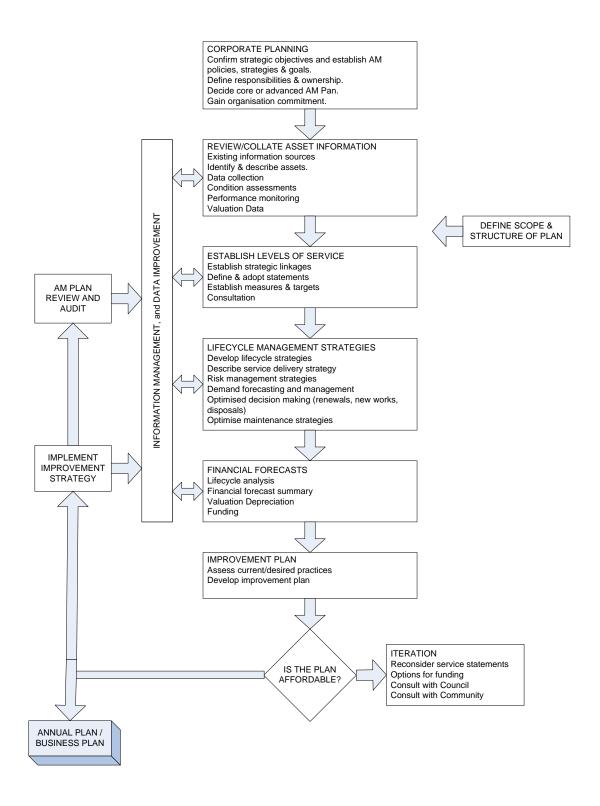
Key elements of the plan are

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

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

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual³. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

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³ IPWEA, 2011, IIMM.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation's vision, mission, goals and objectives.

OUR VISION

Our Vision is for Cobar Shire to be an attractive, healthy and caring environment in which to live, work and play, achieved in partnership with the community through initiative, foresight and leadership.

OUR MISSION

Our Mission is to provide sound and sensible government and ensure that works and services are delivered effectively and equitably to the community of Cobar Shire.

Council will also develop and constantly review its policy on the maintenance of its road network with current priorities to include the sealing of the following strategic roads within the Shire; Ivanhoe Road, Louth Road and Tilpa Road.

OUR VALUES

Council has adopted the following Values that should be reflected in how the whole organisation operates and interacts with others:

- Continually strive for improvement in every aspect of Council's activities and recognise initiative.
- All activities are to be customer focused and provide equity for all.
- Involve the community in decision making through open government and consultative processes.
- Foster and promote sustainable ecological and economic development, rural pursuits and industries that contribute to the wealth of the region and in keeping with the environment and residents lifestyle.
- Conserve and protect the natural beauty of the area.
- Promote a spirit of regional cooperation particularly in regard to planning, infrastructure, economic development, tourism and employment.

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

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

Principles and Goals	Outcomes	How The Asset Management Plans contribute to achieving these outcomes	
A high standard of transport infrastructure supporting economic development	Consult with and assist business and industry to meet their future transport infrastructure needs	Through development of an integrated asset management plan covering transport infrastructure services for business and industry	
	Ensure effective and efficient	Minimise life cycle costs of transport infrastructure	

Duineinles and Carla	Out of the control of	How The Asset Management Plans or with the		
Principles and Goals	Outcomes	How The Asset Management Plans contribute to		
	management of council	for asset users and ensure the AMP demand		
	management of council owned transport	forecast model will identify the public transport		
	infrastructure to support	infrastructure to be managed in a sustainable		
	economic development	manner		
	comonino de veropinent			
	Ensure a strategic regional	Continue to liaise with State and Commonwealth to		
	approach to transport	ensure fit for purpose assets are provided within the		
	infrastructure	region with life cycle costs being considered with		
	demands	asset creation, operation and disposal and		
		incorporate demand projections into the asset		
		management plan		
	Facilitate and improvement in	Continue to liaise with key stakeholders to facilitate		
	transport for industry by road	efficient transport function through the region		
		providing access links to regional, national and		
		global markets and incorporate demand projections into the asset management plan		
		into the asset management plan		
Safe and reliable	Maintain and develop roads,	Continue to develop and maintain regular inspection		
roads,	footpaths and kerb and gutter	of asset condition and defects and develop		
footpaths and kerb	including car parking at	maintenance and capital works programs for		
and gutter.	appropriate standards	inclusion in the asset management plan		
	Work with NSW Roads and	Continue to liaise with the NSW Roads and Traffic		
	Traffic Authority to ensure	Authority through regional and local traffic		
	appropriate	committees to develop strategies for traffic		
	traffic management and road	management and road safety for inclusion in the		
	safety.	asset management plan.		

The Council will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

We have to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments. The purposes of this Act are as follows: (a) to provide the legal framework for an effective, efficient, environmentally responsible and open system of local government in New South Wales, (b) to regulate the relationships between the people and bodies comprising the system of local government in New South Wales, (c) to encourage and assist the effective participation of local communities in the affairs of local government, (d) to give councils: • the ability to provide goods, services and facilities, and to carry out activities, appropriate to the current and future needs of local communities and of the wider public • the responsibility for administering some regulatory systems under this Act • a role in the management, improvement and development of the resources of their areas, (e) to require councils, councillors and council employees to have regard to the principles of ecologically sustainable development in carrying out their responsibilities. The land management provisions of the Act require that Council prepare plans of management for all community land. The plan of management identifies the management objectives for the land category, performance indicators and performance measures to meet the objectives identified.
Local Government Amendment (Planning and Reporting) Act 2009	Local Government Amendment (Planning and Reporting) Act 2009 includes the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Disability Discriminations Act, 1992	The Federal <i>Disability Discrimination Act 1992</i> (D.D.A.) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people. (a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of: (i) work, accommodation, education, access to premises, clubs and sport; and (ii) the provision of goods, facilities, services and land; and (iii) existing laws; and (iv) the administration of Commonwealth laws and programs; and (b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

Legislation	Requirement
Work Health & Safety Act 2011	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Plant Protection Act 1989	This act sets out requirements in respect to Flora Protection
Environmental Protection Act 1994	This act sets out requirements in respect to environmental protection
Threatened Species Conservation Act, 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.
	Under the terms of this Act Council is required to ensure the long term survival of the species identified.
Rivers and Foreshores Improvements Act, 1948	An Act to provide for the carrying out of works for the removal of obstructions from and the improvement of rivers and foreshores and the prevention of erosion of lands by tidal and non-tidal waters
Protection of the Environment Operations Act 1997	Council is required to exercise due diligence to avoid environmental impact and among others are required to develop operations emergency plans and due diligence plans to ensure that procedures are in place to prevent or minimise pollution.
National Parks and Wildlife Act (1974)	An Act relating to the establishment, preservation and management of national parks, historic sites and certain other areas and the protection of certain fauna, native plants and Aboriginal objects
Native Vegetation Act 2003	This Act regulates the clearing of native vegetation on all land in NSW, except for excluded land listed in Schedule 1 of the Act. The Act outlines what landowners can and cannot do in clearing native vegetation.
Public Works Act 1912	Sets out the role of Council in the planning and construction of new assets.
Road Transport (General) Act 2005	Provides for the administration and enforcement of road transport legislation. It provides for the review of decisions made under road transport legislation. It makes provision for the use of vehicles on roads and road related areas and also with respect to written off and wrecked vehicles.

Legislation	Requirement	
Road Transport (Safety and Traffic Management) Act 1999	Facilitates the adoption of nationally consistent road rules in NSW, the Australian Road Rules. It also makes provision for safety and traffic management on roads and road related areas including alcohol and other drug use, speeding and other dangerous driving, traffic control devices and vehicle safety accidents.	
Roads Act 1993	Sets out rights of members of the public to pass along public roads establishes procedures for opening and closing a public road, and provide for the classification of roads. It also provides for declaration of the RTA and other public authorities as roads authorities for both classified and unclassified roads, and confers certain functions (in particular, the function of carrying out roadwork) on the RTA and other roads authorities. Finally i provides for distribution of functions conferred by this Act between the RTA and other roads authorities, and regulates the carrying out of variou activities on public roads.	
Local Government (Highways) Act 1982	An Act to consolidate with amendments certain enactments concerning the functions of the corporations of municipalities with respect to highways and certain other ways and places open to the public.	
NSW Road Rules 2008	A provision of road rules that are based on the Australian Road Rules so as to ensure that the road rules applicable in this State are substantially uniform with road rules applicable elsewhere in Australia.	
Valuation of Land Act 1916	This act sets out requirements in respect Land Valuation	
Crown Lands Act, 1989	An Act to provide for the administration and management of Crown land in the Eastern and Central Division of the State of NSW Council has large holdings of Crown land under it care, control and management.	
Heritage Act, 1977	An Act to conserve the environmental heritage of the State. Several properties are listed under the terms of the Act and attract a high level of maintenance cost, approval and monitoring.	
Building Code of Australia	The goal of the BCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant, health, safety (including structural safety and safety from fire), amenity and sustainability objectives efficiently.	
Building Fire and Safety Regulation 1991	This Act sets out the regulations for things such as means of escape, Limitation of people in buildings, Fire and evacuation plans and testing of special fire services and installations.	
Electrical Safety Act 2002	This act sets out the installation, reporting and safe use with electricity	
Building Regulation 2003	This act sets out requirements in respect to Building Requirements	
Plumbing and Drainage Act 2002	This act sets out requirements in respect to Plumbing Requirements	
Rural Fires Act, 1997	An Act to establish the NSW Rural Fire Service and define its functions; to make provision for the prevention, mitigation and suppression of rural fires. Under the terms of this Act Council is required to mitigate any fire that emanate from bushland.	
Dangerous Goods Safety Management Act 2001	This act sets out the safe use, storage and disposal of dangerous goods	

Legislation	Requirement
Fire and Rescue Service Act 1990	This act sets out requirements in respect to Emergency Services for Fire and Rescue
Public Records Act 2002	This act sets out requirements in respect maintaining Public Records
Surveillance Devices Act	This act sets out requirements in respect use of Surveillance Devices
Civil Liability Act, 2002	An Act to make provision in relation to the recovery of damages for death or personal injury caused by the fault of a person
Companion Animals Act, 1998	An Act to provide for the identification and registration of companion animals and for the duties and responsibilities of their owners. Under the terms of the Act Council is required to provide and maintain at least one off leash area. It currently has eleven areas identified as off leash.
Rural Fires Act, 1997	An Act to establish the NSW Rural Fire Service and define its functions; to make provision for the prevention, mitigation and suppression of rural fires. Under the terms of this Act Council is required to mitigate any fire that emanate from bushland.
Civil Aviation Act 1988	Sets out the Roles, purpose, responsibilities and powers of owners of registered airports and how the rules are enforced.

3.4 Current Levels of Service

We have defined service levels in two terms.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

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

Quality How good is the service?

Function Does it meet users' needs?

