CORP 3

Policy 42 COUNCIL ASSET MANAGEMENT POLICY

POLICY NUMBER	42
OBJECTIVES	To provide the highest level of service for current and future generations which is a balance between responsible management of assets, meeting the community's expectations and affordability. To achieve this Assets must be planned, delivered, maintained and refurbished so that they continue to meet this Vision.
STATUTORY AUTHORITY	
POLICY	Adopted on 17 July 2006 – Min Ref: 264/06 Amended 17 September 2012 – Min Ref: 243/12 Amended 18 April 2016 – Min Ref. 112/16

POLICY

1. PURPOSE

To set guidelines for implementing consistent asset management processes for Northern Midlands Council.

This policy only considers physical or infrastructure assets. In accordance with the 'International Infrastructure Asset Manual' an infrastructure asset is 'a physical component of a facility which has value, enables services to be provided and has an economic life of greater than 12 months'.

The infrastructure assets to be considered include such assets as Roads, Footpaths, Kerb and Channel, Bridges, Buildings, Stormwater, Plant and Equipment.

2. OBJECTIVE

To ensure adequate provision is made for the long-term replacement of major assets by:

- Ensuring that Council's services and infrastructure are provided in a sustainable manner, with the appropriate levels of service to residents, visitors and the environment.
- Safeguarding Council assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets.
- Creating an environment where all Council employees take an integral part in overall management of Council assets by creating and sustaining an asset management awareness throughout the organisation by training and development.
- Meeting legislative requirements for asset management.

- Ensuring resources and operational capabilities are identified and responsibility for asset management is allocated.
- Demonstrating transparent and responsible asset management processes that align with demonstrated best practice.

3. SCOPE

This policy applies to all Council activities.

4. POLICY

4.1 Background

4.1.1 Council is committed to implementing a systematic asset management methodology in order to apply appropriate asset management best practices across all areas of Council. This includes ensuring that assets are planned, created, operated, maintained, renewed and disposed of in accordance with Council's priorities for service delivery.

4.1.2 Council owns and uses approximately $330m of non-current assets to support its core business of delivery of service to the community. As a result of its long history and continued growth, these assets vary in age and include heritage registered facilities.

4.1.3 Asset management practices impact directly on the core business of Council and appropriate asset management is required to achieve our strategic service delivery objectives.

4.1.4 Adopting asset management principles will assist Council in achieving its Strategic Plan and Long Term Financial Plan objectives.

- Asset management

  Vision:

  To provide the highest level of service for current and future generations which is a balance between responsible management of assets, meeting the community's expectations and affordability. To achieve these assets must be planned, delivered, maintained and refurbished so that they continue to meet this vision.

  Goal:

  To provide the highest level of infrastructure to meet the service delivery requirements of the Northern Midlands community, and its many visitors, now and for future generations.

4.1.5 A strategic approach to asset management will ensure that the Council delivers the highest appropriate level of service through its assets. This will provide positive impact on;

- Members of the public and staff;
- Council's financial position;
- The ability of Council to deliver the expected level of service and infrastructure;

- The political environment in which Council operates; and
- The legal liabilities of Council.

4.2 Principles

4.2.1 A consistent Asset Management Strategy must exist for implementing systematic asset management and appropriate asset management best-practice throughout all areas of Council.

4.2.2 All relevant legislative requirements together with political, social and economic environments are to be taken into account in asset management.

4.2.3 Asset management principles will be integrated within existing planning and operational processes.

4.2.4 Asset Management Plans will be developed for major service/asset categories. The plans will be informed by community consultation and financial planning and reporting.

4.2.5 An inspection regime will be used as part of asset management to ensure agreed service levels are maintained and to identify asset renewal priorities.

4.2.6 Asset renewals required to meet agreed service levels and identified in adopted asset management plans and long term financial plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined asset renewals and budget resources documented in budget documentation.

4.2.7 Service levels defined in adopted asset management plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined services levels and budget resources documented in budget documentation.

4.2.8 Asset renewal plans will be prioritised and implemented progressively based on agreed service levels and the effectiveness of the current assets to provide that level of service.

4.2.9 Systematic and cyclic reviews will be applied to all asset classes and are to ensure that the assets are managed, valued and depreciated in accordance with appropriate best practice and applicable Australian Standards.

4.2.10 Future life cycle costs will be reported and considered in all decisions relating to new services and assets and upgrading of existing services and assets.

4.2.11 Future service levels will be determined in consultation with the community.

4.2.12 Training in asset and financial management will be provided for councillors and relevant staff.

5. LEGISLATION

Local Government Act 1993 & Regulations under the Act.

6. RELATED DOCUMENTS

Asset Management Strategy and associated Infrastructure and Asset Management Plans.

7. RESPONSIBILITY

Councillors are responsible for adopting the policy, allocation of resources, providing high level oversight of the delivery of the organisation's asset management strategy and plan and maintaining accountability mechanisms to ensure that organisational resources are appropriately utilized to address the organisation's strategic plans and priorities.

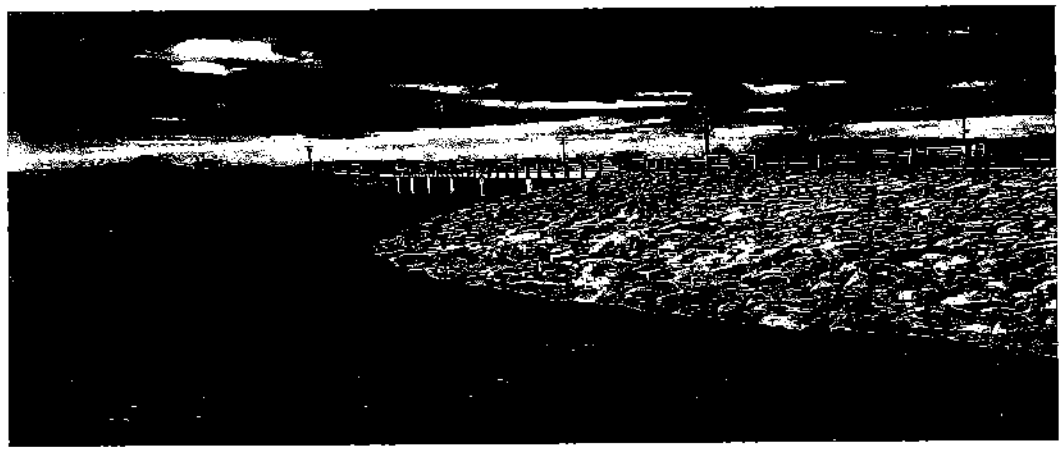
The General Manager has overall responsibility for developing an asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within Council.

8. REVIEW DATE

This policy has a life of 4 years. It will be reviewed in September 2020.

NORTHERN
MIDLANDS
COUNCIL

ASSET MANAGEMENT STRATEGY



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Rev No	Date	Revision Details	Author	Reviewer	Approver
1	17th September 2012		MB		
2	Feb 2016		MB		
3	March 2017	Improvement Plan only	MB		

Table of Contents

Tables

Figures

Executive Summary

This asset management strategy is prepared to assist council in improving the way it delivers services from infrastructure including roads, bridges, footpaths, stormwater drainage, buildings and plant and equipment and any other classes of assets. These infrastructure assets have a replacement value of $330 million.

The asset management strategy is to enable Council to show:

- how its asset portfolio will meet the service delivery needs of its community into the future,
- enable Council's asset management policies to be achieved, and
- ensure the integration of Council's asset management with its long term strategic plan.[1]

Adopting this asset management strategy will assist council in meeting the requirements of national sustainability frameworks, likely State legislation and regulations and providing services needed by the community in a financially sustainable manner.

The asset management strategy is prepared following a review of the council's service delivery practices, financial sustainability indicators, asset management maturity and fit with council's vision for the future outlined in the Strategic Plan 2017-2027. The strategy outlines an asset management improvement plan detailing a program of tasks to be completed and resources required to bring council to a minimum 'core' level of asset maturity and competence.

Strategy outlook

1. Council's long term financial plan provides that Council will have the ability to maintain current service levels for the next 10 years.
2. Council is just able to fund current infrastructure life cycle cost at current levels of service and available revenue.
3. Council's current asset management maturity is slightly below 'core' level, and investment is needed to continue to improve information management, lifecycle management, service management and accountability and direction.

