



ASSET MANAGEMENT STRATEGY
2017/2021
Mid-Western Regional Council



MID-WESTERN REGIONAL COUNCIL

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INTRODUCTION

The Asset Management Strategy (AMS) is designed to provide a plan to manage Councils physical assets including setting parameters for asset selection, maintenance, inspection and renewal which plays a key role in determining the operational performance and sustainability of Council.

This Asset Management Strategy makes up a part of the Council Resourcing Strategy as required by the Local Government Integrated Planning and Reporting framework.

THE RESOURCING STRATEGY INCLUDES:

1 Long Term Financial Planning

2 Workforce Plan

3 Asset Management Strategy

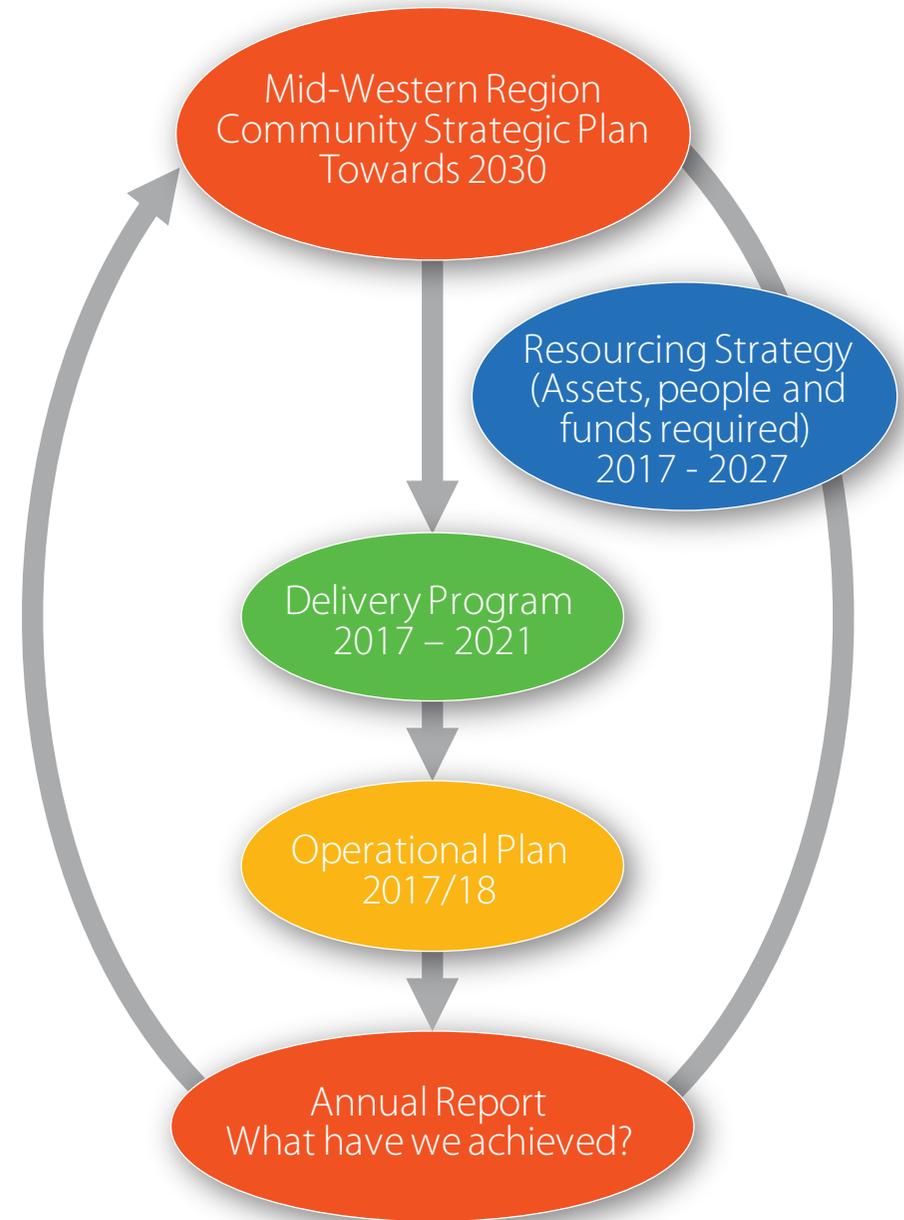
Asset Management Planning incorporates an Asset Management Policy, Asset Management Strategy and Asset Management Plans.

OUR ASSET MANAGEMENT POLICY

The Asset Management Policy sets a vision for Council's asset management activities:

To manage and operate the appropriate mix of sustainable community infrastructure at the lowest life cycle cost that supports communities in the Mid-Western Regional Council.

Council's endorsed Asset Management Policy is attached as Appendix 1.





Asset Management

Asset management deals with the optimal management of physical asset systems and their life cycles. The objective is to minimise the whole of life cost of assets and to identify other critical factors such as risk or business continuity to be considered objectively in the decision making process. It represents a cross-disciplinary collaboration to achieve best net sustained value-for-money in the selection, design/acquisition, operations, maintenance and renewal/disposal of physical infrastructure and equipment, for the purpose of achieving the objectives of the Community Plan.

A strong and sustainable local government system requires a robust planning process to ensure that Council assets are managed in the most appropriate way on behalf of the community.