Capacity/Utilisation Is the service over or under used?

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

Technical service measures are linked to annual budgets covering:

- Operations the regular activities to provide services such as opening hours, cleansing frequency, mowing frequency, etc.
- Maintenance the activities necessary to retain an assets as near as practicable to an appropriate service condition (eg road patching, unsealed road grading, building and structure repairs),
- Renewal the activities that return the service capability of an asset up to that which it had originally (eg
 frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building
 component replacement),

• Upgrade – the activities to provide an higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new library).

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

Our current service levels are summarised in Table 3.4, and additional details are included as Appendix G.

Table 3.4: Current and Desired Service Levels – Summary

COMMUNITY LEVELS OF SERVICE					
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response	
Quality	Well maintained roads Smooth Roads and Footpaths	Customer requests	To be provided from the Resident Survey and Community Plan research	Requests received should not increase annually	
	Do not pond water Look well maintained	% of network that is poor or very poor		Further assessment required to inform future revisions of the Transport Asset Management Plan	
Function	Ensure access to facilities and services is provided that is suited to the use	Customer surveys Customer requests % of network that is poor or very poor	To be provided from the Resident Survey and Community Plan research Has not been fully assessed at this time	Requests received should not increase annually Further assessment required to inform future revisions of the Transport Asset Management Plan	
Capacity/Utilisation	Network meets the capacity requirements	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan	
TECHNICAL LEVEL					
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)	
Operations	Street cleaning Street lighting Inspections	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met	

⁴ IPWEA, 2011, IIMM, p 2.22

	Management Systems			
Operational Cost	•		\$95,000 pa	Will need to increase to \$100,000 pa over the next 10 years to maintain current funding level % due to some asset growth.
Maintenance	Remove hazards Road Grading Repair damage to roads, footpaths, kerb and gutter	Respond to complaints Budget and resources are adequate to complete the required works within an acceptable time	Reactive maintenance to limit of budget allocation.	Regular Inspections Planned Maintenance
Maintenance Cost			\$2,290,000pa	Increased maintenance will be required if service levels are to be maintained
Renewal	Renewal of assets	Replacement Cycle	Renewal of Transport assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met. Increasing renewal required in short to medium term, due to the age of the network.
Renewal Cost			\$2,430,000 for year 1 and then \$2,350,000 per year	Renewal requirements are not being met. The Scenario 2 estimate of average annual renewal requirements is \$6,500,000 pa
Upgrade/New	Provide services in a cost effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works	Achieved by a combination of Council and Contract works. The augmentation of Transport systems to meet appropriate service and risk outcomes is not funded
Upgrade/New Cost	_		\$95,000 is	Transport

assumed for the	improvement plan is
first year, then	assumed to be funded
reduce to \$50,000	
for the remaining	
years of the 10	
year planning	
period	

3.5 Desired Levels of Service

Indications of desired levels of service are obtained from community consultation/engagement. The asset management planning process includes the development of 3 scenarios to develop levels of service that are financially sustainable.

4. FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecast

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

4.3 Demand Impact on Assets

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

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population	Population increase from 5,000	Increase to 7,000 anticipated	Minimal increase in vehicular and pedestrian traffic
Community Expectations	There is a strong desire from the community for a high standard of road network	Expectations will continue to increase	Existing networks are not suitable for the purpose
Increasing Costs	The cost to construct, maintain and renew infrastructure is increasing at a rate greater than council's revenue	Anticipated to continue Cost of renewing Transport systems is increasing	The need to carefully target and plan infrastructure is increasing in importance as maximising the service that can be delivered within the funding limitations will be under pressure.
Environment and Climate Change	It is widely accepted that climate is changing	Future is uncertain but is likely that climate change will impact on the delivery of the services provided by infrastructure. Weather extremes will have significant impact on Transport and flood management infrastructure	Some services such as the Transport network may be impacted by climate/rainfall and severe events. Higher frequency and larger flood events. Additional costs will be imposed to fund environmental initiatives e.g. carbon trading and retrofitting of water quality infrastructure
Industrial Activity	Activity relating to 3 mines operating at Cobar	Additional activity relating to 3 mines operating at Cobar, all with increased capacity and the following additional: 1 mine operating at Nymagee 1 mine operating at Wontawinta 1 mine operating at Mount Hope	Increased Vehicle and pedestrian traffic

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures⁵. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

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

Table 4.4: Demand Management Plan Summary

Service Activity	Demand Management Plan		
Regional Roads- Sealed	Identify and promote major transport routes with road hierarchy matched to service levels.		
	Develop road hierarchy with matched service levels for rehabilitation and bitumen reseals.		
Regional Roads- Unsealed	Identify and promote major transport routes with road hierarchy matched to service levels.		
	Develop road hierarchy with matched service levels for patrol grading and gravel re-sheeting cycle.		
Shire Roads - Sealed	Identify and promote major transport routes with road hierarchy matched to service levels.		
	Develop road hierarchy with matched service levels for rehabilitation and bitumen reseals.		
Shire Roads- Unsealed	Identify and promote major transport routes with road hierarchy matched to service levels.		
	Develop road hierarchy with matched service levels for patrol grading and gravel re-sheeting cycle.		
	Identify surplus unsealed roads for possible disposal.		
Town and Village Streets - Sealed	Identify and promote major transport routes with road hierarchy matched to service levels.		
	Develop road hierarchy with matched service levels for rehabilitation and bitumen reseals.		
Town and Village Streets- Unsealed	Develop road hierarchy with matched service levels for patrol grading and gravel re-sheeting cycle.		
	Identify surplus unsealed roads for possible disposal.		
Footpaths	Identify and promote major pedestrian routes with footpath hierarchy matched to service levels.		
Kerb and Gutter	Identify and promote major street storm water drainage routes that justify extension of kerb and gutter.		
Cobar Regional Airport & village Airstrips	Identify air traffic demand and respond to level of service required. Promote as an alternative access to Cobar Shire Council.		

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⁵ IPWEA, 2011, IIMM, Table 3.4.1, p 3 | 58.

4.5 Asset Programs to meet Demand

Initial population growth is likely to result in infill housing being constructed rather than development of new residential estates.

Increased industrial activity resulting from increased mine capacity and number may necessitate the required extension of bitumen seal and kerb and gutter in the Cobar industrial area.

Council in the near future may consider a change in philosophy in regard to having the rehabilitation and bitumen sealing of its sealed road network and gravel re-sheeting on its unsealed road network being a higher priority than extension of bitumen seals on its Regional Road and Shire Road network with extensions only being undertaken with extra-ordinary funding being provided by the State or Commonwealth Government.

Increased air traffic and passenger numbers will require further upgrading work to the runways, car parking and terminal building

New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

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

□ Contributed □ Constructed \$1,200 \$1,000 (\$1,000) \$800 \$600 \$400 \$200 2017 2019 2022 2023 2024 2020 2021 Year

Cobar SC - Upgrade & New Assets to meet Demand (Transport_S1_V1)

If the current budget for additional assets to be created continues at a rate of:

- \$95,000 for the next year
- then reduces to \$50,000 for the following years
- continues at an average of these rates during the following 10 years

The result will be the creation of close to \$1.1 M of additional assets over the next 20 years.

Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

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

5.1 Background Data

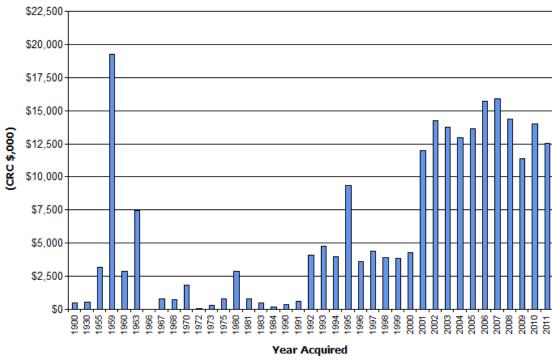
5.1.1 Physical parameters

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

The age profile of the assets include in this AM Plan is shown in Figure 2.

Figure 2: Asset Age Profile





The age profile information in Figure 2 is based on the data in council's asset register.

5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available.

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

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency			
Regional Roads	95% of Unsealed network is not all weather access, with less than 25mm of			
	rain.			
	10% of Sealed network has substandard width.			
	5% of Sealed network has substandard pavement.			
	2 Stock grids with substandard widths.			
Shire Roads	95% of Unsealed network is not all weather access, with less than 25mm or			
	rain.			
	10% of Sealed network has substandard width.			
	5% of Sealed network has substandard pavement.			
	90% Stock Grids substandard (alignment, approaches, delineation and width)			
Town and Village Streets	15% of Sealed network has substandard seal allowing moisture ingress into			
	the pavement.			
Footpaths	5% of Unpaved footpaths with erosion and evenness problems.			
Kerb and Gutter	Isolated problems due to tree roots.			
	Lack of conforming pram ramps.			
Cobar Regional Airport & Village	Runway Sealed surface has reached the end of its useful life and requires			
Airstrips	resealing. Pal lighting system does not meet the current standards and			
	requires replacement. Cobar Airport requires the installation of an AFRU			
	reporting station to comply with RPT standards. Unsealed runways are not			
	available in periods of wet weather.			

5.1.3 Asset condition

Condition is monitored and managed at an operational level, and the information used to prepare the condition profile is from the asset register.

The condition profile of our assets is shown in Figure 3

Fig 3: Asset Condition Profile

At present detailed condition is not available to include in a graphical format. The development of this information should be a consideration for future work, but will be dependent on availability of resources to assess and record.

The technical judgement made by staff is that:

- The majority of Council's Sealed Regional Road and Shire Road network is in 'Average' to 'Good' condition.
- Council's Sealed Town and Village Street network is in 'Average' condition. Conditions need to be improved by the provision of higher levels of bitumen reseals.
- Council's Unsealed Regional Road and Shire Road network is in 'Poor' condition with minimal gravel surface
 and natural surfaced roads requiring heavy formation work and drainage work. Mitre drain and table drain
 work has received low priority in the past.

If funding levels remain the same Council will, in the near future, have to determine whether cyclic maintenance work on its Regional Roads, Shire Roads and Town and Village Streets should be a higher priority than extending the Sealed Road network to ensure that the existing road network does not continue to deteriorate.

• Council's Regional Road and Shire Road bridges are in 'Very Good' condition.

- Council's Footpaths are in 'Good' to 'Very Good' condition.
- Council's Kerb and Gutter is in 'Very Good' condition.
- Council's Airports are generally in good condition with some high priority deficiencies.

Over time, further assessment will be undertaken on the Transport Asset condition.

Condition is generally measured using a 1-5 grading system⁶ as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 2012 covered by this asset management plan is shown below.

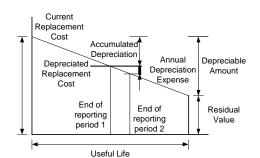
Assets are valued at replacement cost.