Asset management strategies

No	Strategy	Desired Outcome
1	Review Annual Budgeting to incorporate Long Term Financial Planning	The long term implications of Council services are considered in annual budget deliberations.
2	Review Asset Management Plans covering at least 10 years for all major asset classes (80% of asset value).	Identification of services needed by the community and required funding to optimise 'whole of life'

[1] LGPMC, 2009, Framework 2 *Asset Planning and Management*, p 4.

		costs.
3	Develop Long Term Financial Plan covering 10 years incorporating asset management plan expenditure projections with a sustainable funding position outcome.	Sustainable funding model to provide Council services.
4	Incorporate Year 1 of Long Term Financial Plan revenue and expenditure projections into annual budgets.	Long term financial planning drives budget deliberations.
5	Review and update asset management plans and long term financial plans after adoption of annual budgets. Communicate any consequence of funding decisions on service levels and service risks.	Council and the community are aware of changes to service levels and costs arising from budget decisions.
6	Report Council's financial position at Fair Value in accordance with Australian Accounting Standards, financial sustainability and performance against strategic objectives in Annual Reports.	Financial sustainability information is available for Council and the community.
7	Ensure Council's decisions are made from accurate and current information in asset registers, on service level performance and costs and 'whole of life' costs.	Improved decision making and greater value for money.
8	Report on Council's resources and operational capability to deliver the services needed by the community in the Annual Report.	Services delivery is matched to available resources and operational capabilities.
9	Ensure responsibilities for asset management are identified and incorporated into staff position descriptions.	Responsibility for asset management is defined.
10	Implement an Improvement Plan to realise 'core' maturity for the financial and asset management competencies within 2 years.	Improved financial and asset management capacity within Council.
11	Report annually to Council on development and implementation of Asset Management Strategy, AM Plans and Long Term Financial Plans.	Oversight of resource allocation and performance.

Asset Management Improvement Pan

The program of tasks and resources required to achieve a minimum 'core' asset management maturity was developed in the asset management strategy. The tasks and program are shown below.

Ref	Task	Responsibility	Target Date	Budget
2	Fleet Asset Management Plan	JG	30/9/2017	In-house
3	Review LTFP	MM	30/6/2017	In-house
4	Review requirements for Parks & Reserves	MB/JG	31/12/2017	In-house
5	Overall Asset Management Plan	MB/JG	31/12/2017	In-house

1. Introduction

Assets deliver important services to communities. A key issue facing local governments throughout Australia is the management of ageing assets in need of renewal and replacement.

Infrastructure assets such as roads, drains, bridges, and public buildings present particular challenges. Their condition and longevity can be difficult to determine. Financing needs can be large, requiring planning for large peaks and troughs in expenditure for renewing and replacing such assets. The demand for new and improved services adds to the planning and financing complexity.[2]

The creation of new assets also presents challenges in funding the ongoing operating and replacement costs necessary to provide the needed service over the assets' full life cycle.[3]

The national frameworks on asset planning and management and financial planning and reporting endorsed by the Local Government and Planning Ministers' Council (LGPMC) require councils to adopt a longer-term approach to service delivery and funding comprising:

- A strategic longer-term plan covering, as a minimum, the term of office of the councillors and:
    - bringing together asset management and long term financial plans,
    - demonstrating how council intends to resource the plan, and
    - consulting with communities on the plan
- Annual budget showing the connection to the strategic objectives, and
- Annual report with:
    - explanation to the community on variations between the budget and actual results,
    - any impact of such variances on the strategic longer-term plan,
    - report of operations with review on the performance of the council against strategic objectives.[4]

Framework 2 Asset Planning and Management has seven elements to assist in highlighting key management issues, promote prudent, transparent and accountable management of local government assets and introduce a strategic approach to meet current and emerging challenges.

- Asset management policy,
- Strategy and planning,
    - asset management strategy,
    - asset management plan,
- Governance and management arrangements,
- Defining levels of service,
- Data and systems,
- Skills and processes, and
- Evaluation.[5]

[2] LGPMC, 2009, Framework 2 Asset Planning and Management, p 2.

[3] LGPMC, 2009, Framework 3 Financial Planning and Reporting, pp 2-3.

[4] LGPMC, 2009, Framework 3 Financial Planning and Reporting, pp 4-5.

The asset management strategy is to enable Council to show:

- how its asset portfolio will meet the service delivery needs of its community into the future,
- to enable Council's asset management policies to be achieved, and
- to ensure the integration of Council's asset management with its long term strategic plan.[6]

The goal of asset management is to ensure that services are provided:

- in the most cost effective manner,
- through the creation, acquisition, maintenance, operation, rehabilitation and disposal of assets,
- for present and future consumers.

The objective of the Asset Management Strategy is to establish a framework to guide the planning, construction, maintenance and operation of the infrastructure essential for council to provide services to the community.

1.1 Legislative reform

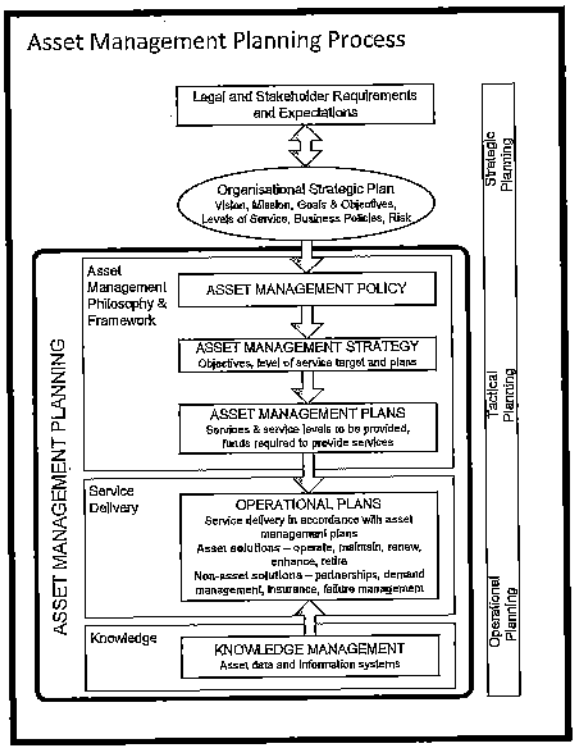
There is statutory requirement for long term asset and financial planning for local government in Tasmania.

[5] LGPMC, 2009, Framework 2 *Asset Planning and Management*, p 4.
[6] LGPMC, 2009, Framework 2 *Asset Planning and Management*, p 4.

1.2 Asset Management Planning Process

Asset management planning is a comprehensive process to ensure that assets are managed and maintained in a way that enables affordable services from infrastructure to be provided in an economically optimal way. In turn, affordable service levels can only be determined by assessing Council's financially sustainability under scenarios with different proposed service levels.

Asset management planning commences with defining stakeholder and legal requirements and needs, incorporating these needs into the organisation's strategic plan, developing an asset management policy, strategy, asset management plan and operational plans, linked to a long-term financial plan with a funding plan.[7]



2. What Assets do we have?

Council uses infrastructure assets to provide services to the community. The range of infrastructure assets and the services provided from the assets is shown in Table 1.

Table 1: Assets used for providing Services

Asset Class	Description	Services Provided
Transport	Road related assets within the road reserve, road formation, road pavement and seal, kerb and channel, footpaths, carparks, bridges, and some street furniture	Manage, maintain, renew and improve road assets to ensure a specified level of service delivery over their entire life.
Stormwater	Stormwater assets relate to the urban drainage system and associated pits and valves	Manage, maintain, renew and improve stormwater assets to ensure a specified level of service over their entire life to the community
Buildings	Building assets relate to buildings and heritage structures owned or controlled by	Manage, maintain, renew and improve building assets to ensure a

[7] IPWEA, 2009, AIFMG, Quick Guide, Sec 4, p 5.

	Council	specified level of service over their entire life to the community
Plant & Equipment	Relate to fleet, and major plant and equipment used by Council to provide services to the community	Maintain assets to ensure a specified level of service over their entire life to the community

3. Council's Assets and their management?

3.1 State of the Assets

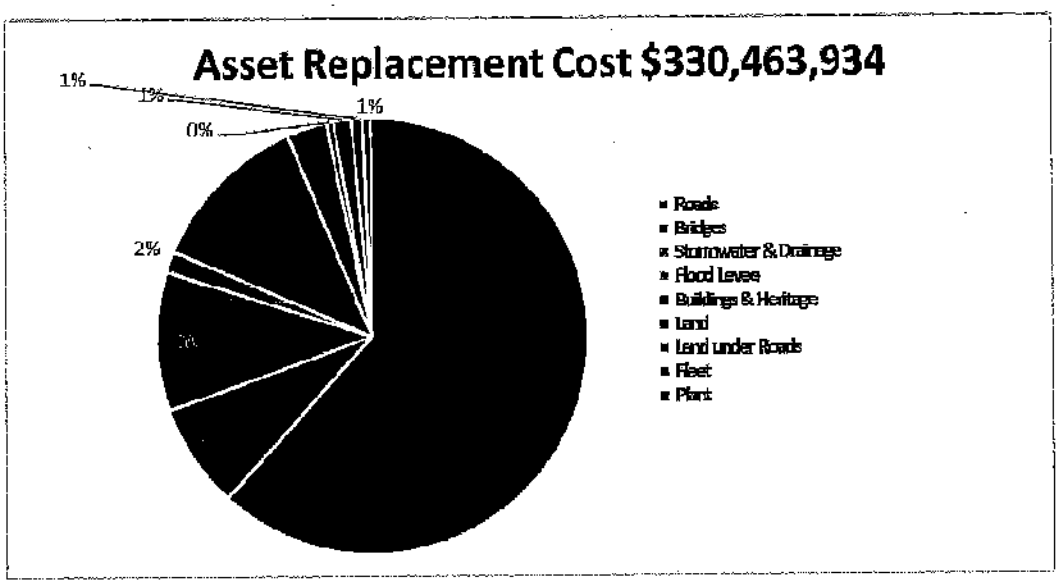
The financial status of Council's assets is shown in Table 2.

