ASSET MANAGEMENT STRATEGY

Reviewed and adopted by Council at its meeting on 16 June 2022

1. EXECUTIVE SUMMARY

Tweed Shire is located in the north east corner of New South Wales, in a diverse area featuring coastal villages, urban centres, rural villages and agricultural activities.

The Shire stretches over 1,303 square kilometres and adjoins the NSW shires of Byron, Lismore and Kyogle with the Gold Coast City Council area and Scenic Rim Regional Council to its north.

The Shire has 37 kms of natural coastline, wetlands and estuarine forests, and some of the richest pastoral and farm land in NSW. The Tweed River basin is a unique and diverse mountainous region, containing three world-heritage listed national parks.

To enable the community to access and enjoy all the services and facilities that Tweed has to offer, the Tweed Shire owns and maintains a large portfolio of assets.

With an infrastructure asset replacement value of over $2.6 billion, the efficient management of these assets is vital in maintaining safe, reliable and efficient services that help achieve the strategic priorities and goals of Council.

Failure to adequately plan for the renewal of assets and the development of new assets will result in the needs of the community, now and into the future, not being met.

The need for this Asset Management Strategy has been identified as a result of the development and adoption of Council's Asset Management Policy and as part of Council's goal to adopt contemporary best practice in Asset Management.

This Asset Management Strategy provides clear courses of action for managing Asset Management at Council and supports the Tweed Shire's Community Strategic Plan and Asset Management Policy.

This Asset Management Strategy is also the basis for outlining and monitoring Key Performance Indicators (KPI) and provides Council with the ability to monitor, measure and report on asset management plans and processes..

This Strategy will be reviewed during the currency of the Council's Delivery Program and outlines the following:

- Council's current position with respect to Asset Management practice.
- Council's future needs with respect to Asset Management practice.
- A current maturity level with respect to the Council's position to manage infrastructure assets.
- A series of Action Plans on how the Council intends to achieve future needs.
- Performance Monitoring Process.

2. INTRODUCTION

2.1 Purpose of the Strategy

The objective of this Asset Management Strategy (AMS) is to develop a structured set of Strategic Actions aimed at enabling Council to improve its asset management practices to support Council's Asset Management Policy and service delivery needs.

Council has identified a need to develop long-term financial management plans for its asset provision as part of a process to adopt continuous improvement programs.

The AMS and the Asset Management Plan for each asset class, developed as a result of this Strategy will provide Council with detailed comprehensive information and knowledge to assist it with its short and long term service delivery planning.

2.2 Key Benefits of the Strategy Implementation

The Tweed Shire has clearly endorsed a commitment to asset management in its Community Strategic Plan, whilst the Delivery Plan sets the course for Council's delivery of services and projects over the next four years.

The goals and objectives of the Community Strategic Plan align with Council's vision that "*The Tweed will be recognised for its desirable lifestyle, strong community, unique character and environment, and the opportunities its residents enjoy*".

It is important that our infrastructure is provided and maintained at a reasonable level[1], commensurate with community's expectations and affordability, to support Council's vision.

As infrastructure is subject to wear and tear, it is necessary that we have a long-term strategy in place to enable us to determine options for planning, acquiring, refurbishing, upgrading maintaining, operating and disposing of assets.

By implementing this AMS, we are aiming to improve Council's asset management practices to provide a more sustainable service delivery process. The key benefits are:

- Ability to provide better outputs with fewer resources by better aligning our resources and needs.
- Ability to understand what condition our assets are in and by monitoring the effect our actions are having on them.
- Having a key set of actions that will allow us to manage the provision of these assets into the future at lowest long-term cost.
- Be able to assign appropriate levels of funding for each asset class in line with the respective service level targets.
- Being able to clearly define what service levels we can deliver to our customers, the rate-payers and users.

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[1] Desired levels of service as documented in our Asset Specific Asset Management Plans.

3. BACKGROUND

3.1 Community Profile

Tweed Shire is located in the north east corner of New South Wales, in a diverse area featuring coastal villages, urban centres, rural villages and agricultural activities.

Diagram 1 – Tweed Shire – Location Map

The centrepiece of the Shire, is Mount Warning, where the sun first hits the Australian continent most of the year. The surrounding McPherson, Tweed, Burringbar and Nightcap ranges form the caldera of the fertile Tweed Valley.

The Shire stretches over 1,303 square kilometres and adjoins the NSW shires of Byron, Lismore and Kyogle with the Gold Coast City Council area and Scenic Rim Regional Council to its north.

The Shire has 37 kms of natural coastline, wetlands and estuarine forests, and some of the richest pastoral and farm land in NSW. The Tweed River basin is a unique and diverse mountainous region, containing three world-heritage listed national parks.

Statistical information from Australian Bureau of Statistics in March 2008 confirms that The Tweed is experiencing and will continue to experience growth.

Tweed Shire is home to an estimated 82,955 people (Australian Bureau of Statistics (ABS) 2006), an increase of 11.52% from 74,380 people in 2001.

A substantial population increase is expected to occur in the Tweed LGA up to 2031. This is in line with recent population trends in the Shire which has seen it grow at an average annual rate of 2.1%, compared to the NSW average of 0.7%. Tweed Heads continues to grow at the fastest rate of the entire Shire's planning districts.

The total population is projected to grow from a 2001 base of 74,590 people past the 2006 figure of 79,321 to 90,870 by 2011. This growth is not expected to occur evenly across the age groups, with relatively little growth anticipated in the younger age groups, especially those under 15 years of age.

This projected population profile reflects the socio-demographic changes which have resulted in middle to older age groups undertaking a sea change. This movement to the Tweed Shire up and out from the rest of NSW, as well as the movement of people down from South East Queensland is expected to result in the continuation of the rapid growth rate over the next two decades.

3.2   What is Asset Management?

With the principles embraced over the last number of years, Asset Management is now a process of logic used to guide the planning, acquisition, operation and maintenance, renewal and disposal of assets. Its objective is to maximise asset service delivery potential and manage related risks and costs over their entire lifecycle. In simplest terms, asset management is about the way in which the Council looks after its assets, both on a day-to-day basis (i.e. maintenance and operations) and in the medium to long term (i.e. strategic and forward planning).

The following diagram illustrates the typical lifecycle of an asset and associated asset management functions from planning for the need to create an asset through to its ultimate disposal including audit and review of the performance of that asset.

Diagram 2 - Asset Lifecycle Diagram

The historic approach to asset management funding has been "last year's budget plus 5%" meaning asset management decisions are being purely budget driven. This is illustrated by the diagram below which shows that the resultant service level delivered by the asset is an outcome of the budget allocation. Tweed Shire, over the last two years, with the extensive work undertaken in the Asset Management Units, has recognized that too often this approach leads to a lack of coordination between desired service delivery and financial planning.
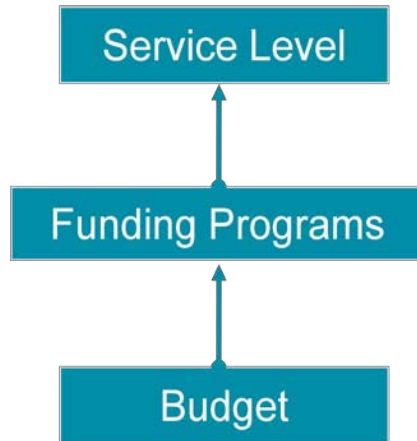
Diagram 3 - Budget Driven Framework

Tweed Shire, in adopting this strategy has a clear focus on Strategic Asset Management (SAM) ensuring that the assets are capable of providing services, of an agreed quality, in a sustainable manner, for present and future communities.

This is not merely a matter of spending more money but instead spending money wisely in a targeted manner. The decision to adopt a Strategic Asset Management approach which can deliver long term prediction of service levels is fundamentally a step in the right direction for the Council and this Strategy encapsulates the results of this service-centric analysis.