Current Replacement Cost	\$236,384,000
Depreciable Amount	\$134,028,000
Depreciated Replacement Cost ⁷	\$189,299,000
Annual Asset Consumption	\$7,849,000

Useful lives were based on industry averages.

Key assumptions made in preparing the valuations were:

• Use of existing technical data for value assessment



Cobar Shire Council – Transport Asset Management Plan 2013

⁶ IPWEA, 2011, IIMM, Sec 2.5.4, p 2 | 79.

⁷ Also reported as Written Down Current Replacement Cost (WDCRC).

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption

5.9%

(Depreciation/Depreciable Amount)

Rate of Annual Asset Renewal 1.8% (Year 1) (Capital renewal expenditure/Depreciable amount)

Rate of Annual Asset Upgrade/New 0.10% (Year 1) (Capital upgrade expenditure/Depreciable amount)

Rate of Annual Asset Upgrade/New

0.10% (Year 1)

(Including contributed assets)

In 2013 the organisation plans to renew assets at 31% of the rate they are being consumed and will be increasing its asset stock by 0.1% in the year.

5.1.5 Historical Data

This is based on the existing technical register. Over time this should be aligned and incorporated into councils financial asset register

5.2 Infrastructure Risk Management Plan

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

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' - requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Unsealed Road Network	Reduction in number of roads with all-weather access	Н	Develop a road hierarchy, appropriate cyclic maintenance program (gravel re-sheeting). Match service levels to available funds.	Not reduced but next actions are understood	Staff time
Sealed Road Network	Increase in Pavement failures and road roughness due to wearing of sealed surfaces	Н	Develop a road hierarchy, appropriate cyclic maintenance program (Bitumen Reseals) to approach a 10 year cycle. Match service levels to available funds.	Not reduced but next actions are understood but risks are reduced by funding priority areas	Staff time
Footpaths	Trips and Falls	Н	Maintain defect data, determine priorities based on service and risk criteria, monitor prioritised program for defect rectification.	Reduced unless disaster funding arrangements change	Staff time
Airports & Airstrips	Runway defects	Н	Daily inspection & rectification	Not reduced but next actions are understood but risks are reduced by funding priority areas	Staff time
Damage due to natural disasters	Network impacted	Н	Claimed and funded by Natural Disaster Funding	Reduced unless disaster funding arrangements change	Staff time

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

⁸ LCC Infrastructure Risk Management Plan

5.3 Routine Operations and Maintenance Plan

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

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

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. road patching but excluding rehabilitation or renewal. Maintenance may be classifies into reactive, planned and specific maintenance work activities.

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

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

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure Planned and Specific
2012-2013	\$2,290,000
2013 onwards	\$2,150,000

Planned maintenance work as a % of total maintenance expenditure is not identified. Information on this should be developed for the next revision of this asset management plan, as higher proportions of planned maintenance expenditure to reactive maintenance will provide better value.

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

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation's service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Sealed Roads	High standard of road with all-weather vehicular access Town and rural roads with a bitumen surface typically spray seal, asphalt or recycled bitumen
Unsealed Roads	Road access with standard varying from all-weather access to dry weather access only Mostly rural roads formed and surfaced with imported granular material
Footpaths	Safe non-vehicular access primarily for pedestrians and cycle movements within the road reserve
Kerb and Gutter	Typically constructed of concrete on the edge of sealed roads to formalise the traffic corridor and convey surface stormwater to the underground pipe drainage network.
Bridges	High level crossings
Major Culverts	Low level creek crossings

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refines investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Not yet identified within the Transport Asset Management Plan, but it likely to be sections of the transport network is critical to access requirements.		Intervention maintenance (reactive and planned) e.g. Grading of unsealed roads

Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

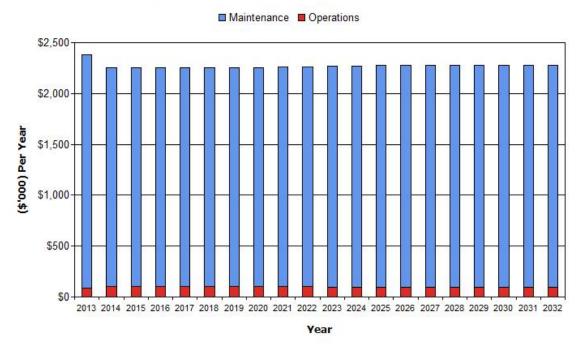
- AUSPEC (NATSPEC) Maintenance and Construction Standards
- ARRB Unsealed Roads Manual
- ARRB Sealed Local Roads Manual
- Austroads Pavement Design
- RTA Sprayed Sealing Guide
- Relevant Australian Standards
- Relevant RTA Standards
- CASA MOS Part 139 Standards

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2012 dollar values (i.e. real values).

Figure 4: Projected Operations and Maintenance Expenditure

Cobar SC - Projected Operations & Maintenance Expenditure (Transport_S3_V1)



The small increase is indicative of the need to fund operations and maintenance associated with the new assets created during the planning period.

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

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the 'Expenditure Template'.

 Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or

- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

A combination of these methods was used to prepare the 3 renewal scenarios included in this asset management plan.

Assets requiring renewal are identified comparing 3 Scenarios.

- Scenario 1 uses the Asset Register valuation data to project the renewal costs for renewal years using the acquisition year and useful life, or
- Scenario 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or a combination of average network renewals plus defect repairs.
- Scenario 3 balances capital renewal expenditure with the Long Term Financial Plan.

It is common that the valuation registers used in Scenario 1 are not developed to a level of maturity where they are reliable for producing a realistic renewal forecast. Ideally when this asset register is sorted by remaining life from 1 to 10 years this should be consistent with the capital renewal program. For Cobar Shire Council the refinement of the asset register to achieve this situation should become an important part of the asset management improvement plan.

Scenario 2 is prepared using the technical estimates of what renewal is required to sustain the current levels of service, and it is common that that this estimate will be beyond the current funding capacity of council. Scenario 3 is a reflection of the actual funding available. The difference between Scenario 2 and Scenario 3 represents "what we can't do". The discussion about this "gap" will lead us into a much better informed community discussion about what are achievable and acceptable service levels, as well as giving a focus on managing risk. The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1.

Table 5.4.1: Useful Lives of Assets

Asset Sub Category	Road Classification	Subgroup	Useful L	ife Estimate (Ye	ears)
Roads			Formation	Pavement	Surface
	Regional Road - Category 1	Sealed	Indefinite	40	10
	Regional Road - Category 1	Gravel	Indefinite	10	
	Regional Road - Category 1	Natural	20		
	Regional Road - Category 2	Sealed	Indefinite	40	10
	Regional Road - Category 2	Gravel	Indefinite	10	
	Regional Road - Category 2	Natural	20		
	Shire Road - Category 1	Sealed	Indefinite	50	10
	Shire Road - Category 1	Gravel	Indefinite	10	
	Shire Road - Category 1	Natural	20		

Asset Sub Category	Road Classification	Subgroup	Useful	Life Estimate	(Years)
	Shire Road - Category 2	Sealed	Indefinite	50	10
	Shire Road - Category 2	Gravel	Indefinite	10	
	Shire Road - Category 2	Natural	20		
	Shire Road - Category 3	Sealed	Indefinite	50	10
	Shire Road - Category 3	Gravel	Indefinite	10	
	Shire Road - Category 3	Natural	20		
	Town Road - Category 1	Sealed	Indefinite	50	10
	Town Road - Category 1	Gravel	Indefinite	20	
	Town Road - Category 1	Natural	20		
	Town Road - Category 2	Sealed	Indefinite	50	10
	Town Road - Category 2	Gravel	Indefinite	20	
	Town Road - Category 2	Natural	20		
	Town Road - Category 3	Sealed	Indefinite	50	10
	Town Road - Category 3	Gravel	Indefinite	20	
	Town Road - Category 3	Natural	20		
Kerb and Gutter	All			80	I
Bridges	All		60		
Paths - Concrete	All		60		
Paths - Paved	All		40		

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
 - o the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
 - o the project objectives to rectify the deficiency,

- o the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
- o and evaluate the options against evaluation criteria adopted by Council, and
- o select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- · Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (eg replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road). 9

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

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.

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⁹ IPWEA, 2011, IIMM, Sec 3.4.4, p 3 | 60.

¹⁰ Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3 | 66.

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
Hierarchy within asset category	20%
Condition assessment	50%
Geometry, safety, functional deficiency	10%
Economic performance	10%
Network strategy	10%
Total	100%

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- AUSPEC (NATSPEC) Maintenance and Construction Standards
- ARRB Unsealed Roads Manual
- ARRB Sealed Local Roads Manual
- Austroads Pavement Design
- RTA Sprayed Sealing Guide
- Relevant Australian Standards
- Relevant RTA Standards
- CASA MOS Part 139 Standards

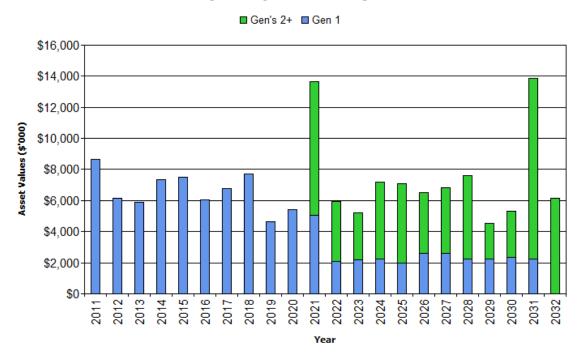
5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

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

Figure 5.1: Projected Capital Renewal Expenditure (Scenario 1 - from Asset Register)

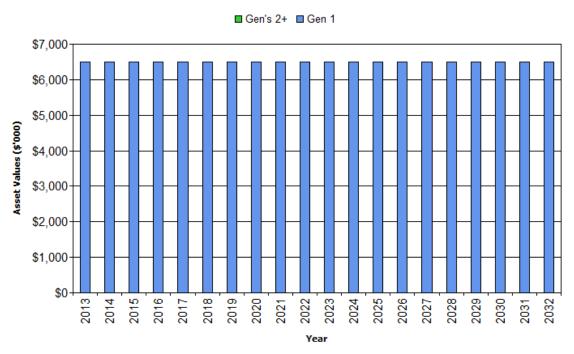
Cobar SC - Projected Capital Renewal Expenditure (Transport_S1_V1)



The renewal projection (forecast) in Scenario 1 (Using the asset technical valuation register) generates a variable renewal profile. Whilst the long term averages and total values from this register are sound, the shorter term renewal forecast are not, and are inconsistent with the known capital renewal plans. This indicates that further refinement of the asset register is required before it is valuable as a capital renewal planning tool. This should be given a high priority in the asset management improvement plan.