Table 2: Financial Status of the Assets

Asset Class	Replacement Cost ($000)	Residual Value ($000)	Accumulated Depreciation	Depreciated Replacement Cost ($000)	Depreciation Expense ($000)
Roads	204,273,284		67,141,263	137,132,021	3,269,953
Bridges	25,623,263		7,767,269	17,855,994	381,622
Stormwater	34,045,073		8,451,865	25,593,208	403,693
Flood Levee	5,205,942		134,442	5,071,500	18,882
Buildings & Heritage	40,246,067		13,838,996	26,407,071	394,836
Land	10,020,340			10,020,340	
Land under Roads	1,772,111			1,772,111	
Fleet	4,419,073		2,125,637	2,293,436	372,720
Plant & Equipment	2,753,645		1,832,404	921,241	165,451
Furniture & Fittings & Computers	2,105,136		1,531,809	573,327	105,017
Total	**330,463,934**		**102,823,685**	**227,640,249**	**5,112,174**

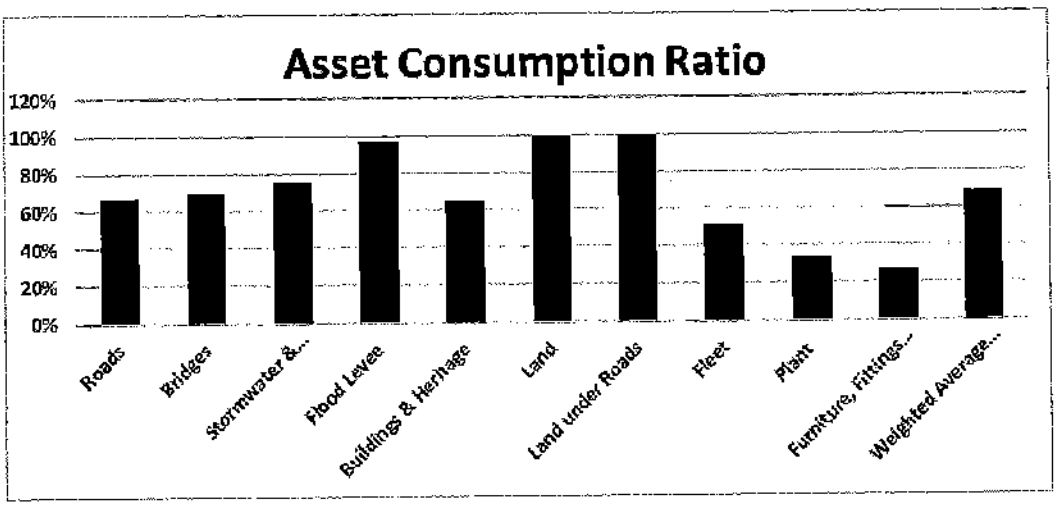
Figure 1 shows the replacement values of Council's assets.

Figure 1: Asset Replacement Cost



The asset consumption ratios of Council's assets (average proportion of 'as new' condition left in assets) are shown in Figure 2.

Figure 2: Asset Consumption Ratio

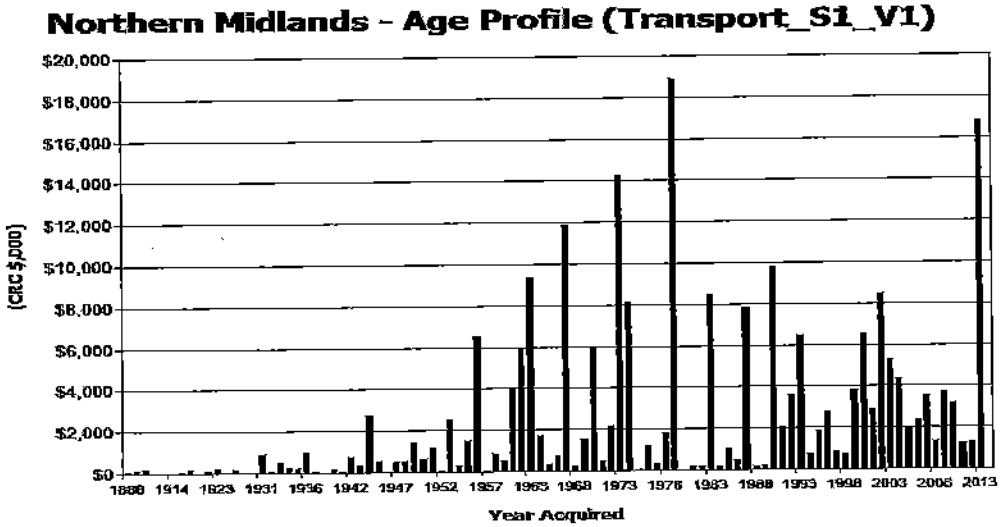


Council asset consumption ratio is on average 69 percent used, with major asset classes all around this level with only minor asset classes substantially below this percentage.

The condition of Council's transport assets is shown in Figure 3.

Asset Condition Profile graph for all assets will be inserted when Asset Management Plans are completed for all asset classes.

Figure 3: Asset Condition Profile



3.2 Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include operating and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management strategy is shown in Table 3.

Table 3: Life Cycle Cost for Council Services

Service	Previous Year Expenditure		Previous Year Depreciation Exp	Life Cycle Cost ($/yr)
	Operations	Maintenance		
Transport assets	Included with Maintenance	1,976,091	3,791,645	5,767,736
Stormwater	6,458	79,402	403,693	489,553
Buildings	Included with Maintenance	673,105	394,836	1,067,941
Plant & Equipment	Included with Maintenance	565,130	392,896	958,026
Other				
TOTAL		$3,293,728	$4,983,070	$8,283,256

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes operating, maintenance and capital renewal expenditure in the previous year or preferably averaged over the past 3 years. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure averaged over the last 2 years is shown in Table 4.

Table 4: Life Cycle Expenditure for Council Services

Service	Previous Year Expenditure		Cap Renewal Exp ($/yr)	Life Cycle Exp ($/yr)
	Operations	Maintenance		
Transport assets	Included with Maintenance	1,976,091	4,060,403	6,036,494
Stormwater	6,458	79,402	25,894	111,754
Buildings	Included with Maintenance	673,105	416,682	1,089,787
Plant & Equipment	Included with Maintenance	565,130	559,214	1,124,344
Other				
All Services		$3,293,728	$5,062,193	$8,362,379

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term, if the life cycle expenditure is less than the life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing service to their communities in a financially sustainable manner. This is the purpose of the AM Plans and long term financial plan.

A shortfall between life cycle cost and life cycle expenditure gives an indication of the life cycle gap to be addressed in the asset management and long term financial plan.

The life cycle gap and life cycle indicator for services covered by this asset management strategy is summarised in Table 5.

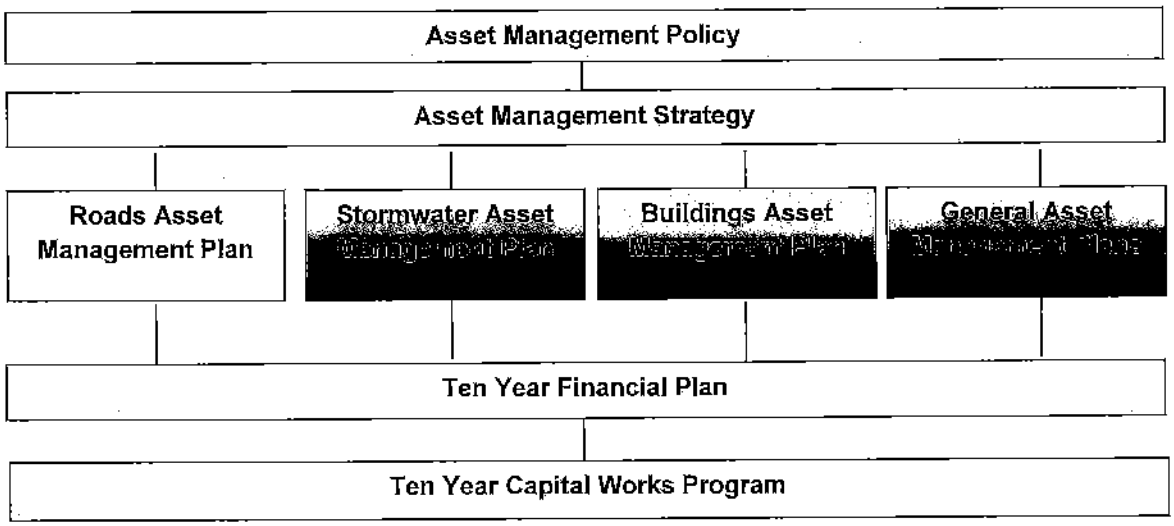
Table 5: Life Cycle Indicators

Service	Life Cycle Cost ($/yr)	Life Cycle Expenditure ($/yr)	Life Cycle Gap * ($/yr)	Life Cycle Indicator
Transport assets	5,767,736	6,036,494	-268,758	105%
Stormwater	489,553	111,754	(377,799)	23%
Buildings	1,067,941	1,089,787	-21,846	102%
Plant & Equipment	958,026	1,124,344	-166,318	117%
Other				
All Services	$8,283,256	$8,362,379	$79,123	101%

Note: * A life cycle gap is reported as a negative value.