Service Delivery

The Community Plan details the service outcomes and objectives, as derived from the community consultation process, of Council. The service areas that the community identified as important were grouped around the following themes:

Looking after our Community - Vibrant towns and villages with a rich history, a safe and healthy community, and a strong sense of community pride – a great place for families

Protecting our Natural Environment - Conserving and promoting the natural beauty of our region

Building a Strong Local Economy - A prosperous and diversified economy delivering lifestyle benefits to the community through employment, income and sustainable economic growth

Connecting our Region - Linking towns and villages across our region, and connecting our region to the rest of NSW

Good Government - A strong council that is representative of the community and effective in meeting the needs of our people



Council utilises infrastructure assets to provide services to the community. Roads and footpaths provide transport services. Stormwater systems protect properties and roads from flooding and control water runoff quality. Park and landscape assets provide recreation services and enhance and protect the built and natural environment. Water and Sewerage services provide services essential for a town and buildings provide cultural, recreational and community services. The Council provides a high level of service to its community due to the standard of construction and relatively young age of infrastructure assets.

Council's existing infrastructure stock was built over the past 100 years. During this past period of infrastructure expansion, little or no analysis was done to determine a strategy to sustain this infrastructure stock by matching future maintenance and renewal expenditures with future income projections. The pattern of infrastructure construction in the past points to a future peak in infrastructure renewal over and above maintenance activities.

The Asset Management Strategy is a procedure to determine what the asset stock needs to be to achieve strategic objectives. The Asset Management Strategy is therefore an ongoing process as strategic objectives develop and change. The steps in this process are to:

- review the strategic trends;
- assess potential impacts on the asset stock;
- assess gaps in asset knowledge to enable the asset management plans and asset improvement plans to be developed.

Linking of service levels and the cost of service delivery is an essential component of strategic asset management. It is essential that council knows the true costs of service delivery and the service levels that are desired by the community and what level they are willing to pay for.

The opportunity for advanced asset management is to focus on facilitating community access to services rather than just building and maintaining assets. This can assist in reducing asset ownership below what, with hindsight, may be seen as either desirable or economically sustainable. Re-assessing what services – and, especially what level of service – the community requires, and seeking alternatives to Council service provision, can significantly reduce the future renewal funding problems Council is facing. Solutions include private provision, co-operating with neighboring Councils and the private sector in the provision of joint services, and administrative assistance to community bodies, such as sporting or social groups, where services can be provided more cost effectively.



Our Assets

Types of Assets

Council's asset types are summarised below and are categorised by the Community Plan Themes which illustrates how these assets help meet the objectives as set out in the Community Plan:

Looking after our Community

- Streetscaping
- Community Buildings
- Swimming Pools
- Cemetery assets
- Library Books
- Parks & Reserves
- Showgrounds
- Sportsgrounds
- Community Service & Program assets
- Animal Control Facilities
- Public Amenities

Protecting our Natural Environment

- Water Supply infrastructure
- Waste Water infrastructure
- Solid Waste Management assets
- Stormwater infrastructure
- Noxious Weeds assets
- Environment education facilities
- Sustainable energy assets
- Wetlands and other community land

Building a Strong Local Economy

- Tourism Signage & Buildings
- Saleyard assets
- Investment Property & Development

Connecting our Region

- Council Roads & Bridges
- Airports
- Footpaths & Cycleways
- Communications assets