The following diagram illustrates the framework for SAM and the Council's corporate SAM system.

The three noteworthy differences here are:

1. Budget and Service Level form a feedback loop as each is dependent on the other.

2. SAM allows the optimal Service Level to be adopted for the available Budget with an understanding of the predicted outcomes.

3. The adopted Service Level drives the required Funding Programs and thus remains connected to the Budget.
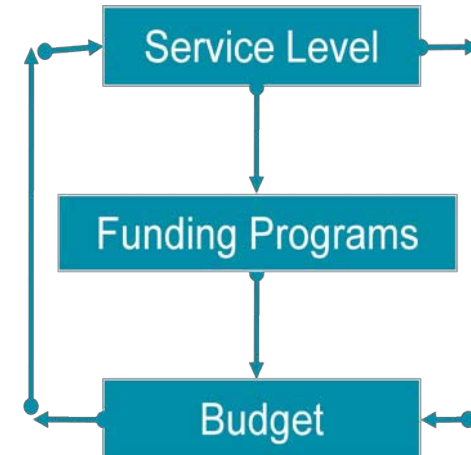
Diagram 4 - Service Driven Framework

In line with the recent Local Government National Asset Management Framework and State-wide Guidelines, the Council is committed to the seven key elements:

1. Development of an asset management policy
2. Strategy and Planning
3. Governance and Management Arrangements
4. Defining Levels of Service
5. Data and Systems
6. Skills and Processes
7. Evaluation

The key Strategic Actions documented in Section 0 demonstrate Council's direction in achieving the above outcomes. The KPI's described in Section 8 demonstrate how Tweed Shire intends to measure the success of these actions. An Asset Management Maturity diagnostic for Council is attached as Appendix A.

In line with the National Framework, this Strategy is a commitment to adopting a service centric approach based on Strategic Asset Management (SAM). The key to SAM is successive layers of knowledge and decision making. This is best illustrated by the Strategic Asset Management Pyramid shown in the following diagram. The SAM Pyramid shows the Council's service-centric asset management planning mechanism. The framework of planning will be:

**Asset Provision Layer 1**: The foundation of SAM is an understanding of the asset portfolio in terms of its physical attributes and its condition, capacity and functionality as shown by the Provision layer.
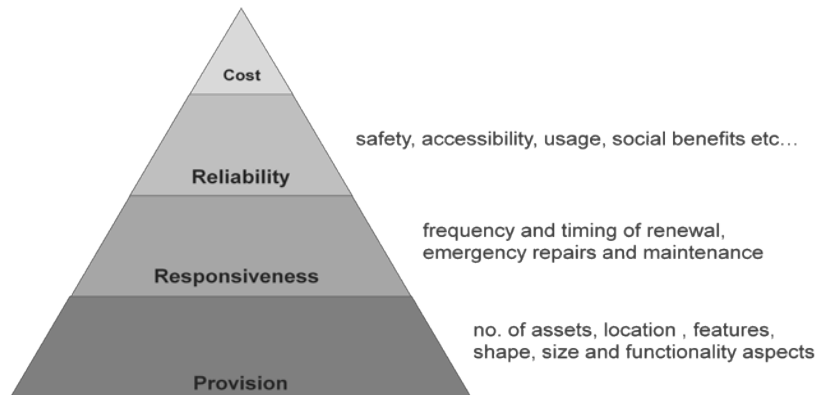
Diagram 5 - Strategic Asset Management Pyramid

The Tweed Shire's corporate Asset Management System in conjunction with the corporate GIS system will hold data, information and attributes that form the 'footprint' of Council's asset stock used in service delivery. This information is now available within the Corporate SAM system.

Service Responsiveness Layer 2:
The Tweed Shire's Decision Matrix is the determinant of the Responsiveness layer. This is in effect a corporate decision matrix, and consists of the planned actions to retain the assets at the desired level of usability over their planned life. The key focus is on the type intervention (minor repairs, major renewal, replacement, etc) and the trigger for action (condition, capacity, functionality, etc). This information is now available within the Corporate SAM system.

Service Reliability Layer 3:
The Decision Matrix in the Responsiveness layer will determine asset performance outcomes which are characterised by the Reliability layer. This is best viewed as the asset performance as seen and experienced by those using and depending on the assets.

Reliability will be measured in terms of performance standards i.e. safety, condition, functionality etc. This information is now available within the Corporate SAM system and is constantly monitored with actuals.

Cost of Delivery Layer 4:

The top of the pyramid is Cost and this is determined by decisions in the layers below. Application of the Service Driven Framework results in an active pyramid where the Provision, Responsiveness and Reliability are tuned to give optimal outcomes for an affordable cost, which drives the future financial plan. This information is now available within the Corporate SAM system and is the fundamental basis for community consultation and options analysis.

3.3 Legislative Control of Asset Management

In addition to using asset management as a tool to manage the community's assets and provide better services to the community, there are also legislative requirements that Council must comply with in relation to the management of its assets and these are as follows:

3.3.1 NSW DLG Integrated Planning Framework

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

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

Then on the 21 March 2007 the LGPMC endorsed the Frameworks for implementation in the context of their relationships with their local government sectors.

The National Frameworks consists of three (3) main frameworks:

- Framework 1   Criteria For Assessing Financial Sustainability

- Framework 2   Asset Planning and Management

- Framework 3   Financial Planning and Reporting

Each State and Territory has agreed and is expected to implement the National Frameworks in consultation with local government, with a target date of 31 December 2010.

A new planning and reporting framework for NSW local government has been introduced. These reforms replace the former Management Plan and Social Plan with an integrated framework. It includes a requirement to prepare a long-term Community Strategic Plan and Resourcing Strategy. The components of the new framework and how they fit together are illustrated in the following diagram below.

Diagram 6 – Tweed Shire Council Planning Process

3.3.2 Local Government (General) Regulations 2005

The Local Government Regulations, require a statement containing a detailed estimate of the council's income and expenditure to be included in the operational plan - S405.

3.3.3 Australian Accounting Standards

The Division of Local Government requires that councils comply with the accounting standard AASB 116 for reporting on infrastructure assets. This has been implemented on a staged process with Buildings and Operational Land being included in the 2007/2008 Financial Reports.

The next major requirement has been to report on all road and stormwater assets in the 2009/2010 financial year. The data required to provide this level of financial reporting is also essential for the planning of future infrastructure renewal requirements.

The following Australian Accounting Standards apply to Local Government assets:

- AASB 116 Property, Plant & Equipment – prescribes requirements for recognition and depreciation of property, plant and equipment assets
- AASB 136 Impairment of Assets – aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts
- AASB 138 Intangible Assets - prescribes the accounting treatment for intangible assets not dealt with in another standard

- AASB 1051 Land Under Roads - allows the recognition of land under roads subject to criteria
- AAS 108 Accounting Policies, Changes in Accounting Estimates and Errors – specifies the policies that Council is to have for recognition of assets and depreciation

There are an array of other legislative requirements that need to be considered in managing infrastructure assets such as the Disability Discrimination Act 1994, the Building Code of Australia and these legislative requirements are taken into consideration at a more detailed level in each of the specific Asset Management Plans.

3.4 Community Expectations

At present, Council does not participate in an Annual/Bi-annual Community Survey with regards to detailed community engagement on their satisfaction with Council's Infrastructure assets.

It is envisaged that prior to the review of this AM Strategy, that a Community Survey or Participation Focus Group will be undertaken to gauge the community's satisfaction. These results will then feed back into the review of this Strategy.

4. STRATEGIC ASSET MANAGEMENT SYSTEMS

The Tweed Shire is currently implementing a number of systems which provide the ability to meet our Strategic Asset Management objectives.