Northern Midlands Council currently meets its life cycle cost, however asset management plans are not complete for buildings, plant & equipment, and other small asset classes. Life cycle cost compared to average forecasted expenditure over the next 10 year period included in the Long Term Financial Plan shows a sustainability indicator of 100% compared to the current indicator shown above of 101%.

3.3 Asset Management Structure



3.4 Corporate Asset Management Team

A 'whole of organisation' approach to asset management can be developed with a corporate asset management team. The benefits of a corporate asset management team include:

- demonstrate corporate support for sustainable asset management,
- encourage corporate buy-in and responsibility,
- coordinate strategic planning, information technology and asset management activities,
- promote uniform asset management practices across the organisation,
- information sharing across IT hardware and software,
- pooling of corporate expertise
- championing of asset management process,
- wider accountability for achieving and reviewing sustainable asset management practices.

The role of the asset management team will evolve as the organisation maturity increases over several phases.

Phase 1

- strategy development and implementation of asset management improvement program,

Phase 2

- asset management plan development and implementation,
- reviews of data accuracy, levels of service and systems plan development,

Phase 3

- asset management plan operation
- evaluation and monitoring of asset management plan outputs
- ongoing asset management plans review and continuous improvement.

The current position on Council's asset management team is developing the asset management plans, implement a long term financial plan for review over the next 12 months.

3.5 Financial & Asset Management Core Competencies

The National Frameworks on Asset Planning and Management and Financial Planning and Reporting define 10 elements. 11 core competencies have been developed from these elements[8] to assess 'core' competency under the National Frameworks. The core competencies are:

Financial Planning and Reporting

- Strategic Long Term Plan
- Annual Budget
- Annual Report

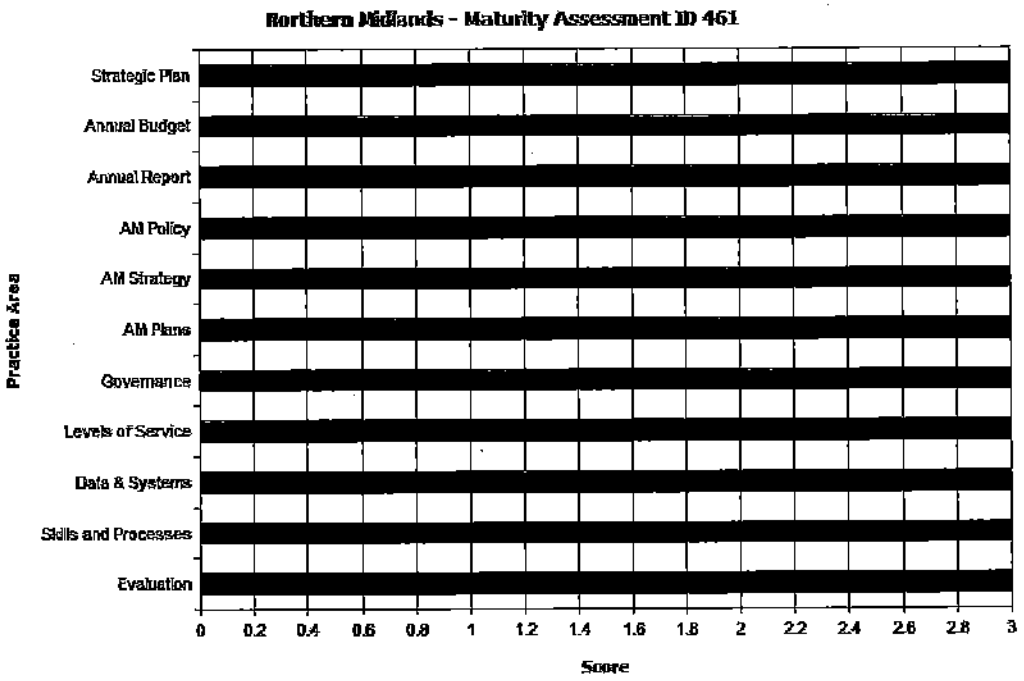
Asset Planning and Management

- Asset Management Policy
- Asset Management Strategy
- Asset Management Plans
- Governance & Management
- Levels of Service
- Data & Systems
- Skills & processes
- Evaluation

[8] Asset Planning and Management Element 2 *Asset Management Strategy and Plans* divided into Asset Management Strategy and Asset Management Plans competencies.

Council's maturity assessment for the core competencies is detailed in Appendix A and summarised in Figure 4. The current maturity level is shown by the blue bars. The maturity gap to be overcome for Council to achieve a core financial and asset management competency is shown by the red bars.

Figure 4: Core Asset Management Maturity



3.6 Strategy Outlook

1. Council's long term financial plan provides that Council will have the ability to maintain current service levels for the next 10 years.

2. Council is just able to fund current infrastructure life cycle cost at current levels of service and available revenue.

3. Council's current asset management maturity is slightly below 'core' level, and investment is needed to continue to improve information management, lifecycle management, service management and accountability and direction.

4. Where do we want to be?

4.1 Council's Vision, Mission, Goals and Objectives

Council has adopted a Vision for the future in the Council Strategic Plan.

Northern Midlands communities will be vibrant, sustainable and resilient, promoting their diversity and conserving the heritage values of our towns.

Our competitive strengths will attract more people to the municipality, increase employment, business activity and property values.

Our community pride will be based on co-operation and self help, evident by our care of natural and constructed assets and our leadership in environmental management.

Each community's needs will be met with fair and appropriate quality services, creating high community satisfaction with Council's performance and high employee morale and well-being.

Council's purpose or reason for existence is set out in the adopted mission statement,

Northern Midlands Council is committed to providing effective, innovative and efficient service to the community it represents. It aims to encourage active local communities of distinct character and to foster a sense of pride in the Northern Midlands area.

The Strategic Plan sets goals and objectives to be achieved in the planning period. The goals set out where Council wants to be. The objectives are the steps needed to get there. Goals and objectives relating to the delivery of services from infrastructure are shown in Table 6.

Table 6: Goals and Objectives for Infrastructure Services

Goals	Objectives
To provide the service needs of our community	Ascertain service level needs. Focus on outputs with a view to continuously improving the match between service requirements and service delivery. Ensure our assets are appropriately used and maintained.
To optimise the service potential of our assets	Through improved management of our existing assets, improved flexibility of our asset base, rigorous planning, evaluation and budgetary processes, and by using more cost effective service delivery.
To maximise value for money	Take account of the full cost of holding, using and disposing of assets throughout their life, ensure asset management decisions are responsive to performance management and monitoring, and by producing costed options for the delivery of asset services.
To contribute to economic growth	Appropriately match assets to meet service delivery demands, and ensure that all asset management decisions are made within Council's overall resource allocation and management framework.
To assign responsibility and accountability	Clearly define ownership and control of assets through asset information systems that meet both government and management decision requirements.

To promote balance between development and sustainability	Balance the demand for new assets through the use of non-asset service delivery alternatives where appropriate, and protect the needs of future generations, and consider asset renewal and rehabilitation options whenever feasible.
To minimise risks to the community and to Council's financial viability	Apply risk assessment and reduction strategies, undertake regular condition audits, and deliver appropriate asset maintenance and renewal programs.

4.2 Asset Management Policy

Council's Asset Management Policy defines the council's vision and service delivery objectives for asset management in accordance with the Strategic Plan and applicable legislation, community needs and affordability.

The asset management strategy is developed to support the asset management policy and is to enable council to show:

- how its asset portfolio will meet the affordable service delivery needs of the community into the future,
- enable Council's asset management policies to be achieved, and
- ensure the integration of Council's asset management with its long term strategic plans.

4.3 Asset Management Vision

To ensure the long-term financial sustainability of Council, it is essential to balance the community's expectations for services with their ability to pay for the infrastructure assets used to provide the services. Maintenance of service levels for infrastructure services requires appropriate investment over the whole of the asset life cycle. To assist in achieving this balance, Council aspires to:

Develop and maintain asset management governance, skills, process, systems and data in order to provide the level of service the community need at present and in the futures, in the most cost-effective and fit for purpose manner.

In line with the vision, the objectives of the asset management strategy are to:

- ensure that the Council's infrastructure services are provided in an economically optimal way, with the appropriate level of service to residents, visitors and the environment determined by reference to Council's financial sustainability,
- safeguard Council's assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets,
- adopt the long term financial plan as the basis for all service and budget funding decisions,
- meet legislative requirements for all Council's operations,
- ensure resources and operational capabilities are identified and responsibility for asset management is allocated,

- provide high level oversight of financial and asset management responsibilities through reporting to council on development and implementation of Asset Management Strategy, Asset Management Plans and Long Term Financial Plan.

Strategies to achieve this position are outlined in Section 5.

5. How will we get there?

The Asset Management Strategy proposes strategies to enable the objectives of the Strategic Plan, Asset Management Policy and Asset Management Vision to be achieved.