Figure 5.2: Projected Capital Renewal Expenditure (Scenario 2 - from Average Network Renewal Estimates)

Cobar SC - Projected Capital Renewal Expenditure (Transport_S2_V1)

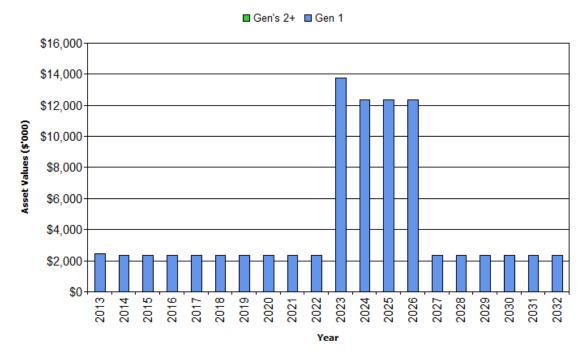


Scenario 2 estimates are based on the estimate of average renewal requirements. These are described in detail in Appendix A

The current renewal expenditure is anticipated to be insufficient for the short term and there is likely to be reduction in service levels and increasing risks.

Figure 5.3: Projected Capital Renewal Expenditure (Scenario 3 – Balanced with Long Term Financial Plan)

Cobar SC - Projected Capital Renewal Expenditure (Transport_S3_V1)



The first 10 years of expenditure shown in Fig 5.3 matches the funding provision in the long term financial plan. The peaks in renewal outside of the 10 year long term financial planning period are indicative of what cannot be done.

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

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

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

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
Hierarchy within asset category	30%
Condition assessment	10%
Geometry, safety, functional deficiency	10%
Economic performance	20%
Network strategy	30%
Total	100%

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
 - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
 - o the project objectives to rectify the deficiency including value management for major projects,
 - o the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - o management of risks associated with alternative options,
 - o and evaluate the options against evaluation criteria adopted by Council, and
 - o select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

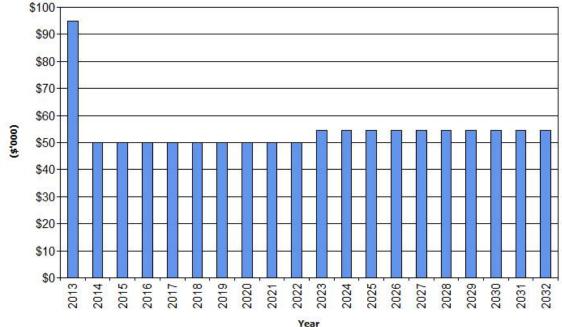
5.5.3 Summary of future upgrade/new assets expenditure

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

Cobar SC - Projected Capital Upgrade/New Expenditure

Fig 6: Projected Capital Upgrade/New Asset Expenditure

(Transport_S3_V1)



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 **Disposal Plan**

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in the organisation's long term financial plan.

Where cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
No assets identified for disposal in this asset management plan				

6. FINANCIAL SUMMARY

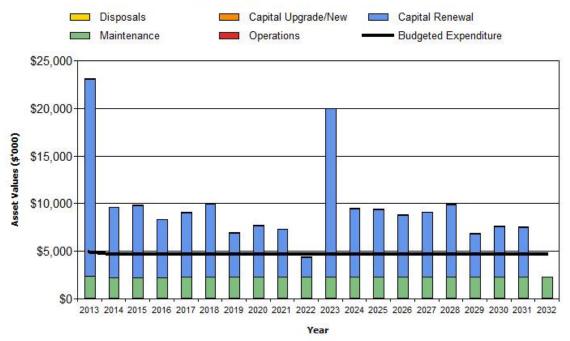
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset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

6.1 Financial Statements and Projections

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

Figure 7.1: Projected Operating and Capital Expenditure and Budget (Scenario 1 - from Asset Register)

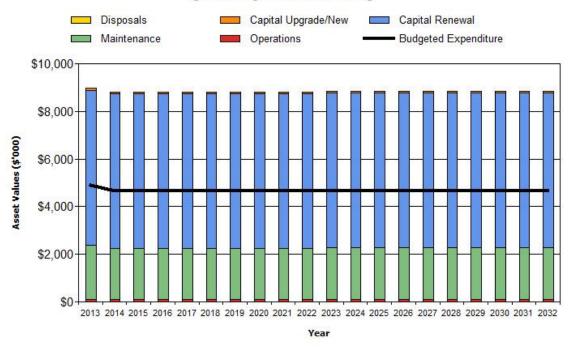




As discussed in Section 5.4 the expenditure projection (forecast) in Scenario 1 (Using the asset/valuation register) is not consistent with the required works program or the long term financial plan, and is indicative of the continuing work required to improve the asset register.

Figure 7.2: Projected Operating and Capital Expenditure and Budget (Scenario 2 - from Average Network Renewal Estimates)

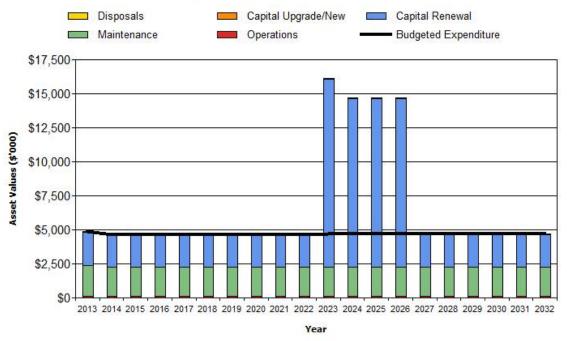
Cobar SC - Projected Operating and Capital Expenditure (Transport_S2_V1)



The Scenario 2 renewal requirements are based on the technical judgement made by Cobar Shire Council technical staff. This level of funding is not currently being achieved, and indicates a future reduction in services levels and increased risk.

Figure 7.3: Projected Operating and Capital Expenditure and Budget (Scenario 3 – Balanced with Long Term Financial Plan)





The first 10 years of Scenario 3 have been balanced with the funding available. In practice to achieve this infrastructure renewal projects will be deferred. The detailed project implications and the service and risk consequences of this should form the basis of developing an advanced asset management plan.

6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period. (Based on Scenario 2)

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio 11 36 %

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, the organisation is forecasting that it will have 36% of the funds required for the optimal renewal and replacement of its assets.

Long term - Life Cycle Cost

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

¹¹ AIFMG, 2009, Financial Sustainability Indicator 8, Sec 2.6, p 2.18

expense). The life cycle cost for the services covered in this asset management plan is \$10,117,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$4,622,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is \$5,495,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 46% of 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 that 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 organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term - 10 year financial planning period

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

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

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$8,768,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$4,622,000 on average per year giving a 10 year funding shortfall of \$4,146,000 per year. This indicates that Council expects to have 53% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is \$8,779,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$4,643,000 on average per year giving a 5 year funding shortfall of \$4,136,000. This indicates that Council expects to have 53% of projected expenditures required to provide the services shown in this asset management plan.

Table 6 – Summary of Service Sustainability Ratios

	Scenario 1 (\$000's)	Scenario 2 (\$000's)	Scenario 3 (\$000's)
Asset Renewal Funding Ratio			
Asset Renewal Funding Ratio	31 %	36 %	100 %
Life Cycle Cost (long term)'(\$000)			
Life Cycle Cost (depreciation + ops. and maintenance. eexpenditures – 10 year average)	\$10,116	\$10,117	\$10,116
Life Cycle Exp. (Capital renewal. + operations + maintenance expenditure 10 year average)	\$4,621	\$4,622	\$4,621
Life Cycle Gap [life cycle expenditure - life cycle cost [-ve = gap]	-\$5,495	-\$5,495	-\$5,495
Life Cycle Sustainability Indicator [life cycle expenditure / LCC]	46 %	46 %	46 %
Medium Term (10 yrs) Sustainability			
10 year Operations, Maintenance & Renewal Projected Expenditure	\$9,596	\$8,768	\$4,625
10 year Operations, Maintenance & Renewal Planned (Budget) Expenditures	\$4,621	\$4,622	\$4,621
10 year Funding Shortfall (10 year projected. expenditures Planned (Budget) Expenditures)	-\$4,975	-\$4,146	-\$4
10 year Sustainability Indicator (10 year planned exp. / projected. Expenditure)	48 %	53 %	100 %
Short Term (5 years) Sustainability			
5 year Operations, Maintenance & Renewal Projected Expenditure	\$11,951	\$8,779	\$4,644
5 year Operations, Maintenance & Renewal Planned (Budget) Expenditure	\$4,642	\$4,643	\$4,642
5 year Funding Shortfall (5 year projected expenditures planned (budget) expenditures)	-\$7,309	-\$4,136	-\$2
5 year Sustainability Indicator (5 year planned expenditures. / projected expenditures)	39 %	53 %	100 %

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

Figure 7A: Asset Management Financial Indicators (Scenario 1 - from Asset Register)

Cobar SC - AM Financial Indicators (Transport_S1_V1)

■ Comparison of LTFP Outlays as a % of Projected Requirements

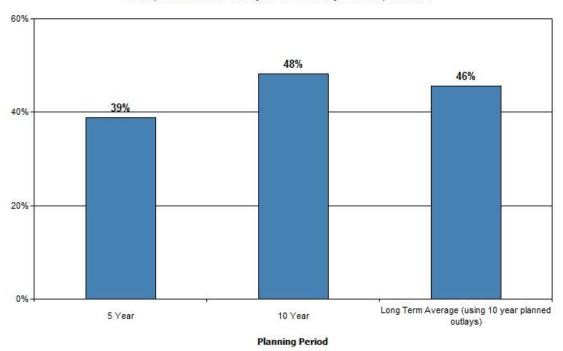


Figure 7B: Asset Management Financial Indicators (Scenario 2 - from Average Network Renewal Estimates)

Cobar SC - AM Financial Indicators (Transport_S2_V1)

■ Comparison of LTFP Outlays as a % of Projected Requirements

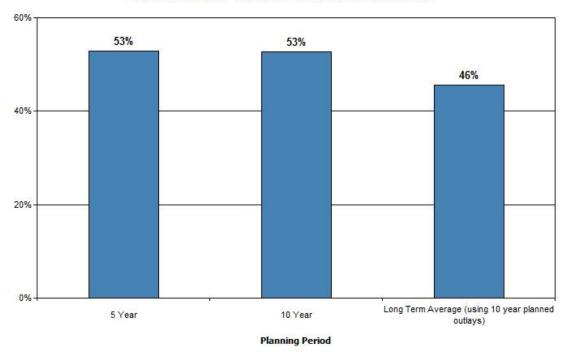
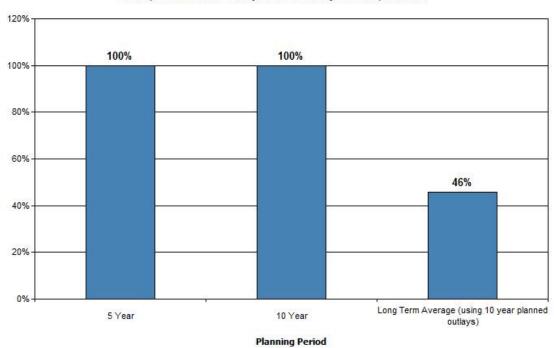