The principle objectives of the Asset Management system are to:

- Provide accurate inventory and condition information of Council's assets;
- Facilitate efficient day-to-day management of the Council's assets;
- Enable objective long-term asset planning based on a sound knowledge of the current state of the Council's assets i.e. long term impacts of funding decisions.
- Allow the adoption of Consumption Based Depreciation.

The software solution chosen by Council has been:

a) the Assetic system and

b) the Works and Assets system - which integrates to the financial system - that have been developed specifically to meet the needs of Local Government Authorities in Australia.

The following diagram illustrates a systematic representation of the Assetic system showing the links to other the Council computer-based systems. Linked systems provide tangible benefits to Council through the removal of data double-handling which is both inefficient and a potential source of errors.

Commencing in 2009, inventory and condition based data has been collected by a range of specialist contractors and consultants for roads, bridges, footpaths and kerb assets. The data collection task is ongoing and there are a number of asset categories which will require further data to be collected.

As new data becomes available, it is being quality-checked and then imported into the Assetic system by the Asset Management business unit. As a future project, the Asset Management business unit will integrate the data in Assetic and the existing GIS system.

myPredictor Module
- Life Cycle Analysis
- Budget Optimisation
- Prediction Modelling
- Financial Projections
- Works Programming

Finance System

Asset System

Mobile and PDA

GIS System

INTERFACES WITH

myData Module – Premium (Tactical)
- Strategic Maintenance Planning
- Risk Management
- Service Levels

myData Module – Premium (Tactical)
- Single Corporate Register
- Condition Management
- Document management

Strategic AM

Tactical AM

Diagram 7 – Systematic Representation of the *Assetic* Asset Management System

5. CURRENT POSITION AND STATUS OF OUR ASSET PLANNING

5.1 Council's Asset stock

The Tweed Shire manages the community's assets in line with its Vision that '*The Tweed will be recognised for its desirable lifestyle, strong community, unique character and environment and the opportunities its residents enjoy'*.

This Asset Management Strategy is designed to take into consideration all of the Council assets. Assets can be described as the physical objects owned, controlled and/or maintained by Council to support the community's social and economic activities. Assets provide the foundation on which the community carries out its everyday activities whilst contributing to our overall quality of life.

The Tweed Shire manages a broad range of assets that have been grouped into ten key asset categories as set out in the following table.

The challenge for asset management is to understand the manner in which the Council's assets perform over time and whether they can be maintained in a "fit for purpose" condition, given that many cannot be seen and/or were built many years ago.

Asset Category	Includes assets such as
Roads	Sealed Roads, Unsealed Roads, Kerbing, Bridges and Major Culverts, Carparks, Traffic Management Devices and Roadside Furniture
Footpaths	Pathways in roadways and open spaces such as parks and reserves
Parks and Open Spaces	Parks, Playgrounds, Irrigation, Park Furniture, Shelters, BBQ's, Fencing and Foreshore assets
Buildings	Civic Buildings and Community Buildings
IT Infrastructure and Furniture	Computer hardware, Computer Software and Furniture
Plant and Equipment	Heavy/Light Plant, Motor Vehicles and other Fleet items
Land	Land
Storm Water Drainage	Pits, Pipes, Headwalls and Minor Culverts
Water Supply	Pipes, Fittings, Pump Stations, Treatment Plant, Dams, Weirs, Reservoirs and associated assets
Sewerage	Pipes, Manholes, Pump Stations, Treatment Plant and associated assets

Table 1 - Asset Categories

5.2   Asset Replacement Costs

The value, condition and expenditure on assets are reported each year in Council's Annual Report. The values are documented in Note 9 of the Financial Statements, and the condition and expenditures are documented in Special Schedule 7[2].

	At 30 June 2009				MOVEMENTS DURING YEAR						At 30 June 2010			
	Cost/ Deemed Cost	Fair Value	Accum Depn and Impairment	WDV	Additions	At cost Value of Disposals	Accum Depn Disposals	Depn and Impairment	Transfers/ Adjustments	Revaluation Increments/ (decrements)	Cost/ Deemed Cost	Fair Value	Accum Depn and Impairment	WDV
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Capital WIP		77,671		77,671	6,808				(73.447)			11,032		11,032
Plant & equipment		37,934	17,287	20,647	6,660	5,900	3,404	2,865	(76)			38,602	16,732	21,870
Office Equipment		1,120	769	351	90			163				1,210	932	278
Furniture and fittings		1,870	871	999	32			208				1,902	1,079	823
Leased plant and equipment														
Land:														
- Operational Land		437,245		437,245	68	(168)		5,450	17,962		460,557			460557
- Community Land	101,173			101,173	1,814			(5,450)		97,537				97,537
Land under roads														
- Pre 1 July 2008														
- Post 1 July 2008														
Non deprec land improvements														
Depreciable land improvements														
Buildings - Non specialised		100,294	14,268	86,026	1,549			1,273		2,878		104,493	15,313	89,180
- Specialised		5,989	469	5,520	314			27		208		6,526	511	6,015
Other structures	9,171		2,020	7,151	102	123	49	544	326		9,551		2,590	6,961
Infrastructure														
- Roads, bridges, footpaths	347,265		196,522	150,743	8,656	990	211	8,751	113,782	268,100		648,119	116,362	531,757
- Bulk Earthworks (non-deprec)	243,364		50,764	192,600	4,426				50,764	(129,628)		118,162		118,162
- Stormwater drainage	136,447		44,889	91,558	3,565			1,751	6,459	15,947		162,380	46,612	115,768
- Water supply network		527,969	185,229	342,740	80,544	18,497	16,000	7,857		7,770		547,077	126,377	420,700
- Sewerage network		688,521	234,394	454,127	9,965	4,590	4,373	14,439		8,909		591,621	133,276	458,345
Other assets														
- Heritage Collections														
- Library books														
- Artworks	2,366			2,366	143						2,509			2,509
- Other														
Tip Asset		1,718	1,144	574				197				1,718	1,341	377
Quarry Asset		533	293	240				67				533	360	173
Totals		1,880,864	748,919	1,971,731	124,736	30,100	23,869	38,152	97,808	192,152	109,597	2,693,932	461,485	2,342,044