Table 7: Asset Management Strategies

No	Strategy	Desired Outcome
1	Move from Annual Budgeting to Long Term Financial Planning	The long term implications of Council services are considered in annual budget deliberations.
2	Develop and annually review Asset Management Plans covering at least 10 years for all major asset classes (80% of asset value).	Identification of services needed by the community and required funding to optimise 'whole of life' costs.
3	Develop Long Term Financial Plan covering 10 years incorporating asset management plan expenditure projections with a sustainable funding position outcome.	Sustainable funding model to provide Council services.
4	Incorporate Year 1 of Long Term Financial Plan revenue and expenditure projections into annual budgets.	Long term financial planning drives budget deliberations.
5	Review and update asset management plans and long term financial plans after adoption of annual budgets. Communicate any consequence of funding decisions on service levels and service risks.	Council and the community are aware of changes to service levels and costs arising from budget decisions.
6	Report Council's financial position at Fair Value in accordance with Australian Accounting Standards, financial sustainability and performance against strategic objectives in Annual Reports.	Financial sustainability information is available for Council and the community.
7	Ensure Council's decisions are made from accurate and current information in asset registers, on service level performance and costs and 'whole of life' costs.	Improved decision making and greater value for money.
8	Report on Council's resources and operational capability to deliver the services needed by the community in the Annual Report.	Services delivery is matched to available resources and operational capabilities.
9	Ensure responsibilities for asset management are identified and incorporated into staff position descriptions.	Responsibility for asset management is defined.
10	Implement an Improvement Plan to realise 'core' maturity for the financial and asset management competencies within 2 years.	Improved financial and asset management capacity within Council.
11	Report six monthly to Council by Audit Committee/CEO on development and implementation of Asset Management Strategy, AM Plans and Long Term Financial Plans.	Oversight of resource allocation and performance.

6. Asset Management Improvement Plan

The tasks required to achieve a 'core' financial and asset management maturity are shown in priority order in Table 8.

Table 8: Asset Management Improvement Plan

Ref	Task	Responsibility	Target Date	Budget
2	Plant & Equipment Asset Management Plan	JG	31/12/2017	
3	Review LTFP	MM	30/6/2017	
4	Review requirements for Parks & Reserves and other assets.	MB/JG	31/12/2017	
5				
6				
7				
8				
9				
10				

Appendix A Asset Management Maturity Assessment

NORTHERN
MIDLANDS
COUNCIL

ROAD INFRASTRUCTURE ASSET MANAGEMENT PLAN

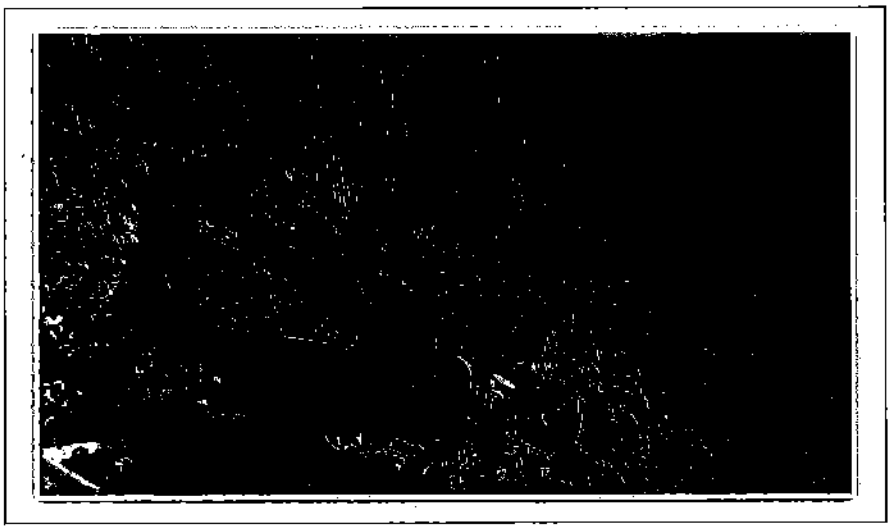


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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

Context

Northern Midlands Council is responsible to provide a number of community-focussed services and in doing so must ensure that its infrastructure assets and community facilities are maintained in accordance with well developed asset management programs and strategic forward plans to enable these services to meet the community needs.

This Road Asset Management Plan (RAMP) seeks to build on previous work carried out on Council's infrastructure assets which aims to provide a more formalised and transparent approach to asset management.

This Road Asset Management Plan includes road relating assets within the road reserve; road formation, road pavement and seal, kerb and channel, footpaths, carparks, bridges, and street furniture and fittings.

The RAMP aims to have in place a mechanism to clearly define its asset refurbishment and asset maintenance practices and to mitigate risk and provide a policy defence in the event of a public liability claim concerning road condition.

The plan will be continuously reviewed and updated to ensure a high degree of accuracy while ensuring that the assets continue to provide an appropriate level of service delivery to the community.

Asset management is seen as a practical and financially responsible means of managing Council's assets by ensuring that the assets continue to provide a specified level of service delivery to defined standards over their entire life.

The risk of claims against a council for negligence in the undertaking of road maintenance work is an issue that is gaining prominence within Australia. A High Court decision of 2001 relating to the 'loss of Immunity' for Highway Authorities has initiated many of the discussion papers on road legislation responsibilities and the law of negligence. The law of negligence is a fault-based system where a person who carelessly causes injury or loss to another person should compensate that person. The High Court decision has ruled that this should also apply to a road authority that does not maintain its assets to an appropriate standard.

In Tasmania, the Local Governments (Highways) Act 1982 provides non-feasance protection for road authorities but reliance solely on legislative protection is considered inappropriate and the development of the RAMP is considered more responsible. Development of this Road Asset Management Plan will assist in minimising risk by providing a policy defence in negligence claims. The RAMP establishes a management system for road functions that is based on policy and operational objectives.

In addressing the "duty of care" issue, it is fundamental that a corporate management process be introduced to ensure that all asset management activities and processes are linked to an effective well-structured RAMP.

The Federal Government's announcement on the future allocation of Roads to Recovery and Auslink funding will have significant implications for Councils in obtaining funding for projects that have regional significance.

With the support of the community, various agencies and road users in preserving the road network and being directly involved through community consultation and cooperative partnership, Northern Midlands' RAMP will achieve a quality asset management system that will deliver an efficient and functional road network.

The Road (or Transport) Infrastructure Service

The road network comprises:

- Footpaths – 66,979 lineal metres
- Kerbs – 134,319 lineal metres,
- Sealed Pavements – 572,958 lineal metres
- Unsealed Pavements – 386,895 lineal metres
- Sealed Surfaces – 572,958 lineal metres
- Bridges/Major culverts – 154 items
- Pipes culverts (600 dia and above) – 98 items
- Street Furniture – 160 items.

These road infrastructure assets have a replacement value of $227 million.

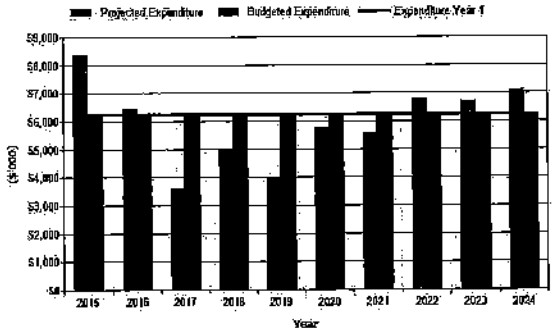
What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $59 million or $5.927 million on average per year.

Estimated available funding for this period is $62.million or $6.226 million on average per year which is 105 percent of the cost to provide the service.

This is a funding surplus of $299,000 on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

Northern Midlands - Projected and Budget Expenditure for (Transport_S1_V1)



What we will do

Council plans to operate and maintain the road network to achieve the following strategic objectives.

1. Ensure the road network is maintained at a safe and functional standard as set out in this asset management plan,
2. Manage heavy vehicle through traffic in all town centres within Northern Midlands,
3. Improve footpaths for each town,
4. Maintain bridges without need for load limits.

We plan to provide road services for the following:

- Operation, maintenance, renewal and upgrade of footpaths, kerbs, pavements, sealed surfaces, and bridges to meet service levels set by Council in annual budgets.
- Maintain an annual reseal program, undertake a resheeting program for unsealed pavements, continue with a reconstruction program, upgrade and extend the street footpath program and continue to replace timber bridges with concrete structures within the 10 year planning period.

What we cannot do

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

- Upgrade unsealed pavements to sealed pavements,
- Provide footpaths on both sides of streets,
- Upgrade all single lane bridges to dual lane.

Managing the Risks

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

- adequate maintenance of assets
- renewal at optimal time
- over-engineering/design
- emergency management.

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

- maintenance levels
- condition assessments at regular intervals
- qualified experienced staff.

Confidence Levels

This AM Plan is based on medium level of confidence of information.

The Next Steps

The actions resulting from this asset management plan are:

- Asset data collection/refining and modelling
- Assessment of condition ratings, to gain a better understanding of asset useful lives
- Review risk analysis of road network to better identify priority items
- Capital works expenditure to be further refined/ investigation.

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Northern Midlands Council community's transport needs. These assets include roads, footpaths, kerbs, pavements, seal surfaces and bridges throughout the community area that enable people to travel with the municipal area.

What is an Asset Management Plan?

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

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

Why is there a funding shortfall?

Most of the Council's road network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

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

Our present funding levels may be insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

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

What happens if we don't manage the shortfall?

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

What can we do?

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

What can you do?