Figure 7C: Asset Management Financial Indicators (Scenario 3 – Balanced with Long Term Financial Plan)

Cobar SC - AM Financial Indicators (Transport_S3_V1)

■ Comparison of LTFP Outlays as a % of Projected Requirements



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

Figures 8.1 to 8.3 show the projected asset renewal and replacement expenditure over the 20 years of the AM Plan for the 3 scenarios being considered. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8.1: Projected and LTFP Budgeted Renewal Expenditure (Scenario 1 - from Asset Register)

Cobar SC - Projected & LTFP Budgeted Renewal Expenditure (Transport_S1_V1)

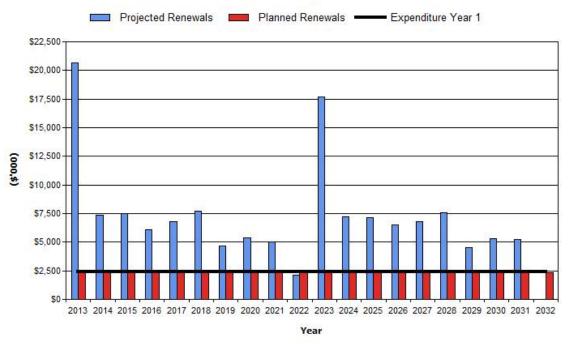


Table 6.1.1.S1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1.S1: Projected and LTFP Budgeted Renewals and Financing Shortfall (Scenario 1 - from Asset Register)

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2013	\$20,660	\$2,430	-\$18,230	-\$18,230
2014	\$7,342	\$2,350	-\$4,992	-\$23,222
2015	\$7,527	\$2,350	-\$5,177	-\$28,400
2016	\$6,062	\$2,350	-\$3,712	-\$32,112
2017	\$6,774	\$2,350	-\$4,424	-\$36,536
2018	\$7,721	\$2,350	-\$5,371	-\$41,907

2019	\$4,643	\$2,350	-\$2,293	-\$44,200
2020	\$5,407	\$2,350	-\$3,057	-\$47,257
2021	\$5,045	\$2,350	-\$2,695	-\$49,952
2022	\$2,107	\$2,350	\$243	-\$49,709
2023	\$17,673	\$2,358	-\$15,315	-\$65,024
2024	\$7,182	\$2,358	-\$4,824	-\$69,849
2025	\$7,113	\$2,358	-\$4,755	-\$74,604
2026	\$6,500	\$2,358	-\$4,142	-\$78,746
2027	\$6,810	\$2,358	-\$4,452	-\$83,198
2028	\$7,584	\$2,358	-\$5,226	-\$88,425
2029	\$4,558	\$2,358	-\$2,200	-\$90,625
2030	\$5,331	\$2,358	-\$2,973	-\$93,598
2031	\$5,244	\$2,358	-\$2,886	-\$96,484
2032	\$0	\$2,358	\$2,358	-\$94,126

Note: A negative shortfall indicates a financing gap; a positive shortfall indicates a surplus for that year.

Figure 8.2: Projected and LTFP Budgeted Renewal Expenditure (Scenario 2 - from Average Network Renewal Estimates)

Cobar SC - Projected & LTFP Budgeted Renewal Expenditure (Transport_S2_V1)

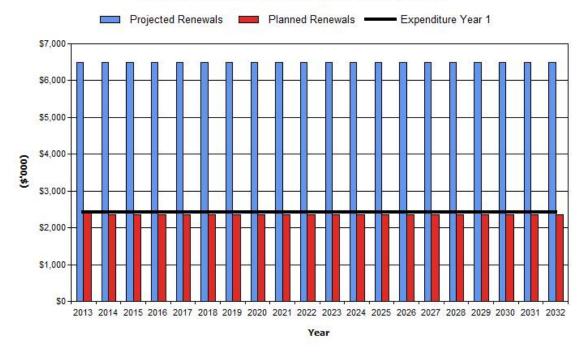


Table 6.1.1.S2 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1.S2: Projected and LTFP Budgeted Renewals and Financing Shortfall (Scenario 2 - from Average Network Renewal Estimates)

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2013	\$6,500	\$2,430	-\$4,070	-\$4,070
2014	\$6,500	\$2,350	-\$4,150	-\$8,220
2015	\$6,500	\$2,350	-\$4,150	-\$12,370
2016	\$6,500	\$2,350	-\$4,150	-\$16,520
2017	\$6,500	\$2,350	-\$4,150	-\$20,670
2018	\$6,500	\$2,350	-\$4,150	-\$24,820
2019	\$6,500	\$2,350	-\$4,150	-\$28,970
2020	\$6,500	\$2,350	-\$4,150	-\$33,120
2021	\$6,500	\$2,350	-\$4,150	-\$37,270
2022	\$6,500	\$2,350	-\$4,150	-\$41,420
2023	\$6,500	\$2,358	-\$4,142	-\$45,562
2024	\$6,500	\$2,358	-\$4,142	-\$49,704
2025	\$6,500	\$2,358	-\$4,142	-\$53,846
2026	\$6,500	\$2,358	-\$4,142	-\$57,988
2027	\$6,500	\$2,358	-\$4,142	-\$62,130
2028	\$6,500	\$2,358	-\$4,142	-\$66,272
2029	\$6,500	\$2,358	-\$4,142 -\$70,414	
2030	\$6,500	\$2,358	-\$4,142 -\$74,556	
2031	\$6,500	\$2,358	-\$4,142 -\$78,698	
2032	\$6,500	\$2,358	-\$4,142	-\$82,840

Note: A negative shortfall indicates a financing gap; a positive shortfall indicates a surplus for that year.

Figure 8.3: Projected and LTFP Budgeted Renewal Expenditure (Scenario 3 – Balanced with Long Term Financial Plan)

Cobar SC - Projected & LTFP Budgeted Renewal Expenditure (Transport_S3_V1)

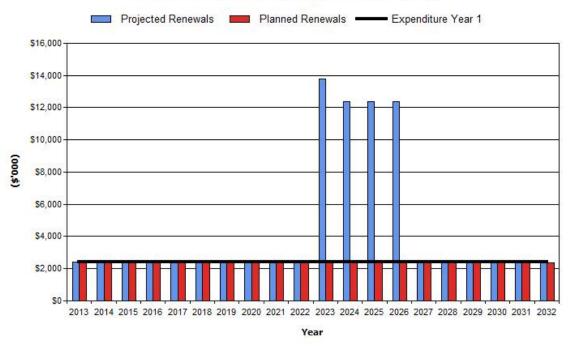


Table 6.1.1.S3 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1.S3: Projected and LTFP Budgeted Renewals and Financing Shortfall (Scenario 3 – Balanced with Long Term Financial Plan)

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2013	\$2,430	\$2,430	\$0	\$0
2014	\$2,350	\$2,350	\$0	\$0
2015	\$2,350	\$2,350	\$0	\$0
2016	\$2,350	\$2,350	\$0	\$0
2017	\$2,350	\$2,350	\$0	\$0
2018	\$2,350	\$2,350	\$0	\$0
2019	\$2,350	\$2,350	\$0	\$0
2020	\$2,350	\$2,350	\$0	\$0
2021	\$2,350	\$2,350	\$0	\$0
2022	\$2,350	\$2,350	\$0	\$0
2023	\$13,778	\$2,358	-\$11,420	-\$11,420

2024	\$12,358	\$2,358	-\$10,000	-\$21,420
2025	\$12,358	\$2,358	-\$10,000	-\$31,420
2026	\$12,358	\$2,358	-\$10,000	-\$41,420
2027	\$2,358	\$2,358	\$0	-\$41,420
2028	\$2,358	\$2,358	\$0	-\$41,420
2029	\$2,358	\$2,358	\$0	-\$41,420
2030	\$2,358	\$2,358	\$0	-\$41,420
2031	\$2,358	\$2,358	\$0	-\$41,420
2032	\$2,358	\$2,358	\$0	-\$41,420

Note: A negative shortfall indicates a financing gap; a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between projected asset renewal/replacement expenditure and amounts accommodated in the LTFP indicates that further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP). This work forms part of the ongoing improvement of the asset management plan. In this asset the extent of the "gap" is shown in the difference between Scenario 2 and Scenario 3.

We will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2.S2 shows the projected expenditures for the 10 year long term financial plan based on the estimated average network renewals (Scenario 2 – Average Network Renewal Estimates). Ongoing consideration of future funding is required as this expenditure is not funded and will result in the consequence of declining service levels and increasing risk.

Expenditure projections are in2012 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan (\$000) – Based on Scenario 2 - from Average
Network Renewal Estimates

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2013	\$95.00	\$2,290.00	\$6,500.00	\$95.00	\$0.00
2014	\$100.04	\$2,151.53	\$6,500.00	\$50.00	\$0.00
2015	\$100.06	\$2,152.34	\$6,500.00	\$50.00	\$0.00
2016	\$100.08	\$2,153.15	\$6,500.00	\$50.00	\$0.00
2017	\$100.10	\$2,153.96	\$6,500.00	\$50.00	\$0.00
2018	\$100.12	\$2,154.76	\$6,500.00	\$50.00	\$0.00
2019	\$100.15	\$2,155.57	\$6,500.00	\$50.00	\$0.00
2020	\$100.17	\$2,156.38	\$6,500.00	\$50.00	\$0.00
2021	\$100.19	\$2,157.18	\$6,500.00	\$50.00	\$0.00
2022	\$100.21	\$2,157.99	\$6,500.00	\$50.00	\$0.00

Table 6.1.2.S3 shows the projected expenditures which are matching the 10 year long term financial plan (Scenario 3 – Balanced with Long Term Financial Plan). Ongoing consideration of future funding is required as this expenditure will result in the consequence of declining service levels and increasing risk.

Expenditure projections are in2012 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan (\$000) – Based on Scenario 3 – Balanced with available funding

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2013	\$90.00	\$2,290.00	\$2,430.00	\$95.00	\$0.00
2014	\$100.04	\$2,151.53	\$2,350.00	\$50.00	\$0.00
2015	\$100.06	\$2,152.34	\$2,350.00	\$50.00	\$0.00
2016	\$100.08	\$2,153.15	\$2,350.00	\$50.00	\$0.00
2017	\$100.10	\$2,153.96	\$2,350.00	\$50.00	\$0.00
2018	\$100.12	\$2,154.76	\$2,350.00	\$50.00	\$0.00
2019	\$100.14	\$2,155.57	\$2,350.00	\$50.00	\$0.00
2020	\$100.17	\$2,156.38	\$2,350.00	\$50.00	\$0.00
2021	\$100.19	\$2,157.18	\$2,350.00	\$50.00	\$0.00
2022	\$100.21	\$2,157.99	\$2,350.00	\$50.00	\$0.00

6.2 Funding Strategy

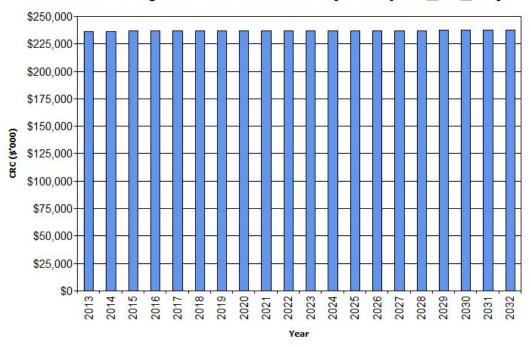
After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the organisation's 10 year long term financial plan.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by the organisation and from assets constructed by land developers and others and donated to the organisation. Figure 9 shows the projected replacement cost asset values over the planning period in real values.