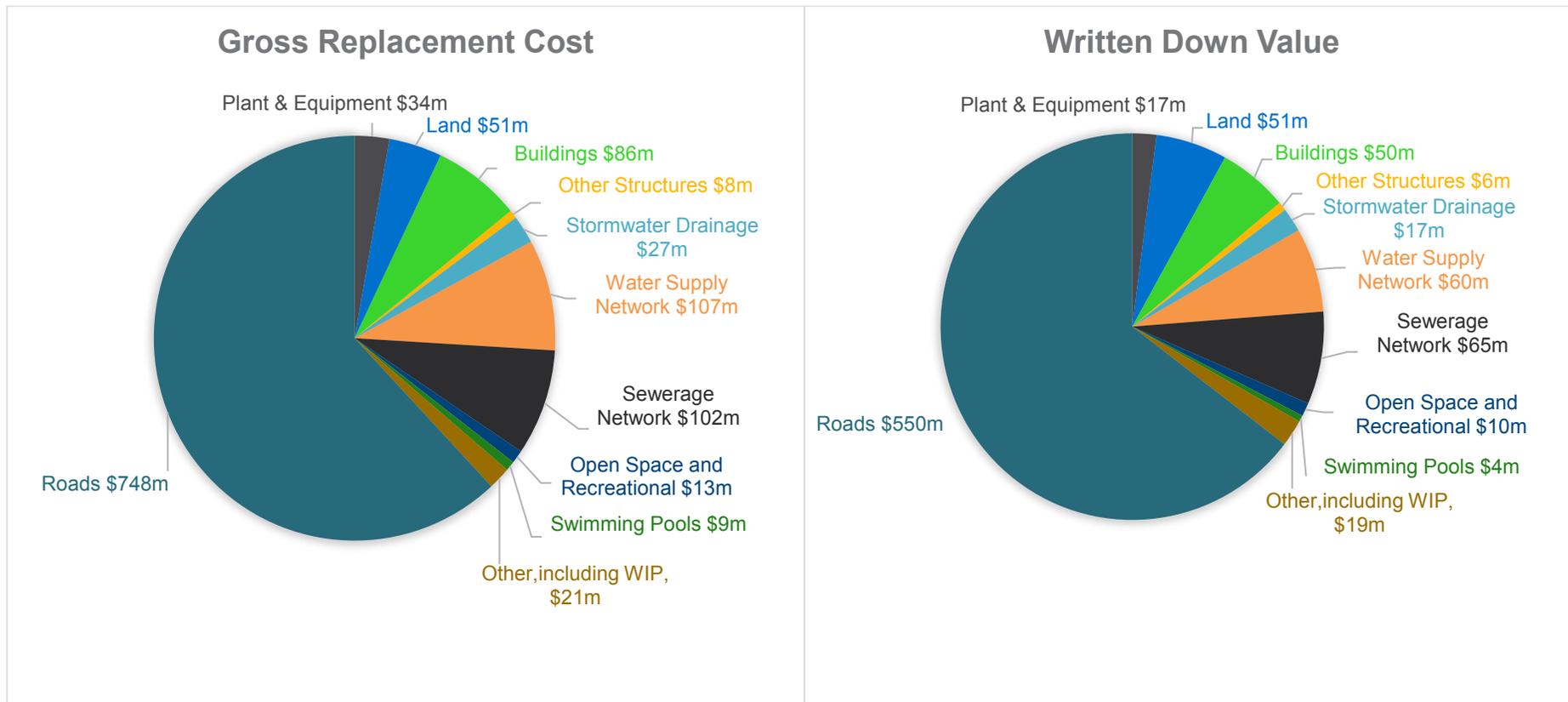
Good Government

- Corporate Buildings
- Plant & Machinery



Asset Conditions

At 30 June 2016, estimated replacement value and written down value of Council assets were over 1,207 million and 851 million, as represented below:





The state of major infrastructure as reported in the Mid-Western Regional Council Financial Statements & Schedules as at 30 June 2016 is included below:

\$'000

Asset class	Asset category	Estimated cost to bring assets to satisfactory standard	Estimated cost to bring to the agreed level of service set by Council	2015/16 Required maintenance ^a	2015/16 Actual maintenance	Carrying value	Gross replacement cost (GRC)	Assets in condition as a percentage of gross replacement cost				
								1	2	3	4	5
Buildings	Centres	106	–	212	236	6,153	10,456	6%	34%	57%	4%	0%
	Councils Works Depot	161	–	67	74	8,094	14,989	6%	36%	56%	1%	2%
	Council Halls	900	–	115	101	4,537	11,814	4%	28%	46%	15%	8%
	Council Houses	197	–	91	52	5,463	7,447	9%	37%	46%	6%	2%
	Museum	–	–	13	15	615	1,377	100%	0%	0%	0%	0%
	Library	–	–	52	59	3,768	5,266	6%	94%	0%	0%	0%
	Childcare Centre(s)	–	–	8	–	1,605	2,476	29%	51%	20%	0%	0%
	Amenities/Toilets	1,502	–	242	263	17,926	28,512	11%	47%	25%	14%	4%
	Rural Fire Service	100	–	–	–	2,098	3,723	0%	42%	47%	9%	1%
	Sub-total	2,966	–	800	800	50,259	86,060	9.4%	41.9%	37.5%	8.4%	2.8%
Other structures	Other structures	23	–	–	–	6,270	8,548	47%	40%	11%	2%	0%
	Sub-total	23	–	–	–	6,270	8,548	47.0%	40.0%	11.0%	2.0%	0.0%
Roads	Sealed roads	6,010	–	922	953	104,185	159,819	32%	34%	23%	11%	1%
	Unsealed roads	2,793	–	1,570	1,497	24,338	72,588	20%	25%	30%	20%	5%
	Bridges	305	–	47	13	31,461	56,544	6%	25%	66%	3%	0%
	Footpaths and Cycleways	222	–	52	30	4,455	8,059	24%	29%	27%	20%	0%
	Kerb and Gutter	206	–	29	30	9,246	19,047	35%	31%	31%	4%	0%
	Parking Areas	22	–	12	4	1,151	1,676	52%	22%	21%	4%	0%
	Culverts and Causeways	425	–	74	87	5,023	10,395	17%	17%	35%	21%	9%
	RMS Regional Roads	6,950	–	593	545	63,976	92,782	17%	27%	35%	19%	1%
	Regional Bridges	–	–	35	52	25,401	46,189	22%	76%	2%	0%	0%
	Bulk Earthwork	–	–	–	–	280,916	280,916	0%	100%	0%	0%	0%
Sub-total	16,933	–	3,334	3,211	550,152	748,015	14.2%	58.5%	19.0%	7.4%	0.9%	



\$'000

Asset class	Asset category	Estimated cost to bring assets to satisfactory standard	Estimated cost to bring to the agreed level of service set by Council	2015/16 Required maintenance ^a	2015/16 Actual maintenance	Carrying value	Gross replacement cost (GRC)	Assets in condition as a percentage of gross replacement cost				
								1	2	3	4	5
Water supply network	Dams and Weirs	–	–	–	–	5,848	14,799	9%	91%	0%	0%	0%
	Reservoirs	356	–	51	64	8,655	15,684	33%	52%	7%	8%	0%
	Pumping Stations	–	–	49	52	3,055	5,651	7%	72%	19%	0%	2%
	Treatment	–	–	476	479	13,357	22,917	0%	50%	50%	0%	0%
	Bores	–	–	98	61	293	1,427	0%	56%	45%	0%	0%
	Reticulation Mains	1,980	–	521	577	17,842	29,418	35%	15%	35%	1%	15%
	Main Delivery	34	–	–	–	11,087	17,210	64%	8%	27%	1%	0%
	Sub-total	2,370	–	1,194	1,232	60,138	107,105	26.3%	40.9%	27.3%	1.4%	4.1%
Sewerage network	Pump Stations	–	–	134	158	5,553	8,213	44%	40%	17%	0%	0%
	Treatment	702	–	415	507	16,160	28,928	43%	22%	25%	10%	0%
	Reticulation Mains	9,588	–	295	317	38,058	57,572	21%	12%	12%	43%	12%
	Rising Mains	251	–	–	–	6,211	7,680	81%	4%	7%	3%	5%
	Sub-total	10,541	–	844	982	65,982	102,393	33.9%	16.4%	15.7%	26.9%	7.1%
Stormwater drainage	Stormwater drainage	–	–	260	507	17,150	27,155	23%	0%	77%	0%	0%
	Sub-total	–	–	260	507	17,150	27,155	22.5%	0.0%	77.0%	0.0%	0.5%
Open space/recreational assets	Swimming pools	82	–	377	507	4,545	9,267	25%	7%	64%	4%	0%
	Open Space and Recreation	392	–	1,619	1,687	9,611	12,691	35%	26%	27%	12%	0%
	Sub-total	474	–	1,996	2,194	14,156	21,958	30.8%	18.0%	42.6%	8.6%	0.0%
	TOTAL – ALL ASSETS	33,307	–	8,428	8,926	764,107	1,101,234	17.6%	49.2%	22.8%	8.5%	1.9%