Asset Management Strategy

Asset Class	Asset Category (as determined by Council)	Depreciation Expense (%) (specific rate or range of rates)	Depreciation Expense $'000	Cost $'000	Fair Value Valuation $'000	Accumulated Depreciation and Impairment $'000	WDV $'000	Asset Condition (refer details attached)	Estimated cost to bring to a satisfactory standard $'000	Required Annual Maintenance $'000	Current Annual Maintenance $'000
		Per Note 1	Per Note4		Per Note 9				Per Section 428 (2d)		
Public Buildings	Council Offices	0.80%	228		29,109	3,144	25,965	Fair/Good	Nil	590	76
	Council Works Depot	0.5%-1.50%	42		4,594	551	5,043	Fair/Good	300	110	117
	Council Halls	1.50%	37		5,107	614	4,493	Fair	450	250	85
	Council Houses	0.5%-1.0%	6		748	176	572	Fair	110	8	29
	Museum	0.60%	8		1,377	209	1,168	Poor	4,000	60	29
	Library	0.66%	10		1,569	52	1,517	Satisfactory	Nil	500	28
	Childcare Centres							Not funded by Council			
	Art Gallery	0.40%	34		8,408	210	8,198	Good	Nil	50	89
	Amenities/Toilets	0.4%-1.0%	27		6,526	511	6,015	Fair/Good	400	130	206
			392		58,438	5,467	52.971		5,260	1,698	659
Public Roads	Sealed Roads	2.5%	5,922		432,147	93,518	332,707	Fair	22,000	5,949	6,917
	Unsealed Roads	1%	125		14,994	2,799	12,070	Fair	5,500	1,639	1,412
	Sealed Roads Substructure	0.67%			106,722		106,722	Fair	Nil	Nil	Nil
	Bridges	1.25%	641		145,110	7,536	136,933	Fair	11,000	1,700	363
	Footpaths/Cycleways	2%	109		20,896	1.760	19,027	Satisfactory	2,000	550	399
	Kerb & Gutter	5%	1,705		39,550	1,079	36,766	Fair	8,500	320	61
	Traffic Facilities	5%						Satisfactory	Nil	234	150
	Carparks	5%	249		6,861	919	5,693	Satisfactory	Nil	150	100
			8.751		759,419	107,611	649,918		49,000	10,542	9,402
Water	Treatment Plants	2%	286		89,453	2,316	87,137	Very Good	Nil	1,533	1,652
	Water Connections	6.67%	50		23,144	7,715	15,429	Satisfactory	Nil	636	663
	Reservoirs	1.43%	402		36,181	3,335	32,846	Satisfactory	Nil	214	180
	Dams	1%	123		56,846	2,204	54,642	Satisfactory	Nil	428	400
	Pipeline	1.43%	6,384		318,243	107,894	210,349	Satisfactory	Nil	1,233	1,619
	Pump Stations	5%	612		22,857	2,913	19,944	Satisfactory	Nil	1,106	1,267
			7,857		546,724	126,377	420,347		Nil	5,150	5,781
Sewerage	Pump Stations	5%	3,363		69,927	7,545	62,382	Satisfactory	Nil	2,018	2,189
	Pipeline	1.45%	6,142		371,127	119,796	251,331	Satisfactory	Nil	1,125	1,161
	Treatment Works	2%	4,934		150,567	5,935	144,632	Good	Nil	5,539	5,711
			14,439		591,621	133,276	458,345		Nil	8,682	9,061
Drainage Works	All Infrastructure	1.25%	1,761		162,830	46,612	115,768	Fair	3,500	1,200	265
			1,761		162,830	46,612	115,768		3,500	1,200	487
Total - Classes	Total - All Assets		33,200		2,118,582	419,343	1,697,349		57,760	27,272	25,390

Note 9 in Council's Financial Statements sets out the current values and categories of infrastructure assets that the Council is responsible for. The following diagram illustrates that of the $2.69 billion assets the most predominant asset type in replacement cost terms are roads, followed closely by sewerage and water assets.
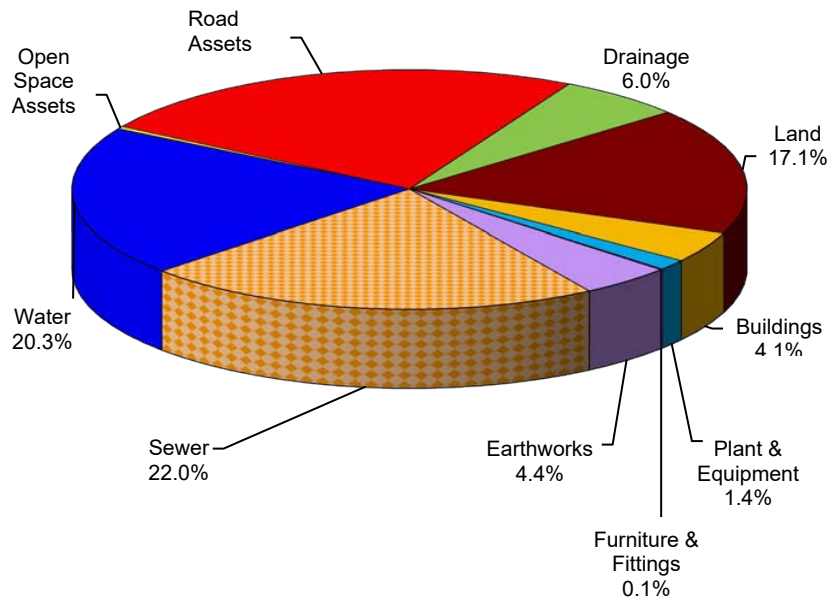
Diagram 8 - Distribution of Asset Replacement Values based on Asset Categories

The 2009/2010 Financial Statements records a total capital expenditure from all sources on infrastructure as $124.7 million which equates to 4.64% of the Total Replacement Value. However, $78 million was spent on the construction of a new filtration plant and hence the split between asset renewal and new assets actually equates to 1.73% and 2.91% respectively.

5.3 Levels of Service

Tweed Shire has set a series of strategic Levels of Service (LoS) to guide the management of its assets. For each major asset category, the LoS define a number of Service Level Outcomes in terms of Performance Outcomes and Measures, KPIs and Targets for achievement.

The detailed Levels of Serviceare available in the respective Asset Management Plans.

5.4 Snapshot of Health of Asset Stock

By understanding the condition of Council's assets and the various types of distresses that affect them, Council can utilise this data to assist in maintaining the level of service the community desires, in the context of affordability, provide intergenerational benefits and also minimise the risk of asset failure. The consequences of asset failures will result in loss of service delivery and could also lead to legal liability if Council is found to have acted unreasonably in the management of its assets.

There are many reasons why Council assets fail/deteriorate and therefore do not meet current performance standards and community expectations, among the most common are the following:

- Damage by service authorities when installing / constructing their infrastructure within Council's road reservation;

- Movement of the underlying soils. Much of Tweed has been built on highly reactive clay;
- Suitability of the asset to meet changing demographics and needs, e.g. requiring a building that was once used as a senior citizen centre to be upgraded to a childcare centre to meet the demands for the increase in a younger population. This is often referred to as 'fit for purpose';
- Increases in the allowable vehicle load limits on Council's roads; and
- Increases in density of private developments in established suburbs, placing additional capacity requirements on assets not designed to cope i.e. sewer, water and stormwater pipes and treatment plants.

Based on condition audits and inspections carried out in the years from 1996 to 2010, Council's assets are estimated to be in average condition as shown in the following diagrams. On a network basis, on average Council's assets have consumed 25% of their useful life.
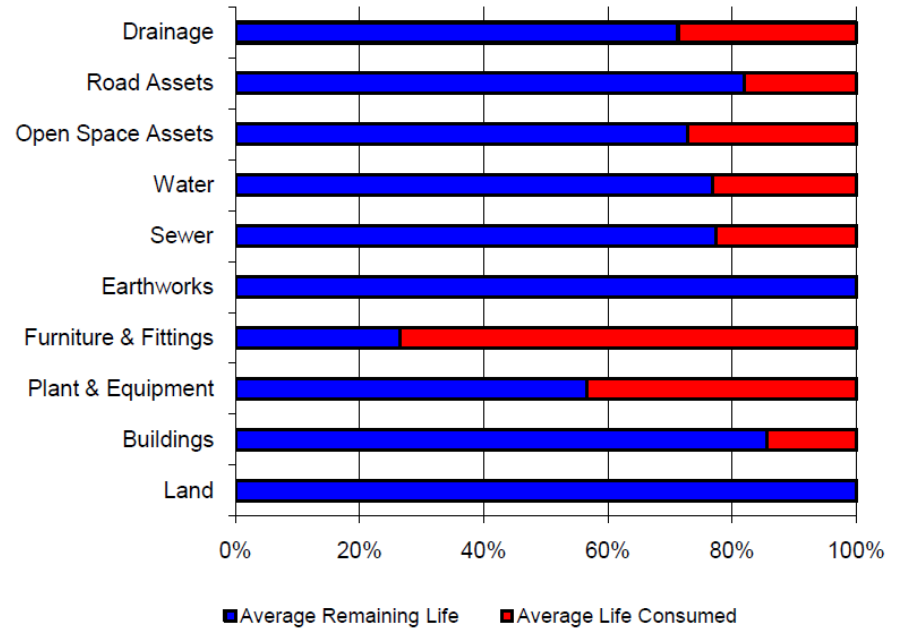
Diagram 9 - Average Useful Life Consumed of Council's Asset Stock

The following graphs illustrates Tweed's Major Asset Network Condition (apart from bridges, water and sewer) based on Council's historical condition data, taking into account the condition rating scales, as illustrated in the following table. The graphs show the percentage of Council's asset network in each category of community condition scale.