Figure 9: Projected Asset Values

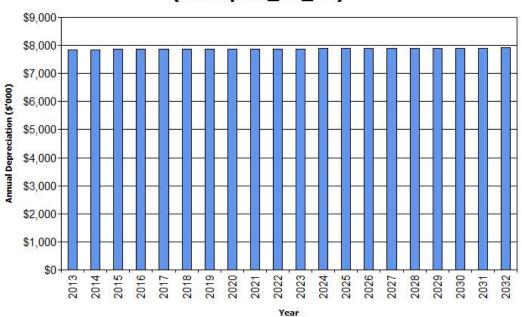
Cobar SC - Projected Asset Values (Transport_S3_V1)



Asset consumption values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Consumption Expense

Cobar SC - Projected Depreciation Expense (Transport_S3_V1)



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost

Cobar SC - Projected Depreciated Replacement Cost (Transport_S3_V1)



The decline in asset value is indicative that service levels cannot be maintained with current funding levels.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Use of the existing inventory data (Scenario 1) including depreciation which is used for the Long Term sustainability assessments	High Risk
Use of technical judgement for renewal requirements (Scenario 2)	Medium risk

Use of technical judgement for valuations, useful lives and remaining lives determined from experience	Medium Risk
Use of current expenditure information as best as this can be determined	Medium Risk

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale ¹² in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate \pm 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy \pm 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	C Uncertain	Estimated, further substantiation required for next revision of the AMP
Growth projections	C Uncertain	Estimated, further substantiation required for next revision of the AMP

¹² IPWEA, 2011, IIMM, Table 2.4.6, p 2 | 59.

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Operations expenditures	C Uncertain	Direct from budget, but breakdown into operations and maintenance and renewal is estimated and requires development		
Maintenance expenditures	C Uncertain	Direct from budget, but breakdown into operations and maintenance and renewal is estimated and requires development		
Projected Renewal expenditures. - Asset values	B Reliable	Direct from budget, but breakdown into operations and maintenance and renewal is estimated and requires development		
- Asset residual values	C Uncertain	Estimated at valuation. Further assessment required		
- Asset useful lives	C Uncertain	Estimated using typical values. Further substantiation required for next revision of the AMP		
- Condition modelling	C Uncertain	Estimated, further substantiation required for next revision of the AMP		
- Network renewals	B Reliable	Estimated, further substantiation required for next revision of the AMP		
- Defect repairs	B Reliable	Estimated, further substantiation required for next revision of the AMP		
Upgrade/New expenditures	C Uncertain	Estimated, further substantiation required for next revision of the AMP		
Disposal expenditures	B Reliable	Estimated, but not considered to be significant		

Over all data sources, the data confidence is assessed as low/medium confidence level for data used in the preparation of this AM Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council uses the Civic View module for its financial management system.

The Director of Corporate and Community Services is responsible for the accounting and financial systems.

Accounting standards and regulations

- Local Government Act (NSW) 1993
- Local Government Amendment (Planning and Reporting) Act 2009
- Local Government (Finance Plans and Reporting) Regulation 2010
- AASB116

Capital/maintenance threshold

Items of infrastructure, property, plant and equipment are not capitalised unless their cost of acquisition exceeds the following; ¹³

Council's capital threshold policy specifies a \$10,000.00 limit for expenditure that is expensed. Expenditure of over \$10,000.00 on an asset is to be classed as capital expenditure and capitalised against the asset.

Required changes to accounting financial systems arising from this AM Plan

- Develop reporting on expenditures, with separation of costs for operations as opposed to maintenance and improved reporting on capital expenditures as renewal or upgrade/new,
- Continued input and development of a single corporate asset register, in which financial calculations including calculation of annual depreciation can be undertaken by council.
- Linking of the customer service system/work orders to the corporate asset register to link requests to asset records,
- Improved project cost accounting to record costs against the asset component and develop valuation unit rates.

7.2.1 Asset management system

A number of systems relevant to asset management are used by Cobar Shire Council. These include:

The Geographical Information System (GIS) used is Mapinfo (Version 10.5). This system holds the spatial information on a number of asset groups including sewer, water and dedicated public roads.

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 $^{^{13}}$ Cobar Shire Council, General Purpose Financial Statements for the year ended 30 June 2011

Property and Rating System used is Civic View.

No Asset Modelling has been undertaken for Sewer Assets. Asset Management Plans are in accordance with the IPWEA National Asset Management Strategy System NAMSPlus.

The responsibility for operating and maintaining the core Asset Management Systems and processes for Sewer Assets is with Engineering Services Department of Council.

Due to the additional requirements to meet financial reporting standards for Fair Value and the likely requirements for a higher standard of reporting on infrastructure assets, it is likely that there will be need to consolidate asset management information into one core corporate system. The ongoing maintenance of this system should then become a core function within Council's operations.

Accountabilities for asset management system and data maintenance

• Engineering Services Department

Required changes to asset management system arising from this AM Plan

- Review of accuracy and currency of asset data,
- Continued development of a single technical asset register as the corporate asset register, in which financial calculations including calculation of annual depreciation can be undertaken by council at an individual asset component level.
- Development of a works costing and maintenance management system to improve works planning and cost recording, in particular to identify expenditure type (operations, maintenance, capital renewal and capital new/upgrade)
- Improved project cost accounting to record costs against the asset component and develop valuation unit rates.

7.2 Improvement Program

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Improve record and reporting on expenditures, with separate costs for operations, maintenance and capture capital expenditures as renewal or upgrade/new	Corporate (Technical & Financial)	Staff Time	July 2013
2	Establish the development of the corporate asset register, in which financial calculations including calculation of annual depreciation are undertaken by council.	Corporate (Technical & Financial)	Staff Time	July 2013
3	Linking of the customer service system to the corporate asset register to link requests to asset records	Corporate	Staff Time	December 2013
4	Continue to Improve project cost accounting to record costs against the asset component and develop valuation unit rates	Corporate (Technical & Financial)	Staff Time	July 2013
5	Review the accuracy and currency of asset data	Technical	Staff Time	July 2013
6	Review methodology for determining remaining life, with detail assessment for assets requiring renewal in the medium term (next 10-20 years) An outcome should be that the remaining lives from the asset register will generate a renewal scenario aligning with the Works Program and Long Term Financial Plan. (Scenario 1 described in this asset management plan will match Scenario 3)	Corporate (Technical & Financial)	Staff Time	December 2013
8	Develop procedures for maintaining the Asset and Financial Registers	Corporate (Technical & Financial)	Staff Time	Ongoing
9	Maintenance response levels should be documented and adopted.	Technical Services	Staff Time	December 2013

7.3 Monitoring and Review Procedures

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

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

Cobar Shire Council – Transport Asset Management Plan 2013

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 1 year of each Council election.

7.4 Performance Measures

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

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into the organisation's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the organisation's Strategic Plan and associated plans,
- The Asset Renewal Funding Ratio achieving the target of 1.0.

8. REFERENCES

- Cobar Shire Council, 'Management Plan and Budget'.
- Cobar Shire Council Rating and Valuation for Roads, Bridges, Kerb and Gutter and Footpath, June 2010
- Draft Policy Inspection and Maintenance State, Regional and Shire Roads, October 2007
- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/namsplus.
- IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/AIFMG.
- IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM

9. APPENDICES

Appendix A	Maintenance and Renewal Requirements to Sustain Levels of Service
Appendix B	Projected 10 year Capital Renewal and Replacement Works Program
Appendix C	Projected 10 year Capital Upgrade/New Works Program
Appendix D	Budgeted Expenditures Accommodated in LTFP
Appendix E	Abbreviations
Appendix F	Glossary

Appendix A Maintenance and Renewal Requirements to Sustain Levels of Service

Maintenance Response

Maintenance response is based on site judgement using the condition and risk associated with the defect and to the extent of the current budget.

Renewal Requirements

The renewal requirements included in this Asset Management Plan have been developed from 2 sources:

- The first source was from the current asset inventory held by council, and has been referred to as Scenario 1.
- The second source is based on the assessment by council's technical staff of the average network renewals required to keep service levels at the current level. E.g. sealed roads should kept sealed and at a useable condition.

It is common that the valuation registers used in Scenario 1 are not developed to a level of maturity where they are reliable for producing a realistic renewal forecast. For Cobar Shire Council the refinement of the asset register to achieve this situation should become an important part of the asset management improvement plan.

Scenario 2 is prepared using the technical estimates of what renewal is required annually to sustain the current levels of service. The scenario 2 assessments are summarised below:

Average Annual Network Renewal Requirements	\$000's
Bitumen Reseals	\$1,200
Gravel Resheeting	\$1,500
Pavement Rehabilitation	\$3,400
Bridge Renewals	
Ancillary Assets – Kerb and Gutter Renewals	\$100
Ancillary Assets – Footpath Renewals	
Airport renewal works	
Total	\$6,500

Appendix B1 Projected 10 year Capital Renewal and Replacement Works Program

Cobar SC
Projected Capital Renewal Works Program - Transport_S2_V1

(\$000)

			(\$000)
Year	Item	Description	Estimate
2013		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2013		Total	\$6,500
2014		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2014		Total	\$6,500
2015		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2015		Total	\$6,500
2016		Network Renewals	Estimate
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2016		Total	\$6,500
2017		Network Renewals	
	1	Bitumen Reseals	\$1,200

	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2017		Total	\$6,500
2018		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2018		Total	\$6,500
2019		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2019		Total	\$6,500
2020		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2020		Total	\$6,500
2021		Network Renewals	
	1	Bitumen Reseals	\$1,200
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2021		Total	\$6,500
2022		Network Renewals	
	1	Bitumen Reseals	\$1,200

	•		
	2	Gravel Resheets	\$1,500
	3	Pavement Reconstruction	\$3,400
	4	Bridges	\$100
	5	Kerb and Gutter	\$100
	6	Footpaths	\$100
	7	Airport	\$100
2022		Total	\$6,500