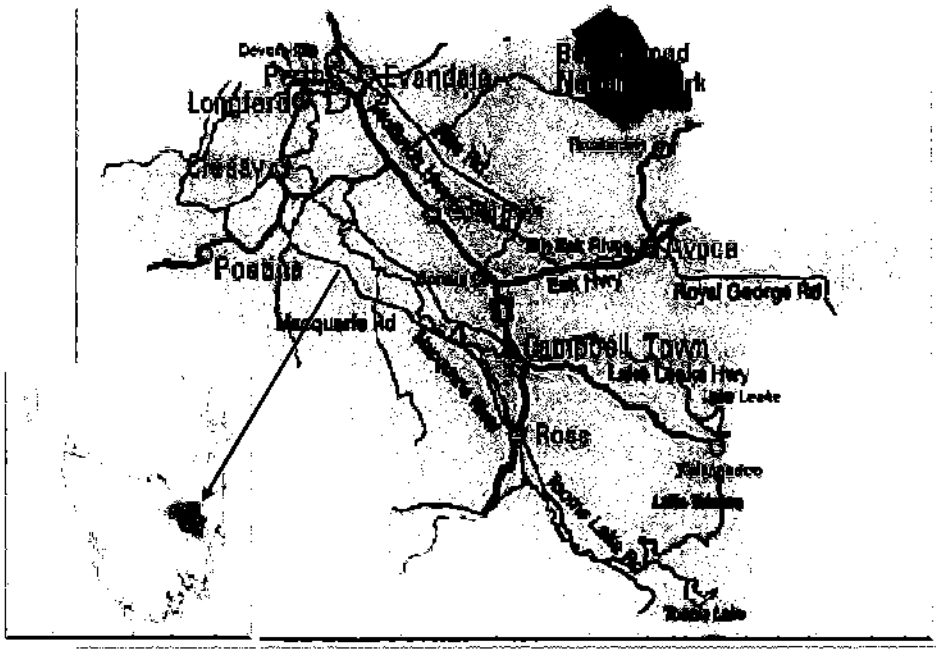
We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its transport mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

The Northern Midlands Council administers an area of 5,130 square kilometres. It supports a population of approximately 12,775 with major population centres including Longford, Evandale, Perth, Campbell Town, Cressy, Ross, Avoca and Rossarden. It has a length of 959 kms of urban and rural roads for which it is responsible, which is the longest total length of roads for a Tasmanian local government authority.

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



The Road Asset Management Plan is a vital component of Council's overall strategic planning process. It is to be read with the following associated planning documents:

- 'Mapping Our Direction' – 2007-2017 Strategic Plan Volumes 1 & 2This document outlines Council's vision and guiding principles to meet strategic objectives.
- Annual / Financial Report This outlines Council's activities and achievements for the financial year compared to its annual plan and strategic objectives, it also reports on the financial performance and position of Council.
- Annual Plan A detailed plan of projects and financial commitments for each year.
- Asset Management Policy & Strategy. These documents outline Council's commitment to Asset Management.
- 10 Year Financial Plan This plan details Council's planned financial operating results, financial position and cash flows for each of the next 10 years. It outlines all aspects the key financial strategy objectives, funding parameters and commitments.
- 10 Year Capital Works Plan A detailed list of scheduled capital works projects for each year for the next 10 years.
- Road Hierarchy A map showing road categories within the municipal area.
- Contracts.

The service levels, strategies and information requirements contained in the AMPs are translated into contract specifications and reporting requirements.

Long term planning is generally well documented within Council's Strategic Plan and in various strategic documents, which have all involved community consultation to ensure that communities needs and expectations have been addressed and documented.

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

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[1].

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

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide transport services to the community.

Table 2.1: Assets covered by this Plan (as at 1 July 2014)

Asset category	Dimension	Replacement Value
Footpath	66,979 Linear Metres	$7,819,898
Kerb	134,319 Linear Metres	$14,165,562
Sealed Pavement	572,958 Linear Metres	$119,272,805
Unsealed Pavements	386,895 Linear Metres	$7,101,191
Sealed Surface	572,958 Linear Metres	$17,870,103
Street Furniture	160 items	$648,153
Sealed Road Formation	572,958 Linear Metres	$23,715,311
Unsealed Road Formation	386,895 Linear Metres	$11,567,022
Bridges and major culverts	154 items	$23,421,334
Small culverts	98 items	$2,201,929
TOTAL		**$227,783,308**

At this stage, data is incomplete for the following road asset categories:

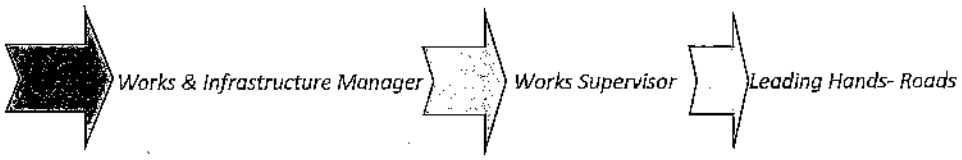
- Barrier fencing (roadside, pedestrian rails etc)
- Street furniture (including street signs, roundabouts, and traffic islands etc).

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

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	• Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financial sustainable.
General Manager	• Custodian of the assets
The Community	• Users in general for recreation, sport, leisure and business
Local agricultural and commercial producers	• Including Translink area at Western Junction, and the transport to Tasmanian saleyards and abattoir sites
Tourists and visitors to the area	• Including visitors to Historic and World Heritage sites, events, sports
Emergency agencies	• Police, fire, ambulance
Utility agencies	• Utilise the road reserve for infrastructure (water, sewer, gas, electricity, telecommunications etc)
Council road managers	• Engineering, construction and maintenance personnel who build and maintain asset components
State & Federal Government	• Periodically provide support funding to assist with management of the network

Our organisational structure for service delivery from infrastructure assets is detailed below:



2.2 Goals and Objectives of Asset Management

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

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

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

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

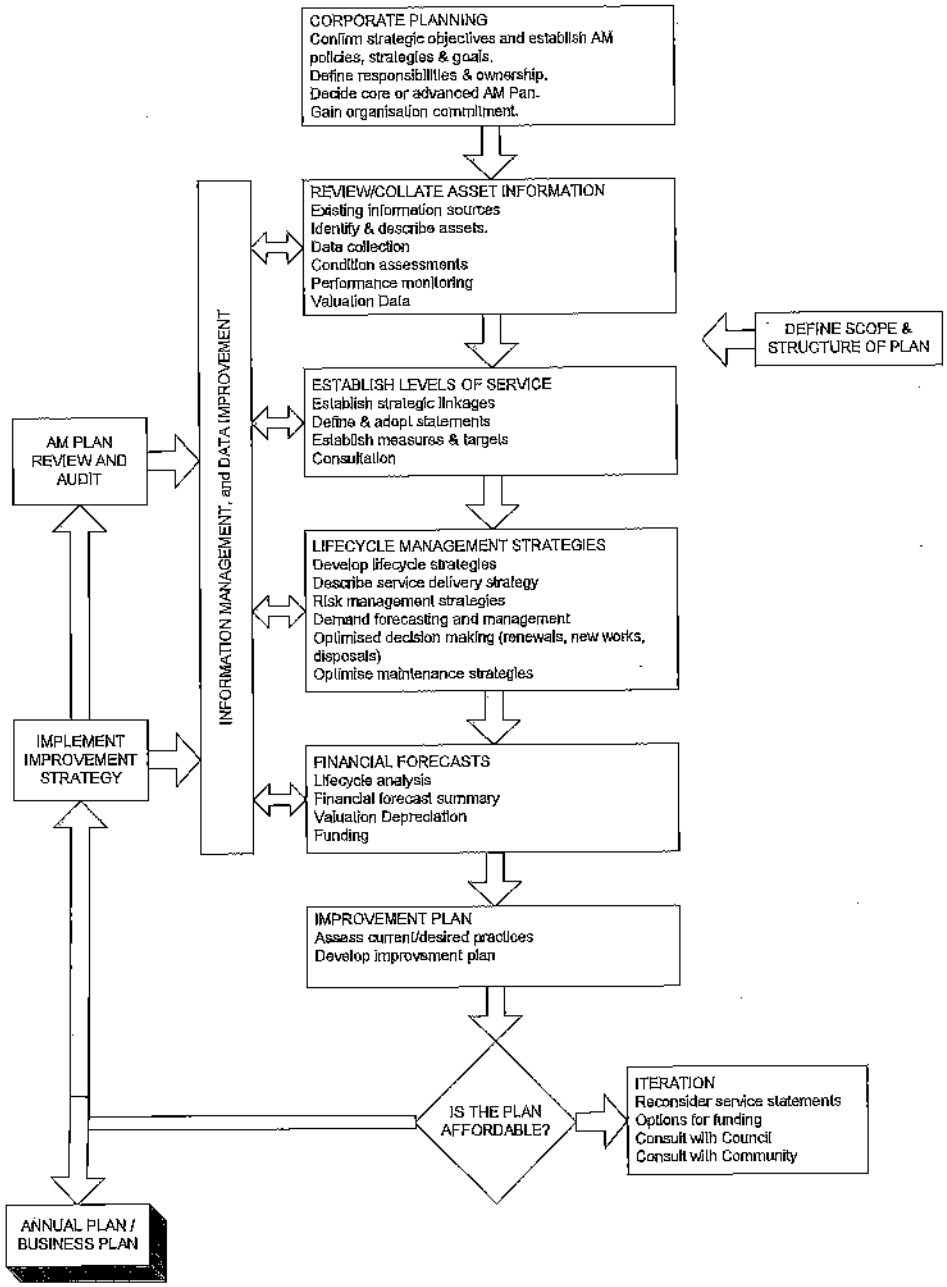
2.3 Plan Framework

Key elements of the plan are

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

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

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual[3]. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

The Local Government Act 1993 and the Local Government (Highways) Act 1982 provide for municipal councils to provide a range of core and non-core services that meet the needs of their communities. The provision of the road network is one of the core services to be provided to a community. Ensuring that this important infrastructure is managed in the most effective and efficient manner and continues to meet the needs of our community, in both the short and long term, is a key issue for Council.