Condition Score	Community Rating	Description
1	Brand New or Excellent	Asset is New or Near New with minimal signs of wear or use.
2	Good	Asset has limited signs of wear and use that only require routine maintenance.
3	Fair	Asset has numerous signs of wear and use. While the condition is still acceptable for normal use, minor capital works to prevent further deterioration.
4	Poor	Asset has considerable signs of wear and use. The condition is impacting on the use of the asset and major capital works are required to return the asset to an acceptable condition.
5	Very Poor	Asset is near the end of its useful life and only provides a severely degraded service. It requires replacement in the near future.
6	Unserviceable	Asset can no longer provide the service it is intended to provide. It is beyond practical renewal and requires replacement.

Table 2 - Condition Scoring Table

The condition scoring scale follows internationally accepted good practice[3] of starting with 1 for new or near new and the values increasing as the asset condition deteriorates.

The descriptions in the Condition Scoring Table are a general guide to assist in understanding the meaning of each condition score. In practice the condition score for an asset is determined by a range of measures and indicators that vary for each asset category. The detailed scoring schemes are documented in the separate Asset Management Plans
prepared for each of the significant asset categories as detailed in Section 5.1.

Distribution of Sealed Road Pavement Condition

Cond 1 — 70.0%
Cond 2 — 17.0%
Cond 3 — 3.0%
Cond 4 — 7.0%
Cond 5 — 3.0%
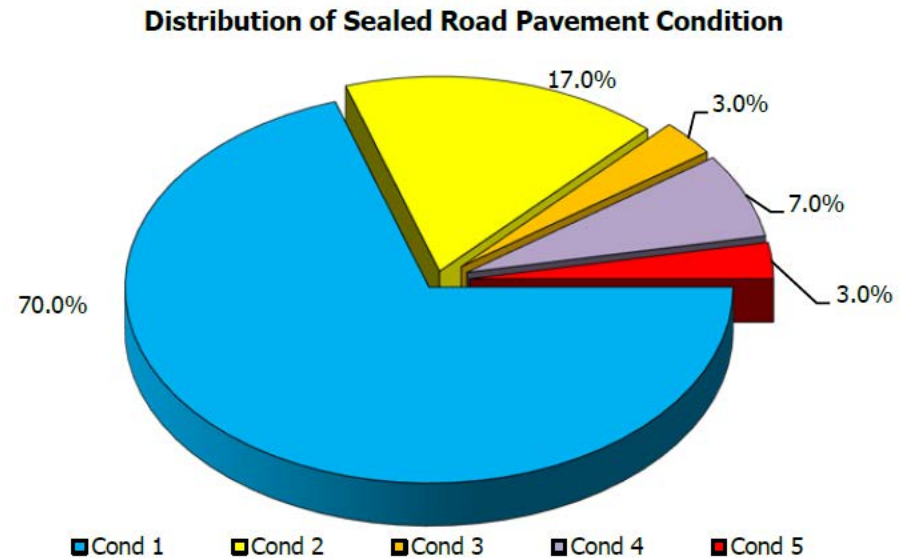
Diagram 10 - Distribution of Sealed Road Pavement Network

[3] International Infrastructure Management Manual 2006

Distribution of Sealed Road Surface Condition
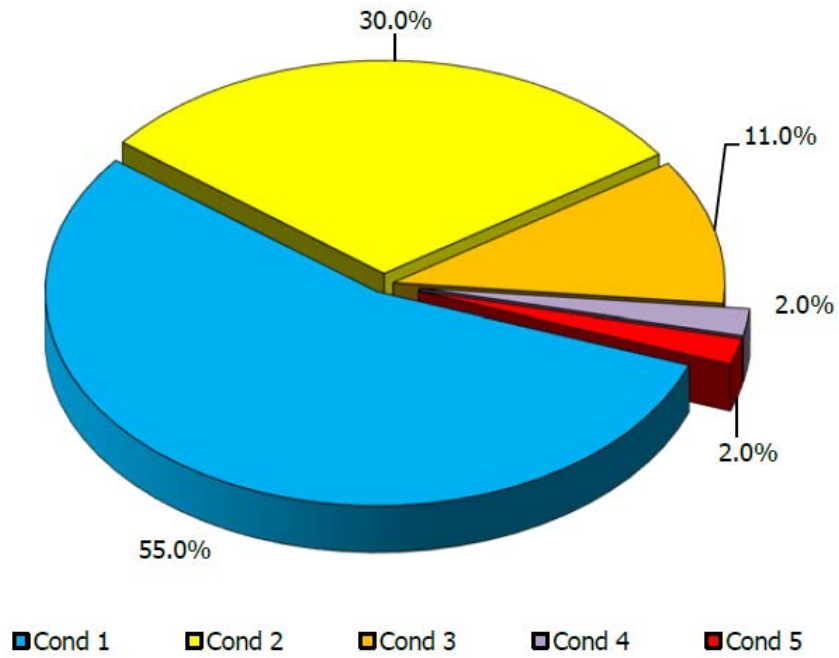
Diagram 11 - Distribution of Seal Road Surface Network

Distribution of Unsealed Road Network Condition
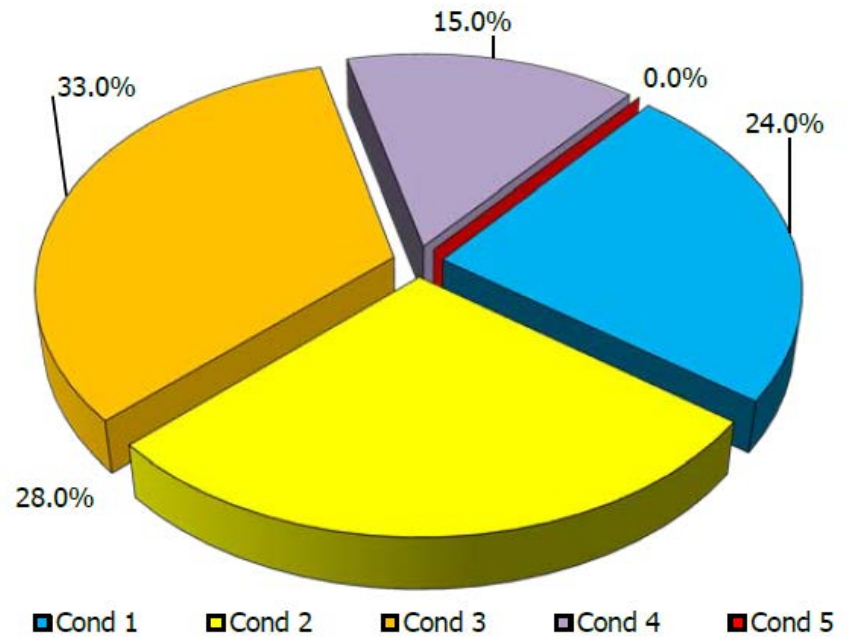
Diagram 12 - Distribution of Unsealed Roads