Appendix B2 Projected 5 year Rolling Works Program

Appendix B2		Transport Serv	vices: 5 Year Rolling Works Program						
				1/12		 12/13	2013/14	2014/15	2015/16
Regional Road	ds								
	Grading and Minor G	ravelling	\$	957,881	\$	957,881	\$ 957,881	\$ 957,881	\$ 957,881
	Seal Repairs		\$	50,000	\$	50,000	\$ 50,000 \$	\$ 50,000 \$	\$ 50,000
	Vegetation Control		\$	60,000	\$	60,000	\$ 60,000 \$	60,000	\$ 60,000 \$
Shire Roads	Signs and Markers P	osts	\$	50,000	\$	50,000	50,000	50,000	50,000
Shire Roads	Grading and Minor G	ravelling	\$	1,336,874	\$	1,336,874	\$ 1,336,87 4	\$ 1,336,87 4	\$ 1,336,87 4
	Seal Repairs		\$	10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000
	Vegetation Control		\$	30,000	\$	30,000	\$ 30,000	\$ 30,000	\$ 30,000
T 01 1	Signs and Markers P	osts	\$	80,000	\$	80,000	\$ 80,000	\$ 80,000	\$ 80,000
Town Streets	Seal Repairs		\$	130,224	\$	130,224	\$ 130,224	\$ 130,224	\$ 130,224
	Street Cleaning		\$	130,000	\$	130,000	\$ 130,000	\$ 130,000	\$ 130,000
	Street Lighting		\$	120,000	\$	120,000	\$ 120,000	\$ 120,000	\$ 120,000
	Signs and Street Nar	nes	\$	40,000	\$	40,000	\$ 40,000	\$ 40,000	\$ 40,000 \$
Kerb and Cha	Unsealed Streets		\$	36,639	\$	36,639	36,639	36,639	36,639
Footpaths	Maintenance		\$	15,000	\$	15,000	\$ 15,000	\$ 15,000	\$ 15,000
Tootputio	Paved Footpaths		\$	35,000	\$	35,000	\$ 35,000	\$ 35,000	\$ 35,000
	Unpaved Footpaths		\$	90,000	\$	90,000	\$ 90,000	\$ 90,000	\$ 90,000
Airports	Cobar Regional Airport Nymagee			94,000	\$1	94,000	\$194,00 0	\$194,00 0	\$194,00 0
	Mt Hope Eurabalong		\$30	000	\$30	000	\$3000 \$3000 \$3000	\$3000 \$3000 \$3000	\$3000 \$3000 \$3000
Pagional Day			Ψ30		ψυ(1 +3000	1 +35555	+ • • • • • • • • • • • • • • • • • • •
Regional Road	Gravel Resheeting			\$ 200,00	0	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
	Resealing			\$ 100,00	0	\$	\$	\$	\$

			100,000	100,000	100,000	100,000
	Causeway Improvements	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Shire Roads						
	Gravel Resheeting (R2R)	\$ 661,723	\$ 661,723	\$ 661,723	\$ 661,723	\$ 661,723
	Resealing (R2R)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
	Causeway Improvements (R2R)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Cobar Regional Airport	Resealing of Runway	\$75,000		\$75,000		
	Replacement of PAL Control module and AFRU module	\$18,000				
	Replacement of Runway Lighting (progressive)		\$100,000		\$100,000	\$10,000

Appendix B3 Road Hierarchy

	Tout Hierarchy		
Regional Roads			
Category 1 RR 407 Mulya Rd RR 411 Tipping Way RR 416 The Wool Track RR 423 Lachlan Valley Way RR 461 Priory Tank Rd RR 461 Balowra Rd RR 7518 Barnato –Tilpa RR 7521 Kiacatoo Rd RR 7522 The Wool Track	Category 2 RR 68 Curranyalpa Rd RR 228 Whitbarrow Rd RR 419 Glenwood Rd		
Shire Roads			
Category 1 SR 13 Lerida/Bedooba Rd SR 20 Grain Rd SR 21 Tallebung Rd SR 23 Booberoi Rd SR 26 Wilga Downs Rd SR 38 CSA Access Rd SR 42 Endeavour Mine Rd	Category 2 SR 6 Pullpulla Rd SR 10 Belarabon SR 22 Round Hill Rd SR 24 Mount Grace Rd SR 45 Garbage Tip Rd SR 46 Canbelego- Nymagee Road	Category 3 SR 1 Buckanbe/Budda Rd SR 2 Barrier Highway — Dunoak SR 3 Nelyambo Bridge Rd SR 4 Gidgee Rd 3SR 7 Mount Gap Rd SR 8 Coomeratta Rd SR 9 Neckarbo Rd SR 11 Bloomfield Rd SR 12 Yathong Rd SR 15 Shuttleton Rd SR 16 Sandy Creek Rd SR 17 Merri Rd SR 18 Bruce Cullenward Dr SR 19 Burthong Rd SR 27 Cooneybar Rd SR 28 Yimkin Rd	SR 29 Booroomugga Rd SR 30 Canbelego Rd SR 31 Moolah Rd SR 32 Developmental Rd SR 33 Nymagee Station Rd SR 43 Sewerage Works Rd SR 34 Wallace Vale Rd SR 35 Osterley Downs Rd SR 36 Palesthan Rd SR 37 Bimbella Rd SR 39 Coombie Rd SR 40 Filtration Plant Rd SR 41 Tilpa Weir Access SR 44 Old Reservoir Rd SR 47 Herc St SR 48 Euabalong Tip Rd

Town Streets Category 1 Category 2 Category 3 **Cowper Street Barton Street Belagoy Street** Marobee Street **Bathurst Street Conduit Street Farnell Street Denman Street Duffy Drive Blakey Street** Railway Parade North Coorilla Street **Mathew Street** Cornish Street Railway Parade South **Illewong Street** Tindera Street Frederick Street **Broomfield Street** Acacia Drive Lerida Road **Brough Street** Airport Road Coronga Street Nullawarra Street Louth Road **Harcourt Street** Annies Lane Murrin Street Marshall Street Leah Street **Baldry Close** Old Bourke Road Maidens Ave **Becker Street** Whoey Street Woodiwiss Ave **Morrison Street** Booroomugga Street Garbage Tip Road Coobar Road Lamrock Street **Murray Street Keewong Road Green Street Lewis Street Nullamutt Street** Nardoo Street Hartman Street **Linsley Street** Wetheral Crescent **Noorong Street Dunstan Street Grahem Street** Hogan Place Irwin Street Elizabeth Street Hartwood Street James Place **Bannister Court** Jandra Crescent Becker Lane Beersheba Court Jeffrey Street Jones Drive Belah Crescent **Kelly Street Bilby Close** Kelly Lane **Bloxham Street Bossie Mitchell Drive Bourke Road Knight Drive Bottlebrush Drive Kurrajong Circle Bourke Street** Lavina Street **Box Place Bradley Street** Little Morrison Lane Longworth Street **Brennan Street** Madden Street Brickworks Road Mahmong Place **Brigalow Place Campbell Street Margaret Street** Mitchell Street **Carr Street** Molineaux Street Clifton Place Monaghan Street Condon Place Mulga Place Cypress Place Prince Street Dalton Park Racecourse Road Rankin Street Dapville Street Rosewood Place Echidna Ave Second Street **Eleventh Street** Singleton Drive Fletcher Street Snelson Street **Fourteenth Street** Francisco Drive **Sunset Drive** Tenth Street Gibbes Street Thirteenth Street **Gould Street** Wattle Drive **Government Road** Wrightville Street Wilga Crescent

		Yarren Circle	Wittagoona Street
			Wood Street
Airports			
Category 1	Category 2		
Cobar Regional Airport	Nymagee Airstrip		
	Mt Hope Airstrip		
	Eurabalong Airstrip		

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program Cobar SC

Projected Capital Upgrade/New Works Program - Transport_S2_V1

				(\$000)
Year	Item		Description	Estimate
2013	1	Planned/Required Upgrade New		\$95
2013		Total		\$95
				(\$000)
Year	Item		Description	Estimate
2014	1	Planned/Required Upgrade New		\$50
2014		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2015	1	Planned/Required Upgrade New		\$50
2015		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2016	1	Planned/Required Upgrade New		\$50
2016		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2017	1	Planned/Required Upgrade New		\$50
2017		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2018	1	Planned/Required Upgrade New		\$50
2018		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2019	1	Planned/Required Upgrade New		\$50
2019		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2020	1	Planned/Required Upgrade New		\$50
2020		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2021	1	Planned/Required Upgrade New		\$50
2021		Total		\$50
				(\$000)
Year	Item		Description	Estimate
2022	1	Planned/Required Upgrade New		\$50

\$50

2022

Total

Appendix D Budgeted Expenditures Accommodated in LTFP

10 year Budgeted Expenditures from Worksheet Form 3 Expenditure Planning on the NAMS.PLUS2 Expenditure Template.

NAMS.PLUS2 Asset Management Cobar SC © Copyright, All rights reserved. The Institute of Public Works Engineering Australia. Transport_S3_V1 Asset Management Plan First year of expenditure projections 2013 (yr ending 30 June) Transport Operations and Maintenance Costs Asset values as at 30 June 2012 Calc CRC from Asset Register from New Assets (000) \$0 (000) Current replacement cost % of asset value This is a check for you Depreciable amount (000)Additional operations costs 0.04% Depreciated replacement cost (000) Additional maintenance Annual depreciation expense (000) Additional depreciation 5.86% Planned renewal budget (information only) Planned Expenditures from LTFP You may use these values calculated from your data 20 Year Expenditure Projections Note: Enter all values in current 2013 or overwrite the links Year ending June 2013 2015 2017 2020 2022 2014 2016 2018 2019 2021 Expenditure Outlays included in Long Term Financial Plan (in current \$ values) Operations Operations budget \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100 Management budget \$0 \$0 \$0 AM systems budget \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 Total operations \$90 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100 Maintenance Reactive maintenance budget \$2,150 \$2,150 \$2,150 \$2,150 Planned maintenance budget \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 Specific maintenance items budget \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,150 \$2,150 \$2,150 \$2,150 \$2,150 \$2,150 \$2,150 \$2,150 Total maintenance \$2,290 \$2,150 Capital Planned renewal budget \$2,350 \$2,350 \$2,350 Planned upgrade/new budget \$50 \$0 \$0 Non-growth contributed asset value \$0 \$0 \$0 \$0 \$0 \$0 \$0 Asset Disposals Est Cost to dispose of assets Carrying value (DRC) of disposed assets \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan) Additional Expenditure Outlays required 2022 and not included above \$000 Operations Maintenance to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used) Capital Renewal Capital Upgrade User Comments #2 Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C) 2019 2022 2016 Forecast Capital Renewal \$000 \$000 \$000 \$000 \$000 \$000 \$000 \$000 \$000 \$000 from Forms 2A & 2B \$2,430 \$2,350 \$2,350 \$2,350 \$2,350 \$2,350 \$2,350 \$2,350 \$2,350 \$2,350 Forecast Capital Upgrade

\$50

from Form 2C

Appendix E Abbreviations

AAAC Average annual asset consumption

AM Asset management

AM Plan Asset management plan

ARI Average recurrence interval

ASC Annual service cost

BOD Biochemical (biological) oxygen demand

CRC Current replacement cost

CWMS Community wastewater management systems

DA Depreciable amount

DRC Depreciated replacement cost

EF Earthworks/formation

IRMP Infrastructure risk management plan

LCC Life Cycle cost

LCE Life cycle expenditure

LTFP Long term financial plan

MMS Maintenance management system

PCI Pavement condition index

RV Residual value

SoA State of the Assets

SS Suspended solids

vph Vehicles per hour

WDCRD Written down current replacement cost

Appendix F Glossary

Annual service cost (ASC)

1) Reporting actual cost

The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.