**Notes:**

- a Required maintenance is the amount identified in Council's asset management plans.

Infrastructure asset condition assessment 'key'

1	Excellent	No work required (normal maintenance)
2	Good	Only minor maintenance work required
3	Average	Maintenance work required
4	Poor	Renewal required
5	Very poor	Urgent renewal/upgrading required



Targets of Council Asset Management

There is a recognised backlog in asset renewal activities of over \$33 million (see estimated cost to bring up to a satisfactory condition above), and no gap in required maintenance expenditure (see difference in required and actual annual maintenance above). Because of this, Council is working on closing the gap in asset renewal expenditure with 10 year projection of capital expenditure included in the draft Long Term Financial Plan as follows:

Mid-Western Regional Council											
10 Year Financial Plan for the Years ending 30 June 2027											
CAPITAL WORKS - ALL FUNDS (CONSOLIDATED)											
Scenario: Base Scenario	Current Year	Projected Years									
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Capital WIP	-	-	-	-	-	-	-	-	-	-	-
Plant & Equipment	3,501,800	4,560,797	5,228,638	2,351,909	5,295,691	5,375,126	5,455,753	5,537,590	5,620,653	5,704,963	5,790,538
Office Equipment	13,380	-	-	-	-	5,702	5,788	5,875	5,963	6,052	6,143
Furniture & Fittings	-	-	-	-	-	-	-	-	-	-	-
Plant & Equipment (under Finance Lease)	-	-	-	-	-	-	-	-	-	-	-
Operational Land	400,000	-	-	-	-	-	74,874	75,997	77,137	278,294	579,468
Community Land	-	-	-	-	-	-	-	-	-	-	-
Land under Roads	-	69,481	70,524	71,567	72,677	73,767	-	-	-	-	-
Land Improvements - non-depreciable	-	-	-	-	-	-	-	-	-	-	-
Land Improvements - depreciable	-	5,371	-	-	5,618	-	-	-	-	-	-
Buildings - non-specialised	818,094	5,585,954	1,337,594	713,491	724,574	735,443	746,474	757,671	769,036	780,572	792,281
Buildings - specialised	-	-	-	-	-	-	-	-	-	-	-
Other Structures	1,255,373	799,001	714,000	1,028,000	331,000	541,000	241,000	771,000	227,000	233,000	632,000
Roads	23,007,510	20,324,293	7,186,561	7,482,163	7,516,931	7,408,685	7,298,815	7,187,298	7,074,108	6,959,220	6,842,608
Bridges	906,596	55,765	56,602	57,439	58,331	59,206	60,094	60,995	61,910	62,839	63,782
Footpaths	544,835	526,557	128,456	130,354	132,379	134,365	136,380	138,426	140,502	142,610	144,749
Bulk Earthworks (non-depreciable)	-	-	-	-	-	-	-	-	-	-	-
Stormwater Drainage	331,856	243,999	320,037	350,135	355,576	360,910	366,323	371,818	377,395	383,056	388,802
Water Supply Network	3,134,547	8,844,290	2,929,029	3,470,167	3,469,301	9,346,000	8,917,000	2,017,000	7,730,000	2,701,000	3,413,000
Sewerage Network	1,997,920	1,784,735	1,918,406	16,952,260	3,663,637	4,089,000	1,315,000	4,342,000	1,870,000	1,787,000	1,929,000
Swimming Pools	-	-	-	-	-	-	-	-	-	-	-
Other Open Space/Recreational Assets	261,279	3,831,087	289,198	1,524,895	286,617	290,916	295,280	299,709	304,205	308,768	313,399
Other Infrastructure	568,436	-	-	-	-	-	-	-	-	-	-
Heritage Collections	-	-	-	-	-	-	-	-	-	-	-
Library Books	66,566	68,165	69,188	40,211	71,301	72,371	73,456	74,558	75,676	76,811	77,964
Other Assets	97,000	340,390	425,740	245,818	213,626	216,830	220,083	223,384	226,735	230,136	233,588
Remediation Assets	-	2,000,000	-	-	-	-	-	-	-	2,500,000	-
Total Capital Expenditure	36,905,192	49,039,886	20,673,974	34,418,409	22,197,259	28,709,321	25,206,321	21,863,321	24,560,321	22,154,321	21,207,320
Total Expenditure	36,905,192	49,039,886	20,673,974	34,418,409	22,197,259	28,709,321	25,206,321	21,863,321	24,560,321	22,154,321	21,207,320

The imbalance between the rates of renewal and asset consumption has developed because renewal has a 'delay function'; most of Council's assets have been built by developers or with the assistance of State and Federal funding over the last 30, 40 or more years. Renewal is lumpy; unlike depreciation, which averages the renewal costs, actual payments for renewal are periodic, and for any given asset group renewal can be far less, or much more, than depreciation.