The prime means for service delivery for road assets is through Council ownership of them. Perhaps at some time in the future Council may be able to support private sector developers/landowners in the provision of infrastructure through development of various components of the road network in accordance with engineering standards and planning objectives. The scenario of private ownership within the municipality is certainly not within the foreseeable future.

Good Governance is enhanced where Councils are able to focus on long-term strategies/policies for asset function as well as day-to-day asset maintenance. The development of this road asset management plan is considered an important component to enable the long-term planning of its infrastructure.

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

2.5 Community Consultation

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

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council engineers and technical officers have traditionally worked to the provision of a level of service that is an assumed to be the community's expectation.

During any future consultation process Council will test this assumption to make sure that it is correct or amend it accordingly. The assumptions are that the road network will provide for:

- reasonably direct traffic routes between important centres of community interest;
- ease of access to major traffic routes;
- normal heavy vehicle traffic to be limited to Arterial Roads managed by the State through State Growth where possible;
- access to the municipal road network by heavy vehicles to be limited to those necessarily using the municipal roads (i.e. for business within the municipal area) and then for them to use only Link and Collector Roads other than when immediately accessing properties in order to minimise maintenance on local access roads;

[3] IPWEA, 2011, IIMM.

- limited through access directed along residential streets;
- minimal conflict between various road user groups/vehicle types (e.g. cars, trucks, motor cyclists, cyclists, pedestrians, children and people with disabilities);
- suitable traffic control devices in dangerous locations especially where there is potential conflict between user groups (e.g. pedestrian crossings, road & street intersections);
- people with disabilities, the aged, mothers with children, etc in relation to potential hazards and obstructions such as road crossings, location of street furniture, light poles, sign posts, etc.
- road surfaces that create minimal adverse noise conditions in residential areas, are smooth riding, accessible & safe in all the prevailing local weather conditions (i.e. non-slippery when wet) and free-draining;
- street lighting in urban areas provides good visibility at night;
- all road structures (e.g. pavement base, surface, bridges, and traffic devices) to be maintained in a safe, workable condition;
- street & roadside trees selected to maximise aesthetic benefit but with minimal ongoing problems with hazards caused by root movement & droppings (e.g. berries);
- nature strips to be suitable for easy maintenance by adjoining property owners;
- town street signage adequate to facilitate access for non-locals.

In all cases, the asset functionality and asset maintenance targets need to be clearly defined with the community (users) and the asset service provider (Council) to determine the "line of best fit" having regard to practicality and economics. That is, a level of service provided within a reasonable duty of care in an affordable financially sustainable manner that considers community expectations in regard to safety, comfort, ride ability, travel time, access and overall condition of the local road network.

Consultation with the community has been developed as a two-way process in order to encourage feedback and to assist with the corporate decision making process in determining future and strategic direction.

Council is involved in cyclic customer opinion surveys via LGAT, and focus groups (Local District Committee structure) that are designed to measure and compare community satisfaction with Council and its services and provides data to ensure continuous improvement. In addition, the Council's Customer Request System is tracked to determine the level of dissatisfaction with Council's local roads.

Council operates a Local District Committee Structure for the towns and villages of Ross, Campbell Town, Avoca/Rossarden, Perth, Longford, Cressy and Evandale. These forums provide Council advice of a wide range of issues in their area.

3.2 Strategic and Corporate Goals

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

Our vision is:

> *Northern Midlands communities will be vibrant, sustainable and resilient, promoting their diversity and conserving the heritage values of our towns. Our competitive strengths will attract more people to the municipality, increase employment, business activity and property values. Our community pride will be based on co-operation and self help, evident by our leadership in environmental management. Each community's needs will be met with fair and appropriate quality services, creating high community satisfaction with Council's performance and high employee morale and well-being.*

Our mission is:

> *Northern Midlands is committed to providing effective, innovative and efficient service to the community it represents. It aims to encourage active local communities of distinct character and to foster a sense of pride in the Northern Midlands area.* The overall objective of Council's asset management is:

To ensure that infrastructure assets are planned, designed, developed, constructed and maintained to meet service, safety, and efficiency standards acceptable to the community.

The specific purpose of the Road Asset Management Plan is to:

- Demonstrate responsible stewardship by the Council;
- Define and articulate how the infrastructure is and will be managed to achieve the organisation's objectives;
- Provide a basis for customer consultation to determine the appropriate levels of service;
- Manage risk of asset failure;
- Achieve savings by optimising whole of life costs; and
- Support long term financial planning.

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

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Local Government Highways Act 1982	
Local Government Highways (Amendment) Act 2005	Concerns functions with respect to roads open to the public.
Roads & Jetties Act 1935	
Traffic Act 1925	
Australian Road Rules	
Australian Standards	
State Growth Standards/Specifications and Codes of Practice	

In Tasmania the law still allows for the 'nonfeasance' rule relating to road authorities and their liability for non-repair of roads. It exempts highway authorities from all civil liability, whether the action be brought in "nuisance, negligence, or a special form of negligence such as breach of the duty of an occupier"

However, road authorities, like other public authorities and individuals, are liable for their tortuous acts (misfeasance):

> ...while a road authority owes to the members of the public using a highway no duty to undertake active measures whether of maintenance, repair, construction or lighting in order to safeguard them from its condition, on the other hand it possesses no immunity from liability for civil wrong. It is, of course, a civil wrong to cause particular damage by obstructing a highway, or by making it unsafe or dangerous. Interferences with a highway which in themselves would be unlawful in a stranger are as a rule authorized acts when done by a road authority. But a road authority in doing them must take due care for the safety of those using the highway and is not protected if it creates dangers which reasonable care and skill could avoid. Because the road is under its control, it necessarily has an opportunity denied to others for causing obstructions and dangers in highways. But when it does so, the road authority is liable, not, I think, under any special measure of duty which belongs to it, but upon ordinary principles.

This information has been obtained from Report 55 (1987) - Community Law Reform Program: Liability of Highway Authorities for Non-Repair of the NSW Law Commission.

Clear examples can be given of both nonfeasance and misfeasance, but the dividing line between the two can become very difficult to determine in certain situations, particularly where the highway authority in question has done some work on the highway on which the accident occurred.

If a highway authority, therefore, leaves a road alone and it gets out of repair, there is no doubt that no action can be brought, although damage ensues. But this doctrine has no application to a case where the road authority has done something, made up or altered or diverted a highway, and have omitted some precaution, which, if taken, would have made the work safe instead of dangerous.

To give a relatively simple example, if a highway authority in the course of carrying out repair work digs a hole in a highway but omits to erect a protective barrier around it at night, this would be misfeasance in relation to users of the highway. It is misfeasance because the omission to fence off the hole or take other measures to safeguard users means that the repairs were carried out carelessly. If, on the other hand, the hole in the highway had been caused by natural deterioration or by the actions of a third party, the failure of the highway authority to repair it or to erect a protective barrier would be nonfeasance.

It is believed that eventually the changes in Victoria that removed the nonfeasance rule in January 2005 will apply to the rest of Australia. On this basis, for Road Asset Management Planning, consideration should be given to the impact of the loss of the nonfeasance rule even though measures may not be implemented immediately.

One of these measures is to document 'levels of service'. This is important, regardless of the nonfeasance issue, as it assists council in defining the funding of services.

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

3.4 Levels of Service

Service levels are defined service levels in two terms, community levels of service and technical levels of service.

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

Community levels of service measures used in the asset management plan relate to how the community receives the service in terms of quality (functional, comfort, empathy, assurance), appearance (tidy, clean, well signed), safety (signage, warnings devices) and responsiveness. Survey data to measure community levels of service are sourced from Council's customer request system, the requests sorted based on the request classification.

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

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing, mowing grass, energy, inspections, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (eg road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide a higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new footpath).