Distribution of Footpath Network Condition
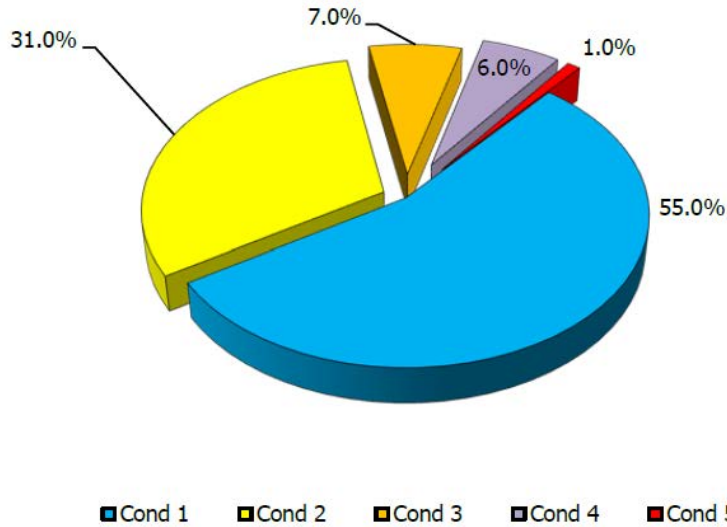
Diagram 13 - Distribution of Footpath Network

Distribution of Building Portfolio Condition
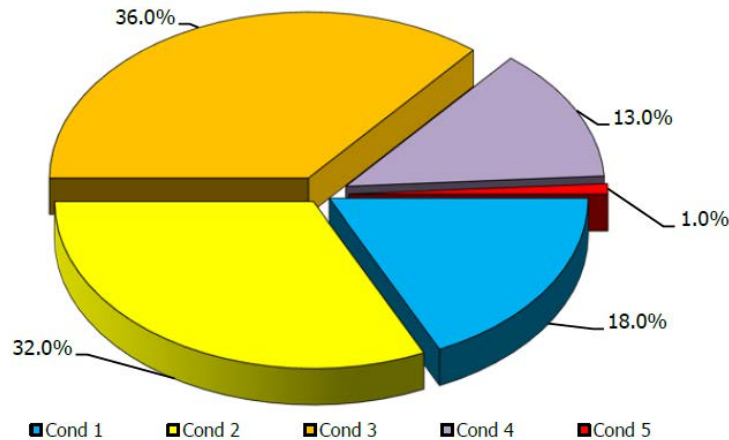
Diagram 14 - Distribution of Building Portfolio

The financial implications of the work required for roads, footpaths and buildings are discussed in Section 6.

5.5   Asset Management Maturity

Asset Management Maturity is the level or ability of Tweed Shire to achieve contemporary best practice asset management. In general terms contemporary best practice asset management for Council means the following:

- *Council knows what we own/control or have responsibility or legal liability for;*
- *Council has recorded these assets in a register down to an identifiable level and our valuations are reported at a component level;*
- *Council will monitor the condition, functionality, capacity, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the portfolio levels;*
- *Council understands and have recorded the current levels of service in terms of reliability, repeatability and quality of service as well as our responsiveness to any asset failures;*
- *Council understands the likely future levels of service required based on population growth, demographic changes and community expectations;*
- *Council understands the long term (10 years plus) funding needs of our municipality to meet customer expectations in both capital and maintenance expenditure;*

- *Council will monitor and report on the condition, performance and functionality of our assets against prescribed service levels and regulatory requirements;*
- *Council will have uniform processes across our whole organisation for the evaluation of any investment in:*
  - o *Capital works*
  - o *Maintenance*
  - o *Operations*
- *Council has a consistent method of developing annual needs based budgets; and*
- *Council regularly reports and compare actual performance against planned performance – costs, service levels and responsiveness.*

5.6 Measuring the Council's Asset Management Maturity

Council has assessed its maturity in asset management on the basis of the Step Watch Program matrix attached in Appendix A.

The Step Watch Program is a mentoring program developed specifically for local government based on state based asset management guidelines. The diagnostic was undertaken by ACEAM Pty Ltd consultants and has been based on several years of successful Step Watch Asset Management Implementations across Australian Local Government Authorities (LGAs).

It is envisaged that all future maturity assessments will be undertaken by Council utilsing this method.

Each matrix provides a baseline of Council's asset management maturity levels two years ago (yellow) and the Council's current maturity level (green). The results clearly demonstrate that Council has made significant improvements in its asset management practices and systems over the past two years.

Each table also illustrates the ideal maturity level for a Local Government Authority (blue). Specific actions to allow Tweed Shire to continue to improve towards the ideal target are documented in Section 0 of this Strategy.

5.7 Snapshot of Asset Management Issues Facing Tweed Shire

The majority of Council's assets were first constructed at the same time the original suburbs were built. These assets are approaching the latter half of their expected life and, as such, the physical condition will further deteriorate in the coming years. In addition, Council has also received in recent years an increasing amount of contributed assets from developments.

At the same time, population growth as identified by recent studies and increased economic activity are challenging the capacity of existing assets to meet the increasing demands and changes in our environment.

Community expectations are also changing, which affect the ability of existing assets to meet the functional needs of the community.

The following provides a general assessment of the issues Council is currently experiencing and will need to address in the near future:

- *Adopting good-practice asset management strategies to ensure the intergenerational sustainability of community assets;*
- *Ensuring that the required funding is available to upgrade the existing assets of the Council to meet changing expectations of the community;*
- *Moving towards consumption-based funding analysis and optimised budgeting methods;*
- *Being able to reliably predict the condition of assets after 10 years time at the current rate of expenditure;*
- *Ensuring sound risk management and mitigation associated with Council's assets;*
- *Community Education/involvement and understanding of levels of service and the relationship between funding and service delivery;*
- *Life cycle costing to justify new assets; and*
- *Future maintenance needs for new infrastructure and managing sustainability.*

6. LONG-TERM FINANCIAL PROJECTIONS

Assets are necessary products that provide a service to an end user, in Council's case the community.

Even though the service may be required indefinitely like a residential street or park, no asset will last forever without proper management. Even with good maintenance, assets may deteriorate well before reaching their design life (useful life) dependant upon many unplanned factors, such as ground conditions and the environment.

Tweed Shire's situation is challenging as the municipality had bursts of urban development in 1940-1950's - which results in significant demands for reconstruction in the 2020's and is also seeing increases in new assets being contributed to Council from developers.

Council is committed to responsible financial management, in a constantly changing environment. In order that Council make responsible financial decisions it is imperative to understand and plan for the future to ensure there is adequate funding available to properly manage Council's assets in accordance with Council's Strategies and best practice.

Tweed Shire utilises a modern local government asset modelling and prediction tool: MyPredictor - a component of the Assetic Asset Management System. Tweed Shire has applied asset performance and life-cycle models, which simulate the behaviour of the asset in real-life.

The life-cycle models are capable of infrastructure modelling to take account of:

- *Different Service Level objectives for the Council's assets;*
- *Different asset management practices; and*
- *Different financial strategies for funding asset maintenance.*