Only sound long term renewal forecasting will let Council know where it stands in preparing for the renewal challenge. Renewal is not associated with increased funding. Instead, it has to compete with many other demands on Council, and recently these demands – for social and environmental reasons as well as for increased services – have themselves been increasing. Revenue increases have not kept pace with these extra demands; a limited revenue base and community sensitivity to tax (property rates) increases have been the main reasons. Renewal is exacerbated where maintenance is underfunded.

Council's objective over the next 12 to 18 months is to carefully review depreciation methodology and effective lives. This will maintain that the infrastructure backlog figure as reported in special schedule 7 accurately reflects current costs to bring to satisfactory standard and will also necessarily require community engagement in order to determine the meaning of satisfactory.

FIT FOR FUTURE

The NSW Government Fit for the Future reforms aimed to improve the strength and effectiveness of local government in providing services and infrastructure that communities need. In 2015, Mid-Western Regional Council was deemed Not Fit in the initial Independent Pricing and Regulatory Tribunal (IPART) Fit for the Future assessment, on the basis that Council did not satisfy financial criteria set for:

- Sustainability; and
- Infrastructure and Service Management

On receiving these results, Council prepared a renewed Business Improvement Program (BIP) which directly tackles the challenges of sustainability and infrastructure service management, with an aim to become Fit for the Future by 2021. The result of Council's renewed Business Improvement Program, which was reported in Council's 2016-2026 Long Term Financial Plan, was a Fit for the Future proposal that met forecast performance benchmarks. In order to meet these forecast benchmarks, Council is required to complete the following Asset Management improvement strategies:



Strategies	Key Milestones	Target Date	Expected Outcome
Objective 2: Examine Opportunities to Reduce Operating Expense			
a) Review current depreciation methodology and process	i) Refine asset management data and systems	2016/17 2017/18	Reliable asset management data and systems to assist decision making
	ii) Examine alternative depreciation options and what is required to demonstrate preferred option is fair and reasonable	2016/17	Preferred methodology for treatment of depreciation
	iii) Confirm depreciation process and educate staff	2017/18	Consistent treatment of depreciation costs
	iv) Reassess roads Fair Value ahead of 5 year schedule	2017/18	Accurate assessment of depreciation costs
	v) Implement in line with fair value assessment over 5 year period	2021/22	Accurate assessment of depreciation costs



Strategies	Key Milestones	Target Date	Expected Outcome
Objective 3: Improve Asset Management and Service Processed			
a) Review current depreciation methodology and process	i) Refine asset management data and systems	2016/17 2017/18	Reliable asset management data and systems to assist decision making
	ii) Examine alternative depreciation options and what is required to demonstrate preferred option is fair and reasonable	2016/17	Preferred methodology for treatment of depreciation
	iii) Confirm depreciation process and educate staff	2017/18	Consistent treatment of depreciation costs
	iv) Reassess roads Fair Value ahead of 5 year schedule	2017/18	Accurate assessment of depreciation costs
	v) Implement in line with fair value assessment over 5 year period	2021/22	Accurate assessment of depreciation costs
b) Review current asset management methodology and process used to determine asset condition, asset value and asset life	i) Increase confidence levels and reliability of asset management data	2017/18	Accurate asset management data
	ii) Link asset management decisions to community satisfaction levels and expectations	2018/19	Deliver services and infrastructure which meets community expectations



Strategies	Key Milestones	Target Date	Expected Outcome
Objective 4: Ensure Rational Asset Decisions Are Made			
a) Provide reliable asset management data	i) Increase confidence levels and reliability of asset management data	2017/18	Reliable asset management data
	ii) Ensure training is provided to relevant staff	2017/18	Consistent asset management practices
b) Ensure appropriate asset management systems are in place	i) Review current asset management systems and identify areas for improvement	2016/17 ongoing	Effective asset management
	ii) Ensure training is provided to relevant staff	2016/17 ongoing	Consistent asset management practices
c) Conduct annual condition checks on key assets	i) Refine framework for assessing asset conditions, with a focus on making assessments as objective as possible	2016/17	Preferred methodology for conducting annual condition checks
	ii) Ensure training is provided to relevant staff	2016/17 ongoing	Consistent annual condition check practices
	iii) Continue program of annual condition checks	2016/17 ongoing	Accurate asset condition data



Strategies	Key Milestones	Target Date	Expected Outcome
d) Identify obsolete assets and opportunities for asset rationalisation	i) Prepare list of all Council assets that may be considered surplus to requirements, starting with land and buildings	2016/17	Identify future scope to dispose of unused or duplicate land and building assets
	ii) Identify land and buildings which are not used at all and/or have no future use	2016/17	Identify unused assets
	iii) Identify land and buildings which can be rationalised	2016/17	Identify duplicate assets
	iv) Develop a strategy for disposing of assets over a 5 year time period, including community consultation strategy	2017/18	Asset rationalisation strategy
e) Educate community on current service level standards with a focus on the regionalisation of assets rather than duplication of assets around the region	i) Discuss as part of community engagement process for next round of IP&R	2017/18	Provide opportunities for community engagement and feedback
f) Consider the full life cycle costs associated with the investment in new	i) Develop process/guideline for new asset investment	2016/17	Sound business case for investment