2) For investment analysis and budgeting

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

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

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

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

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new

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 operations 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 operations 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 operations 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 facility.

Capital funding

Funding to pay for capital expenditure.

Capital grants

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

Capital investment expenditure

See capital expenditure definition

Capitalisation threshold

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision- making).

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Fair value

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

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue. productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business.

Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service

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

Life Cycle Cost *

- Total LCC The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
- 2. Average LCC The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings

See borrowings.

Maintenance

All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

Planned maintenance

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

Reactive maintenance

Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.

Specific maintenance

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

Unplanned maintenance

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *

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

Materiality

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing

general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)

The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations

Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, oncosts and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense

The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio

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

Operations, maintenance and renewal gap

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)

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

PMS Score

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

Rate of annual asset consumption *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining useful life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal

See capital renewal expenditure definition above.

Residual value

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Specific Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

Appendix G Detailed Service Level Tables for Asset Groups

Table G1 Current Levels of Service- Regional Roads Sealed, Shire Roads Sealed- High Volume and Town Streets
Sealed- High Volume

COMMUNITY LEVELS (1	1	
Theme	Community	Measure	Current Service Level	Acceptable Level of
	Expectation		Response	Service Response
Quality	Provide high ride ability.	Customer service requests relating to ride ability	<1 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Function	Meets user requirements for -Road width -accessibility -use of traffic control	Customer service requests relating to width, access and traffic control	<1pa	<1 pa
	device	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Capacity/Utilisation	Network meets the capacity requirements	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
TECHNICAL LEVELS OF	SERVICE			
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Street cleaning Street lighting Inspections of road surface and signage	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met
Maintenance	Remove hazards Road Grading Repair damage	% of length resealed each year	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met

Renewal	Renewal of assets	Replacement Cycle % of length resealed each year	Renewal of Transport assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met.
				Increasing renewal required in short to medium term, due to the age of the network.
Upgrade/New	Provide services in a cost effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works	Achieved by a combination of Council and Contract works. The augmentation of Transport systems to meet appropriate service and risk outcomes is not funded

Table G2 Current Levels of Service- Shire Roads Sealed -Low Volume and Town Streets Sealed- Low Volume.

COMMUNITY LEVELS O	F SERVICE			
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response
Quality	Provide high rideability.	Customer service requests relating to ride-ability	<1 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Function	Meets user requirements for -Road width -accessibility -use of traffic control	Customer service requests relating to width, access and traffic control	<1 pa	<1 pa
	device	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests	1 per month	<1 per month
	,	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
TECHNICAL LEVELS OF S	SERVICE			- Wanagement Fair
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Street cleaning Street lighting Inspections of road surface and signage	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met
Maintenance	Remove hazards Road Grading Repair damage	% of length maintained each year	Reactive maintenance to limit of budget allocation	Regular Inspections Planned Maintenance meeting agreed service levels
Renewal	Renewal of assets	Replacement Cycle	Renewal of Transport assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met. Increasing renewal required in short to medium term, due to the age of the network.

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Upgrade/New	Provide services in a	Cost, Meet	Achieved by a	Achieved by a
	cost effective	Corporate Strategy	combination of	combination of
	manner		Council and Contract	Council and Contract
			works	works. The
				augmentation of
				Transport systems to
				meet appropriate
				service and risk
				outcomes is not
				funded

Table G3 Current Levels of Service –Regional Roads Unsealed

COMMUNITY LEVELS OF SERVICE						
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response		
Quality	Ensure that roads provide a smooth ride(pothole, rut free)	Customer service requests	10 per month	4 per month		
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan		
Function	Ensure that road drainage is fully operational and meets	Customer service requests	10 per month	4 per month		
	users requirements	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan		
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests	1 per month	<1 per month		
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan		
TECHNICAL LEVELS O	F SERVICE					
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)		
Operations	Inspections of road surface and signage	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met		
Maintenance	Carry out regular maintenance grading	Grading frequency (times per year) Category 1 Road	1.5 times per year	2 times per year		
		Grading frequency (times per year) Category 2 Road	1 time per year	3 times per 2 years		
Renewal	Renewal of assets	Replacement Cycle	Renewal of Transport assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met.		
				Increasing renewal required in short to medium term, due to the age of the network.		

Cobar Shire Council – Transport Asset Management Plan 2013

Upgrade/New	Provide services in a cost effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works	Achieved by a combination of Council and Contract works. The augmentation of Transport systems to meet appropriate service and risk outcomes is not
				outcomes is not funded

Table G4 Current Levels of Service – Shire Roads Unsealed

	Community		Current Service Level	Acceptable Level of
Theme	Expectation	Measure	Response	Service Response
Quality	Ensure that roads provide a smooth ride(pothole, rut free)	Customer service requests	40 per month	16 per month
		% of network that	Has not been fully	Further assessment
		is poor or very poor	assessed at this time	required to inform
				future revisions of
				the Transport Asset
				Management Plan
Function	Ensure that road drainage is fully operational and meets	Customer service requests	40 per month	16 per month
	users requirements	% of network that	Has not been fully	Further assessment
		is poor or very poor	assessed at this time	required to inform
				future revisions of
				the Transport Asset
				Management Plan
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests	4 per month	<4 per month
		% of network that	Has not been fully	Further assessment
		is poor or very poor	assessed at this time	required to inform
				future revisions of
				the Transport Asset
				Management Plan
TECHNICAL LEVELS O				
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Inspections of road and	Frequency	Reactive to limit of	Requires furthe
	signage condition		budget allocation.	assessment to identify and determine whether basic service leve expectations are being met
Maintenance	Carry out regular	Grading frequency		
	maintenance grading	(times per year) Category 1 Road	1 time per year	3 times per 2 years
		Grading frequency (times per year) Category 2 Road	1 time per year	1 time per year
		Grading frequency (times per year) Category 3 Road	2 times per 3 years	1 time per 2 years

Renewal	Renewal of assets	Replacement Cycle	Renewal of Transport assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met. Increasing renewal required in short to medium term, due to the age of the network.
Upgrade/New	Provide services in a cost effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works	Achieved by a combination of Council and Contract works. The augmentation of Transport systems to meet appropriate service and risk outcomes is not funded

Table G5 Current Levels of Service- Footpaths

COMMUNITY LEVELS	OF SERVICE			
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response
Quality	Provide all weather access for pedestrians	Customer service requests relating to weather	1 per month	<1 per month
		Provide footpaths in accordance with Council hierarchy standards	60% meets hierarchy specification	>95% compliance
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Function	Ensure footpaths are accessible by young, old and DDA users	Customer service requests relating to accessibility % of network that is	2 per month	Further assessment required to inform future revisions of the Transport Asset
		poor or very poor	Has not been fully assessed at this time	Management Plan
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests relating to capacity	4 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
TECHNICAL LEVELS O	F SERVICE			
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Inspections	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met
Maintenance	Maintenance response rate	Frequency	Condition 5 Defects isolated within 24hrs 90% time Repairs completed within 5 working days	Condition 5 Defects isolated within 24hrs 100% time Repairs completed within 5 working days

Renewal	Provide footpaths in accordance with Council hierarchy standards	Footpaths are provided in accordance with hierarchy specification	60% meets hierarchy specification	>95% compliance
		Replacement Cycle	Renewal of footpath assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met. No Condition 5 trip or above ground hazards
Upgrade/New	Provide services in a cost effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works	Achieved by a combination of Council and Contract works. The augmentation of Transport systems to meet appropriate service and risk outcomes is not funded

Table G6 Current Levels of Service- Kerb and Gutter

COMMUNITY LEVELS	OF SERVICE			
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response
Quality	Do not pond water	Customer service requests	1 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Function	Water drained by kerb and gutter	Customer service requests	1 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests relating to capacity	1 per month	<1 per month
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
TECHNICAL LEVELS O		T		
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Inspections	Frequency	Reactive to limit of budget allocation.	Requires further assessment to identify and determine whether basic service level expectations are being met
Maintenance	Repair damage to kerb and gutter	Budget and resources are adequate to complete the required works within an acceptable time. Urgent repairs undertaken	Reactive maintenance to limit of budget allocation.	Further assessment required to inform future revisions of the Transport Asset Management Plan as to the adequacy of funding
Renewal	Kerb and gutter provided to drain storm water	Extent provided	Provision of 75% across all town and village streets	Provision of 100% across all town and village streets
			Replacement of kerb and gutter on a 150 year cycle	Replacement of kerb and gutter on a 80 year cycle

Upgrade/New	Upgrade/New	Provide services in a	Cost, Meet	Achieved by a
		cost effective manner	Corporate Strategy	combination of
				Council and Contract works

Table G7 Current Levels of Service- Cobar Regional Airport & Village Airstrips

COMMUNITY LEVELS	OF SERVICE			
Theme	Community Expectation	Measure	Current Service Level Response	Acceptable Level of Service Response
Quality			<1 per month	Nil
			Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Function	Meets user requirements for -Runway width -accessibility -use of traffic control	Customer service requests relating to width, access and traffic control	<1pa	Nil
	device	% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
Capacity/Utilisation	Network meets the capacity requirements	Customer service requests	<1 per month	Nil
		% of network that is poor or very poor	Has not been fully assessed at this time	Further assessment required to inform future revisions of the Transport Asset Management Plan
TECHNICAL LEVELS O	F SERVICE			
Budget Area	Activities	Measure	Current Funded Level of Service (Scenario 3	Optimal Level of Service (Scenario 2)
Operations	Inspect to ensure facilities are safe- clear signage, good traffic control devices and facilities, no major surface defects	Frequency of runway inspections on surface and signage		
Maintenance	Maintain seal- optimal maintenance	% of length resealed each year	0 pa	0 pa
Renewal	Renewal of assets	Replacement Cycle % of length resealed each year	Renewal of runway pavement assets is undertaken to the limit of the budget allocation	Network in average condition. Renewal replacement cycle not being met.
			<1%	10%
				Increasing renewal required in short to medium term, due to the age of the network.

Upgrade/New	Provide services in a	Cost, Meet Corporate	Achieved by a	Achieved by a
	cost effective manner	Strategy	combination of	combination of
			Council and	Council and Contract
			Contract works	works. The
				augmentation of
				Transport systems to
				meet appropriate
				service and risk
				outcomes is not
				funded