Total Asset Capital Renewal Projections
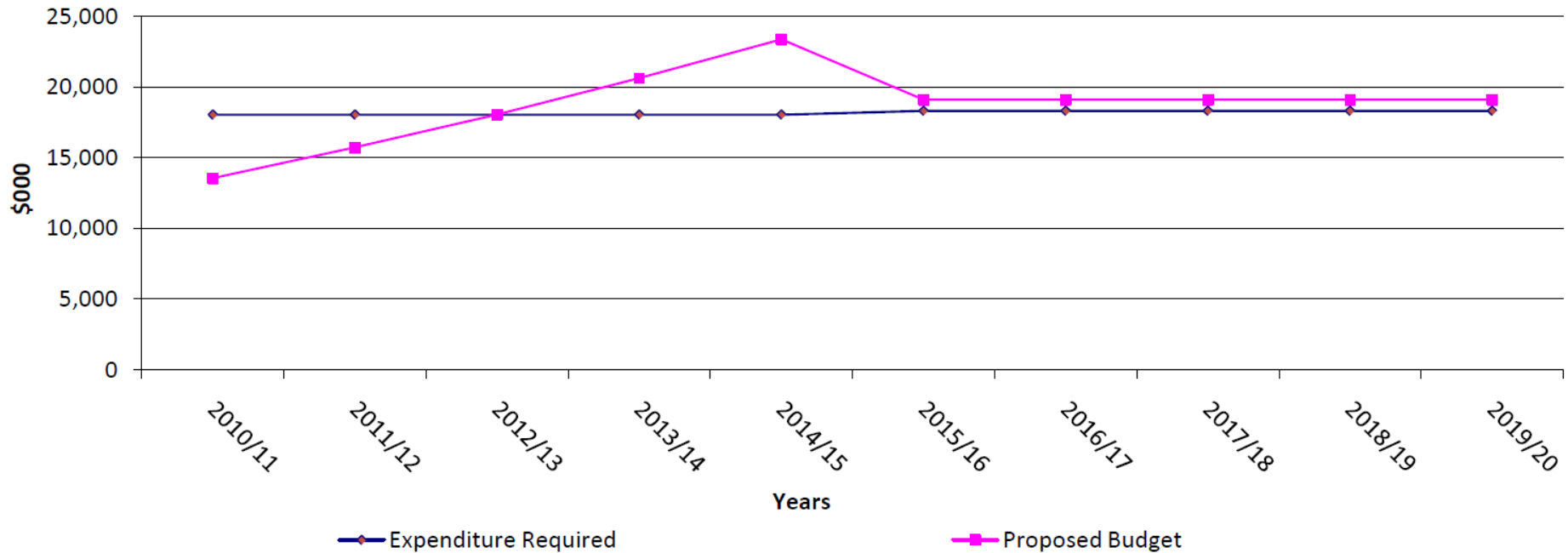
Diagram 15 – 10-Year Projection of Required Capital Budget versus Allocated Budget Levels

Whilst the above graph demonstrates that Council will within the next five years meet its asset expenditure requirements, this is not the end of responsibly managing Council's assets. Council currently has a backlog of assets that require renewal and/or rehabilitation.

By incrementally increasing the annual capital works expenditure, together with the actions identified in this AMS (such as setting agreed and affordable levels of service that will be provided to the community and implementing systems and frameworks), Council will be in a better position to maximise the use of its existing assets to better allow Council to manage its assets and meet its vision and goals for the Tweed community.

7.   STRATEGIC ACTIONS

As noted in Section 5.6, Tweed Shire has made significant improvements in asset management practices over the past two years as evidenced by the improvement in the Asset Management Maturity scores. Council has also invested in modern advanced asset management tools and Asset Management Software System.

It is vital that Council capitalises on its efforts to date and keeps on travelling down a path of continuous improvement. By adopting the following strategic actions, the Council will move closer to the Local Government Asset Management Framework ideal targets of the Maturity matrices (see Appendix A).

Importantly, the following strategies are a series of linked steps that will enable the Council to produce advanced Asset Management Plans that will guide the long-term financial planning for its assets.

7.1   Strategy 1 – Service Levels Review and Monitoring

Tweed Shire has already established Strategic Service Levels for its key infrastructure asset categories. Moving forward, Council should:

- *Review its Strategic Service Levels to ensure they provide adequate guidance for the strategic decisions required for effective asset management and all have measurable performance targets.*

Responsibility: Asset Management Business Unit (AMBU).

Target: February 2011.

- *Develop Operational Service Levels that provide Performance Outcomes, Measures and Targets for day- to-day asset management activities and decision making. The targets set should be consistent with delivering the desired Strategic Service Levels.*

Responsibility: AMBU.

Target: May 2011.

- *Annually monitor the Council's performance with respect to the Strategic and Operational Service Levels and recommend changes of practices or Service Levels if necessary.*

Responsibility: AMBU.

Target: Annually each September.

7.2   Strategy 2 – Advanced Condition Management

Tweed Shire can improve the quality of its asset decision making and prediction through adopting more advanced asset condition assessment practices:

- *Determine the appropriate range of condition, capacity and functionality measures for each asset category that will provide a cost-effective measure of the condition of each asset.*

Responsibility: AMBU in conjunction with the relevant

Business Unit for each asset category.

Target: December 2011

- *Develop cost-effective assessment tools for each condition, capacity and functionality measure and document in Asset Assessment Manuals for each asset category.*

Responsibility: AMBU in conjunction with the relevant

Business Unit for each asset category.

Target: April 2012.

- *Update asset condition assessment scores using Advanced Condition Management tools.*

Responsibility: Relevant Business Unit for each asset category.

Target: June 2011 and then annually each June.

- *Undertake Community Satisfaction Surveys to gauge the Community's satisfaction with the current levels of service being delivered.*

Responsibility: Relevant Business Unit for each asset category.

Target: June 2011 and then bi-annually each June.

7.3 Strategy 3 – Enhanced Long-Term Modelling

The Advanced Condition Management practices will allow Council to undertake enhanced long-term modelling of its asset portfolios and thus generate more robust financial projections:

- *Develop enhanced model cost parameters to match the advanced condition management practices.*

Responsibility: AMBU in conjunction with the relevant

Business Unit for each asset category.

Target: March 2012.

- *Generate enhanced long-term financial projections from myPredictor using the scores obtained through Strategy 2.*

Responsibility: AMBU.

Target: August 2012 and then annually each August.

7.4 Strategy 4 – Linking Long-Term Financial Planning with Advanced Asset Management

Developing long-term financial projections for infrastructure assets is of little value unless the process is linked in to the long-term financial process of the Council. This step is critical for success:

- *Integrate the asset long-term financial projections into the Council's Long-Term Financial Plan, making adjustments to Service Levels and / or funding source models as necessary to achieve asset portfolios that are both affordable and sustainable in the long-term.*

Responsibility: AMBU and Finance.

Target: October 2012 and then annually each October.

7.5 Strategy 5 – Asset Management Plans for Major Asset Categories

The key asset management plans for Council will be the Transportation Asset Management Plan (TAMP) also incorporating footpaths and bridges, the Building Asset Management Plan (BAMP), the Water Activity Management Plan, the Wastewater Activity Management Plan, the Stormwater Drainage Asset Management Plan (DAMP), the Open Space Asset Management Plan (OSAMP) and the Fleet Asset Management Plan (FAMP).

- *Prepare and document Asset Management Plans.*

Responsibility: AMBU.

Target: March 2011.

- *Annually review Council's asset management plans and update as needed to incorporate changes in policy, practices and community expectations.*

Responsibility: AMBU.

Target: Annually each December.

8. KEY PERFORMANCE INDICATORS

The following below sets out the relevant Key Performance Indicators (KPIs) that the Tweed Shire will use to assess the quality and effectiveness of its Asset Management practices.

KPI	Measurement Method
Overall Asset Management	Measured in terms of the maturity index in this strategy Appendix.
Asset Service Levels[4]	Measuring actual v/s targets.
Renewal Funding Index	Ratio of Net Present Worth (NPW)of planned capital expenditure (LTFP) divided by the desired capital expenditure (as per the AM plans)
Customer Satisfaction	Measured in terms of customer response through the Council surveys.
Asset Condition Index[5]	Ratio of average condition loss over two network level condition audits
Asset Consumption Index[6]	The current written down book value divided by the current gross value
Sustainability Index[7]	Capital Expenditure on Replacement and Renewal divided by Depreciation Expense
Asset Health Index	Ratio of the Network Level Remaining Life to the Expected Useful Life at a Portfolio Level.

Table 3 - Key performance Indicators for quality Assessment of Asset Management Practices

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[4] Council will develop service levels for all asset categories from 2011 to 2012.
[5] Average network asset condition to remain status quo or better.
[6] Council will aim to achieve a ratio fo 75 out of 100 by 2015.
[7] Council will aim to fund its Capital renewal expenditure to meeting depreciation by 2015.