Strategies	Key Milestones	Target Date	Expected Outcome
Objective 5: Address Infrastructure Backlog			
a) Review existing infrastructure backlog to fully understand what is required and establish clear parameters for reporting an accurate backlog in the future	i) Align activities to OLG planned changes to Special Schedule 7	2016/17 ongoing	Accurate infrastructure backlog data
b) Develop a program to have the backlog reduced over a defined timeframe	i) Develop strategy to address backlog in next 10 years, prioritising areas to be addressed	2017/18	Strategy to address backlog
c) Increase spend on asset maintenance to close gap between required and actual spending	i) Increase confidence and reliability of data to identify actual and required expenditure	2017/18	Accurate asset maintenance data
	ii) Review general ledger and the capture of asset data to improve identification of operational vs maintenance costs	2017/18	Accurate asset maintenance data
	iii) Improve understanding of remaining useful life of assets and spending required to achieve this life	2017/18	Accurate asset maintenance data
	iv) Identify options for funding to start closing infrastructure gap based on satisfaction levels of community	2017/18	Strategy to close asset maintenance gap
	v) Increased cash funding on asset renewals (from additional revenues, operating expense savings and identified options in point iv)	2019/20	Closure of asset maintenance gap

Asset Management Plans

Asset Management Plans (AMPs) are long-term plans that outline the asset activities for each service. The International Infrastructure Management Manual (IIMM) defines an Asset Management Plan as “... a written representation of the intended asset management programs for one or more infrastructure networks based on the controlling organisation’s understanding of customer requirements, existing and projected networks, and asset conditions and performance.”

An AMP have been developed for each major asset group. AMPs incorporate, as a minimum, the following factors:

- Council will establish and monitor prescribed levels of service for each asset related service. The levels of service will be determined by Council in accordance with the Community Plan and corresponding Delivery Plan and Operating Plan.
- Existing levels of service and associated cash flow projections for maintenance, renewal and upgrade will be documented.
- The asset management plan will include the service provider, service levels, performance targets, asset custodian, life cycle cash flows and risk profiles for each service.
- The capital works program will be developed from each asset management plan and will identify all works needed to achieve target service levels.
- Council will have a funding model for all asset related services extending out at least 10 years into the future and a matching Funding Strategy which addresses the need for funds the peaks and troughs in this need and how the funds will be sourced.

Asset Management Plans currently in place or programmed for development are:

- Roads Asset Management Plan, incorporating associated infrastructure such as bridges and footpaths
- Water Supply Network Asset Management Plan
- Sewerage Network Asset Management Plan
- Buildings Asset Management Plan, incorporating Other Structures
- Stormwater Drainage Asset Management Plan
- Waste Asset Management Plan.
- Open Spaces Asset Management Plan

Water Supply, Waste Water Supply and Waste AMPs

There are specific asset management planning requirements for water supply, sewerage and waste management. They require compliance with the *Best-Practice Management of Water Supply and Sewerage Guidelines 2007* and the *NSW Reference Rates Manual for Valuation of Water Supply, Sewerage and Stormwater Assets*. These requirements include the need to prepare an Asset Register, a 20 to 30-year Operation Plan, Maintenance Plan and a Capital Works Plan which identifies the required renewals, works for improved levels of service and works for serving new growth. Councils must continue to meet these asset management planning requirements for their water supply and sewerage infrastructure. Waste assets also meet this 30 year requirement.

Our Asset Management System

In order to capture the necessary data to create accurate and meaningful Asset Management Plans, Council requires an up to date asset management system which collects the following information:

- Asset registers;
- Asset ownership/custodianship;
- Asset condition assessments;
- Asset attributes (physical and lifecycle);
- Asset maintenance and management systems;
- Strategic planning capabilities;
- Predictive modelling;
- Deterioration modelling; and
- Lifecycle costing.

Council currently uses an integrated asset management system that captures and provides the above data in order to complete fair value financial modelling as required on a 5-year cyclical rotation for each major asset category.

This asset management system captures actual data for capital works which is then used to model Asset Management Plans and long term financial asset planning. The ability to capture operating costs against each asset will be developed over the next two years.

Measuring Asset Expenditure

An understanding of expenditure trends is fundamental to managing assets. Assets that are allowed to deteriorate beyond their optimum renewal period will start requiring high levels of reactive maintenance in order to control risk and correctly separate recurrent or reactive maintenance costs from asset renewals enables better asset planning and the reduction of lifecycle costs.

It is also important to differentiate between capital expenditure on the existing asset stock and capital expenditure on expanding the asset stock.

Expenditure on public works assets may be split into four categories, maintenance, capital renewal, capital upgrade and capital expansion.

- Maintenance - expenditure on an asset, which maintains the asset in use but does not increase its service potential or life
- Capital Renewal - expenditure on renewing an existing asset or a portion of an infrastructure network, which increases the service potential or extends the life
- Capital Upgrade - expenditure on upgrading the standard of an existing asset or infrastructure network to provide a higher level of service to users, e.g. widening the pavement and sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, building a grandstand at a sporting facility, replacing an existing bridge with one having a greater carrying capacity, replacing a chain link fence with a wrought iron fence.
- Capital Expansion - expenditure on extending an infrastructure network, at the same standard currently enjoyed by existing residents, to a new group of users, e.g. extending a drainage or road network, the provision of an oval or park in a new suburb.

Risk Management

Management of risk and liability through a risk assessment process is fundamental in assisting Council to allocate resources and meet community expectancies. The following asset categories have been identified as critical to this process, and although further and continuous work in this area is required, Council is committed to reducing risk in Council assets as demonstrated in the table below.



Identifying Risk

Asset Class	Risk Identified	Possible Causes	Risk Matrix Rating	Risk Treatment
Roads	Motor vehicle accidents causing injury/fatality/damage to property	Road deterioration, design flaws, missing safety signage, vandalism of safety signage	High	Australian Standards, RTA regulations, asset condition testing, public liability insurance
	Increased infrastructure deterioration	Design flaws, reduced material quality, reduced work quality, heavy vehicle movements, excessive weather events, poor maintenance	High	Annual maintenance program, reactive maintenance, public liability insurance
Playgrounds/ Sportsgrounds	Damage to assets (outside of normal effective life)	Natural disasters, vandalism, accidental damage	High	Identify high risk areas and use proactive means eg levee banks, security cameras, education programs
	Damage to sportsgrounds	Overuse	High	Management of use of grounds and parks
	Inadequate amenities	Underestimated use or capacity	Med	Review and upgrade where required
	Injury/fatality to users	Unmaintained infrastructure, mis-use of assets, component failures, poor design, inadequate safety signage	High	Maintenance programs and AMP's, public liability insurance, safety signage



Asset Class	Risk Identified	Possible Causes	Risk Matrix Rating	Risk Treatment
Stormwater Drainage	Reticulation Risk	Flood events or continued heavy rainfall	High	Regular asset condition monitoring, Hazard reporting, education programs
	Structural failure	Poor design or quality of materials used	High	Regular asset condition monitoring, Australian standards, Hazard reporting
	Blockages	Environmental conditions, roots leaves	High	Regular asset condition monitoring, Hazard reporting, maintenance programs
	Injury/fatality from inadequate infrastructure	Blocked access escape paths during natural disaster event, drowning, health, odours, mosquitoes	High	Public liability insurance, Australian standards, Legislation compliance eg WHS Acts, Hazard reporting, education programs
	Damage to property	Attempted vehicle access through flooded assets, inadequate reticulation causing flooding on private property	High	Regular asset condition monitoring, public liability insurance, Australian standards, Hazard reporting, education programs
Buildings	Injury/fatality to users	Unmaintained infrastructure, mis-use of assets, component failures, poor design, inadequate safety signage	High	Maintenance programs and AMP's, public liability insurance, safety signage, adequate emergency access
	Damage to property	Natural disasters, vandalism, accidental damage	High	Identify high risk areas and use proactive means eg security cameras, education programs, planning & development legislation



Asset Class	Risk Identified	Possible Causes	Risk Matrix Rating	Risk Treatment
Water Supply/ Sewerage	Reticulation Risk	Poor design or quality of materials used, aged infrastructure	High	Australian standards, asset condition testing, maintenance programs, AMPs
	Blockages	Environmental conditions, roots leaves	High	Regular asset condition monitoring, Hazard reporting, maintenance programs
	Health of community	Insufficient or inadequate infrastructure, non-functioning infrastructure, leakage	High	Regular asset condition monitoring, Hazard reporting, maintenance programs, EPA legislation, public liability insurance
Solid Waste Management	Health of community, injury/fatality	Sharps or incorrectly dumped waste treatment eg illegal asbestos dumping	High	Public liability insurance, Legislation compliance eg WHS Acts, Hazard reporting, education programs, EPA Legislation

Risk Management Strategies

Council aims to improve its risk management processes in regard to Asset Management and will incorporate information from the Asset Management System with the following risk management strategies to develop an ongoing risk management plan within the next 24 months.

The main elements of risk management as defined in AS/NZS 4360 are:

- Establish Risk Management Context,
- Determine Risk Evaluation Criteria,
- Identify Risks,
- Analyse Risks
- Evaluate Risks,
- Treat Risks (or Manage Risks),
- Monitor and Review



Establish the Context

The risk management context is established in three areas, strategic, organisational and risk management. The Strategic Context involves identifying:

- the relationships between the council and the environment;
- strengths, weaknesses, opportunities and threats (SWOTs), including the financial, operational, competitive, political (public perception/image) social and legal aspects of the council's functions; and
- the stakeholders.

The purpose of the strategic context is to identify and determine the crucial elements that might support or impair the council's ability to manage the risks associated with its operation.

Organisational Context

The purpose of this stage is to develop an understanding of the council and its capabilities, as well as its goals and objectives and the strategies that are in place to achieve them.

Risk Management Context

The purpose of this stage is to develop the criteria against which risk is to be assessed. This may depend on operational, technical, financial, legal, social, humanitarian, or other criteria.

Risk evaluation criteria can include

- financial loss of up to a certain amount,
- injury to a person requiring hospitalisation,
- number of incidents not to exceed a certain amount.

Risk Identification

Risk identification seeks to identify the risks and elements at risk that may need to be managed. A well structured systematic process is crucial, because a potential risk not identified at this stage is excluded from further analysis. All risks should be identified, whether or not they are under the control of the council.

The risks are identified in three stages:

- What can happen. The aim is to generate a comprehensive list of events which might affect each element of the council's service delivery.
- How and why it can happen. It is necessary to consider possible causes and scenarios. There are many ways and event can be initiated. It is important that no significant causes are omitted.
- Are risks credible? An assessment of credibility of all risk is undertaken to ensure that credible risks receive proper and due consideration.

Risks should be defined as a statement of risk. For example: There is a risk of injury to people from tripping on a paved footpath.

Risk Analysis

Risk is analysed by combining estimates of likelihood and consequences in the context of existing control measures. The objective of a risk analysis is to separate the minor acceptable risks from the major risks and to provide data to assist in assessment and treatment of risk.

The level of risk is determined by considering two aspects against existing controls:

- how likely it is that things may happen (likelihood, frequency of probability), and
- the possible consequences (impact or magnitude of the effect) if they do occur.



The risk analysis process is to:

- identify the existing management controls, technical systems and procedures to control risk,
- evaluate the likelihood of events occurring and their consequences in the context of these existing controls,
- combine the evaluation of likelihood and consequences to produce a level of risk.