9. STRATEGY REVIEW

Any Strategy must be a dynamic document, reflecting and responding to changes over time. A full review of this Asset Management Strategy should take place every three years to document progress and set out proposals for the next five years or following changes to Council's Community Strategic Plan.

10. REFERENCES

- Tweed Shire Community Strategic Plan

- Tweed Shire Financial Statements 2009/10

- Tweed Shire Annual Report 2008-2009

- Tweed Shire Council Annual Report 2007-2008

- Tweed Shire Urban Land Release Strategy

- Tweed Shire Council, Community profile, communities working together May 2008

APPENDIX A – TWEED SHIRE ASSET MANAGEMENT MATURITY MATRIX 2010

Rating	Frequency	Emphasis	Formality	Systems	Results
0-9 Unawareness	Never do this	Not emphasised	No formal process	No system exists	No results seen
10-30 Awareness	Occasionally do this	Receives minimal emphasis; some efforts under way	Done informally only; ad hoc procedures; minimal documentation	Manual system exists; plans for automated systems are in place	Minimal results; long way to go
30-50 Systematic Approach	Sometimes done on an as needed basis for critical programs and activities	Moderately emphasised; try to adhere to this	Semi formal process; some routine procedures exist	Automated systems exists; meets basic user needs	Some results; still below expectations
50-80 Competence	Often do this on many programs	Generally emphasised; something that is done and checked	Formal process exists; modestly documented; good but still evolving	Good system in place; widely available; meets all key user needs	Good results getting there
70-95 Excellence	Usually do this; omitted only in exceptional circumstances	Strongly emphasised; used to measure and reward by	Formal, documented process; well tested and well followed	Strong system in place; meets nearly all user needs	Excellent results still some room to improve
96-100 best possible	Always do this; standard operating procedure	Heavily emphasised; one of the principles by which business is done	Strict, formal process exists; well documented; not deviated from	State of the art system in place	Unparalleled results a total success

Maturity Level - Transportation	Unaware		Aware				Syst. Approach				Competence						Excellence			
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
(Processes & Plans)																	B			
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G					B	
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	B			
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G	G	G	G						B			
Demand Analysis & Management	Y	Y	Y	G	G										B					
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G			B			
Asset Costing & Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G					B			
Works Management	Y	Y	Y	G	G												B			
Performance Measurement	Y	Y	Y	Y	Y	G	G	G									B			
KPI (Systems & Tools)																				
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B			
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G				B			
Works Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y								B			
Asset Costing Systems	Y	Y	Y	Y	Y	Y	G	G	G								B			
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y								B			
Plans & Records Management	Y	Y	Y	G	G	G											B			
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G	G		B			

Legend   2008 Assessment   [ ]   2010 Assessment [yellow]   Ideal Target [green]   [blue]

Maturity Level - Buildings	Unaware		Aware				Syst. Approach				Competence								
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
(Processes & Plans)																	B		
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G					B
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G				B		
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G	G	G							B		
Demand Analysis & Management	Y	Y	Y	G	G										B				
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G					B		
Asset Costing and Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G				B		
Works Management	Y	Y	Y	G	G												B		
Performance Management	Y	Y	Y	Y	Y	G	G	G									B		
	Y	Y	Y	Y	Y	G	G	G											B
KPI (Systems and Tools																			
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G				B		
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G				B		
Works Management Systems	Y	Y	Y														B		
Asset Costing Systems	Y	Y	Y	Y	Y	Y	G	G	G	G							B		
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y								B		
Plans & Records Management	Y	Y	G	G	G												B		
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G		B		

Legend   2008 Assessment   ▢ 2010 Assessment   ▢ Ideal Target   ▢

Maturity Level - Open Space Assets	Unaware		Aware				Syst. Approach				Competence						Excellence		
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	95	100
(Processes & Plans)																			
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G					B	
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G					
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G	G	G	G								
Demand Analysis & Management	Y	Y	Y	G	G										B				
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G					
Asset Costing and Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G						
Works Management	Y	Y	Y	G	G														
Performance Management	Y	Y	Y	Y	Y	G	G	G											
																		B	
KPI (Systems and Tools																			
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G					
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G					
Works Management Systems	Y	Y	Y	Y	Y	Y													
Asset Costing Systems	Y	Y	Y	Y	Y	Y	G	G	G	G									
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y										
Plans & Records Management	Y	Y	Y	G	G	G													
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G	G				

Legend   2008 Assessment   [yellow] 2010 Assessment   [green] Ideal Target   [blue]

Maturity Level - Stormwater Drainage	Unaware		Aware				Syst. Approach				Competence						Excellence	
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	100
(Processes & Plans)																	B	
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	G	G							B	
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	G	G							B	
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G									B	
Demand Analysis & Management	Y	Y	Y	G	G										B		B	
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	G	G							B	
Asset Costing and Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	G	G							B	
Works Management	Y	Y	Y	G	G												B	
Performance Management	Y	Y	Y	Y	Y	Y	G	G	G								B	
KPI (Systems and Tools																	B	
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G						B	
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G						B	
Works Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y							B	
Asset Costing Systems	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G						B	
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y						B	
Plans & Records Management	Y	Y	Y	G	G	G											B	
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G				B	

Legend   2008 Assessment   [yellow] 2010 Assessment   [green] Ideal Target   [blue]

Maturity Level - Fleet	Unaware		Aware				Syst. Approach				Competence						Excellence	
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	100
(Processes & Plans)																	B	
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	B	
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G	G	G							B	
Demand Analysis & Management	Y	Y	Y	G	G										B		B	
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G				B	
Asset Costing and Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G					B	
Works Management	Y	Y	Y	G	G												B	
Performance Management	Y	Y	Y	Y	Y	G	G	G									B	
KPI (Systems and Tools																	B	
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Works Management Systems	Y	Y	Y														B	
Asset Costing Systems	Y	Y	Y	Y	Y	Y	G	G	G								B	
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y									B	
Plans & Records Management	Y	Y	G	G	G												B	
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G			B	

Legend   2008 Assessment ☐   2010 Assessment (yellow)   Ideal Target (green)   (blue)

Maturity Level - Water	Unaware		Aware				Syst. Approach				Competence						Excellence	
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	100
(Processes & Plans)																		
Corporate Registry Management																		
Knowledge of Assets																		
Service Level Specs & Measurement																		
Demand Analysis & Management																		
Strategic Planning & Lifecycle Analysis																		
Asset Costing and Budgeting																		
Works Management																		
Performance Management																		
KPI (Systems and Tools																		
Asset Register System																		
Strategic Planning Systems																		
Works Management Systems																		
Asset Costing Systems																		
Customer Management Systems																		
Plans & Records Management																		
Spatial Mapping Systems																		

Legend   2008 Assessment   [yellow] 2010 Assessment   [green] Ideal Target   [blue]

Maturity Level - Sewerage	Unaware		Aware				Syst. Approach				Competence						Excellence	
Score	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	100
(Processes & Plans)																	B	
Corporate Registry Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Knowledge of Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	B	
Service Level Specs & Measurement	Y	Y	Y	Y	Y	Y	G	G	G	G							B	
Demand Analysis & Management	Y	Y	Y	G	G										B		B	
Strategic Planning & Lifecycle Analysis	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G			B	
Asset Costing and Budgeting	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G	G				B	
Works Management	Y	Y	Y	G	G												B	
Performance Management	Y	Y	Y	Y	Y	G	G	G									B	
KPI (Systems and Tools																	B	
Asset Register System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Strategic Planning Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G			B	
Works Management Systems	Y	Y	Y														B	
Asset Costing Systems	Y	Y	Y	Y	Y	Y	G	G	G								B	
Customer Management Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y								B	
Plans & Records Management	Y	Y	Y	G	G	G											B	
Spatial Mapping Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G			B	

Legend   2008 Assessment   [yellow] 2010 Assessment   [green] Ideal Target   [blue]