Risk Evaluation

Risk evaluation involves comparing the level of risk found during the analysis process with previously established risk criteria and deciding whether the risks can be accepted.

Options should be evaluated on the basis of the extent of risk reduction and the extent of benefits or opportunities created, taking into account the criteria developed in Risk Context. In general, the adverse impact of risks should be made as low as reasonably practicable irrespective of any absolute criteria. A combination of options may give the optimum risk reduction outcome. If the risks fall into the acceptable or low categories, they may be accepted with minimal further treatment. Acceptable or low risks should be monitored and periodically reviewed to ensure they remain acceptable. If the risks do not fall into the acceptable or low category, they should be managed using one of the options below.

The output of risk evaluation is a prioritised list of risks for further action.



Risk Matrix

POTENTIAL CONSEQUENCE						LIKELIHOOD				
						A	B	C	D	E
No.	Key Word	Health & Safety	Environmental	Financial	Public Image	Rare	Unlikely	Possible	Likely	Almost Certain
						<i>Requires unusual chain of events</i>	<i>Not expected to occur</i>	<i>May Occur</i>	<i>Will occur occasionally</i>	<i>Expected to occur</i>
5	Catastrophic	<i>Fatality or work related fatal disease</i>	<i>Detrimental impact to environment or community. High level prosecution.</i>	<i>Greater than \$500,000</i>	<i>International media coverage</i>	Moderate 13	High 19	Critical 22	Critical 24	Critical 25
4	Severe	<i>Serious Permanent injury or illness</i>	<i>Long term negative impact. Low level prosecution.</i>	<i>No more than \$500,000</i>	<i>National media coverage</i>	Moderate	Moderate 12	High 18	Critical 21	Critical 23
3	Serious	<i>Lost time injury or illness</i>	<i>Serious but reversible impact Media enquiry.</i>	<i>No more than \$100,000</i>	<i>State media coverage</i>	Low	Moderate 9	Moderate 11	High 17	Critical 20
2	Significant	<i>Medically treated injury or illness</i>	<i>On-site incident promptly contained requiring external clean up aid.</i>	<i>No more than \$25,000</i>	<i>Local media coverage.</i>	Low	Low 5	Moderate 8	High 15	High 16
1	Minor	<i>First Aid treated injury or illness</i>	<i>On-site incident immediately contained & cleaned up.</i>	<i>No more than \$5,000</i>	<i>Public complaint.</i>	Low	Low 2	Low 3	Moderate 7	High 14



STATUS	ACTION REQUIRED	NOTIFY	MONITOR
Critical	Do not commence activity. Immediate senior management action required.	General Manager (Notified by Group Mgr)	N.A.
High	Immediate action required to reduce risk. Authorisation required before commencing activity.	Group Manager (Notified by Operational Mgr)	Weekly
Moderate	Risk reduction required to as low as reasonable practicable before commencing task	Operational Manager	Monthly
Low	Follow routine procedures and monitor risk.	Team Leader	Annually

Manage the Risks

Risks need to be managed appropriately to the significance of the risk and importance of the affected item/asset to the region As a general guide:

- low levels of risk can be accepted and additional action may not be needed; these risks should be monitored,
- major or significant levels of risk should be managed with actions to reduce or eliminate the risk,
- high levels of risk require close management and the preparation of a formal plan to manage the risks.

Options for managing risk are shown below. The optimum solution may involve a combination of options.

- Avoid the risk by deciding not to proceed with the activity that would incur the risk, or choose an alternative course of action that achieves the same outcome,
- Reduce the level of risk by reducing the likelihood of occurrence or the consequences, or both;
 - the likelihood may be reduced through management controls, organisational or other arrangements which reduce the frequency of, or opportunity for errors, such as alternative procedures, quality assurance, testing, training, supervision, review, documented policy and procedures, research and development.
 - the consequences may be reduced by ensuring that management or other controls, or physical barriers, are in place to minimise any adverse consequences, such as contingency planning, contract conditions or other arrangements.



- Transfer the risk by shifting the responsibility to another party (such as an insurer), who ultimately bears the consequences if the event occurs. Risks should be allocated to the party, which can exercise the most effective control over those risks.
- Accept and retain the risks within the organisation where they cannot be avoided, reduced or reduced or transferred, or where the cost to avoid or transfer the risk is not justified, usually because the risk is acceptable or low. Risks can be retained by default, i.e. Where there is a failure to identify and/or appropriately transfer or otherwise manage risks.
- The cost of managing risks needs to be commensurate with the benefits obtained, the significance of the event and the risks involved.

Risk Management Plans

Plans should document how the chosen options are to be implemented. The plan should identify responsibilities, schedules, the expected outcomes of treatment, budgeting, performance measures and the review process to be set in place.

The successful implementation of the risk management plan requires an effective management system which specifies the methods chosen, assigns responsibilities and individual accountabilities for actions and monitors them against specified criteria.

Monitoring and Review

Monitoring and review is an essential and integral step in the process of managing risk. It is necessary to monitor risks, the effectiveness of any plans, strategies and management systems that have been established to control implementation of risk management actions. Risks need to be monitored periodically to ensure changing circumstances do not alter the risk priorities.

Risk Management Process Improvement

The process improvement covers 3 steps and identifies further issues to be addressed.

- Improve risk management process and link to assets,
- Link work history for scheduled and reactive work to assets,
- Monitor costs on important scheduled and reactive jobs.

Definitions

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

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

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

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

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

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

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

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



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

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

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

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

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

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



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Appendix 1 - Asset Management Policy



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