Council's current community and technical service levels are detailed in the following tables:

Key Performance Measure	Level of Service	Performance Process	Measure Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Smooth surface, road width, well drained, no defects	Number of valid customer/requests which merit corrective action. Results of LGAT survey.	Wet season < 30 pa Dry season < 15 pa Stable or improve	Number of requests per annum
Appearance	Road user sallsfied with the amenity of road items including; street cleaning, road fumiture (including signage), nature strip/ vegetation control, line marking	Number of valid customer requests which merit corrective action.	Wet season < 30 pa Dry season < 15 pa	Number of requests per annum
Safety	Control of hazards, warning signage	Number of valid customer requests which merit corrective action.	Reduction in number of injury vehicle crashes recorded	Number of reported incidents
Responsiveness	Council's response to various community raised issues ranging from calls about problems, handling correspondence and service applications	(a) Provision of a 24 hour, 7 day per week call-out service to attend to issues (b) Percentage of issues responded to in set timeframes	100% of time 95% of time	Number of complaints.
TECHNICAL LEVELS OF SERVICE				
Condition	Sealed roads to be maintained to appropriate standard/intervention	Condition assessments	0% below condition 8	X% road pavement X% road seal X% kerb & channel X% footpaths are above the condition intervention level
Design Standards	Roads to be in compliance with municipal standards	Percentage of roads not to standard		X% with no kerb in residential area
Cost	Provide road maintenance in a cost effective manner	Within annual budget	Sealed road cost per km - $ Unsealed road cost per km - $	Cost per km of sealed roads - $, cost per km of unsealed roads - $.
Risk/Safety	Assess all roads for potential risks	Safety inspections	X number of unaddressed risks	X number of unaddressed risks

MAINTENANCE SERVICE LEVELS BY FUNCTION	
Sealed Surface	Provide safe driving conditions, uniform seal appropriate to classification of the road. Minimise rate of deterioration of the pavement.
Sealed Surface	Provide safe driving conditions, uniform seal appropriate to classification of the road. Minimise rate of deterioration of the pavement.
Unsealed Road	Provide safe driving conditions and ride-ability appropriate to the classification of the road.
Drainage	Provide hydraulic capacity (large enough to carry normal storm flows), road structure, structural integrity and clear flow of water away from the road pavement.
Operational Servicing	Provide timely emergency response to assist the public and minimise disruption caused by temporary loss of use of the asset.
Roadside Signs	Provide clear messages to motorists in day and night conditions and be aesthetically sound.
Guard Fence	Provide required structural resistance to errant vehicles to minimise accident severity.
Paved Islands & Footpaths	Provide safer travel, and be aesthetically sound.
Road Markings	Provide clear delineation of the road and traffic movements.
Street Trees	Provide for safe travel, aesthetically pleasing features.
Roadside Verges	Minimise weed infestations, sight distance hazards, fire hazard while recognising important roadside vegetation environmental issues.
Street Lighting & Traffic Signals	Provide prompt reporting of damage to electrical assets to the appropriate Utility Service Provider.
Bridge Structure	Provide safe conditions for users, maintain structural integrity.
Bridges & Culverts	Provide accurate and timely reporting of asset conditions.

Measure Performance Target Descriptions

Road Asset Condition is measured by the percentage of road length which is below the condition intervention level for the particular road component. Current performance indicates very good condition for both the pavement and sealed surface road components. This is apparent due to the annual road reseals which return the sealed surface asset condition to new, in addition the reseal preparation works undertaken correct minor pavement defects and thus improve the pavement asset condition to a degree.

Sealed Road Maintenance Cost Per Kilometre performance is measured by averaging the annual budget & expenditure figures by the total kilometres of sealed road maintained by Council to present a cost per kilometre. This figure will gauge the standard (amount) of maintenance undertaken on Council roads per year.

The Risk/ Safety performance measure identifies the trend in traffic behaviour on Council roads and highlights the level of risk associated with the correct management of the asset category.

The following matters have been taken into account with development of maintenance standards:

Road condition surveys – periodic surveys to monitor road pavement, road surfacing, structure, and roadside condition at specified intervals depending on the asset, its condition at the previous survey, the volume and nature of road usage (hierarchy classification), and any risk to safety.

Routine maintenance standards – routine maintenance and repair functions and standards, based on agreed asset performance targets, and intervention standards and actions (based on risk assessment) for a particular asset element (e.g. road, footpath, bridge) and road type. Standards vary across the road network in line with the designated road hierarchy and relevant risk factors such as traffic volumes, composition of traffic, operating speed, the susceptibility of assets to deterioration, the cost effectiveness of repairs, and competing priorities for funding.

Repair and maintenance works – routine maintenance and repair works are undertaken within a specified reasonable period of time having regard to intervention action priorities, and to specified standards.

Temporary measures – temporary works to be undertaken to reduce the risk of an incident until such time as maintenance or repair works can be completed.

Emergency works – works required to be undertaken immediately outside routine works programs to ensure the safety of road users and the public as a result of emergency incidents. Emergency works include traffic incident management, responses to fires, floods, storms and spillages, and assistance under the Tasmanian State Emergency Response Plan & Municipal Emergency Management Plan.

This Road Asset Management Plan, having regard to the above matters, establishes schedules of asset defect intervention levels for different categories of public roads & footpaths for which Council has operational and/or maintenance responsibility.

The hierarchy of roads & footpaths is used as the basis for determining the various standards across the road network in line with relevant risk factors, while having regard to the type, volume and nature of road usage.

Where there has been under-funding of maintenance and it continues for any length of time, it will result in more rapid deterioration of the asset therefore reducing its intended life-span. This will bring forward the need to fund replacement or renewal. Generally the unit cost of replacement or renewal of an asset is considerably more expensive than the cost to maintain it. This may place greater demand on Council's financial resources or alternatively Council may need to reduce the level of service.

3.5 Asset Function and Hierarchy

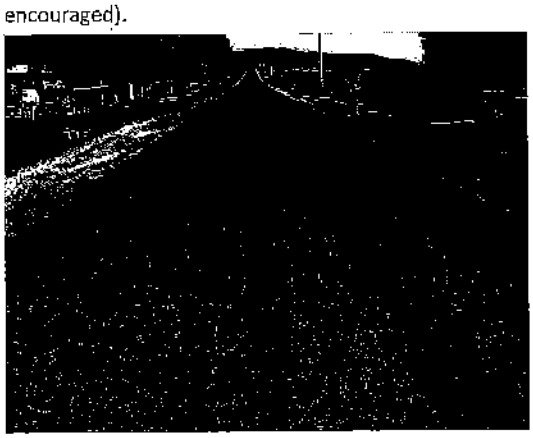
Road & footpath hierarchy categories were established during 2006 for the key road network assets of urban roads, rural roads and footpaths. Categories within the hierarchy have been based on the specific function of that category, the user types & numbers, and location.

The purpose of the hierarchy categories is to enable works to be prioritised & programmed in a rational manner when undertaking maintenance and remedying defects. It provides a framework in which information on road network assets is collected, reported, and decisions made.

Arterial Roads are listed as the highest category of importance of road within the municipal area. They include National Highways (Midlands Highway), State Highways and Main Roads that are the responsibility of the State Road Authority, State Growth.

Table 3.5: Road Hierarchy

Road Category	Functional Description
Category 5: Arterial Not a Council Responsibility	State & National Arterials – Function is to carry the heaviest volumes of traffic, including commercial vehicles, and provide the principal routes for traffic flows in and around the municipality. These come under the jurisdiction of State Growth and as such maintenance of the road pavement & surface is not the responsibility of Council. These are designated on TasMap and tourist maps as National or Primary Roads ('A' roads).
Category 4: Link & Industrial Roads	**Link Roads** - Provide the linkage between centres and they are supplementary to the arterial road system within the municipal area. Link roads generally have a relatively high vehicle count. **Industrial Roads** - Provide heavy vehicle access directly to industries (including forestry) and have a high heavy vehicle count.
Category 3: Collector	**Collector Roads** – Carry moderate volumes of traffic and provide access by linking local areas to link and arterial roads. They also provide links between the various collector roads. They should have limited through traffic (this is not promoted or encouraged).



Road Category	Functional Description
Category 2: Local Access	**Local Access Roads & Streets** – Primary function is to provide access to a number of properties and they cater for relatively short distance travel to higher level roads.

Category 1: Limited Roads	**Limited Access Roads** – Provide access to a small number of properties. They are Access generally 'no through' roads.

Non Council Roads These are private and crown roads not maintained by Council.

Note:
Bridges, culverts, traffic facilities and kerb & channel have the same hierarchies as the road hierarchy which is based on road function & vehicular traffic volumes. For the footpath hierarchy pedestrian traffic is the basis of usage volume.

There is a classification of roads within Tasmania that was established in the 1980's by the Road Direction and Signs Advisory Council as a guide for tourism. This is still used on TasMap and Tourist maps. 'A' roads are Primary Roads (State Highways), 'B' roads are Secondary roads (Main Roads) and 'C' roads are Minor roads (Council roads).

Council's Hierarchy Category 4 & 3 roads are generally 'B' & 'C' roads under this Tourism classification. However, the classification appears not to have been changed over the 25 years or so of its existence yet there are instances of the importance of some of these roads being significantly diminished over this period. An example within Northern Midlands Council area is Rossarden Road classed as a 'B' road (B42) whereas currently it is a Local Access Road at hierarchy level 2. At the time of nomination Rossarden was a busy mining town that has since declined.

Council's hierarchy is based on functional requirements as outlined above and as shown by the Rossarden example, there will be instances where it is at variance with the tourism classification.

3.5.2 Footpath Hierarchy

The draft Footpath Hierarchy is based on key pedestrian generators and location, pedestrian age and type and functional use including shared footway/bike paths and general property access.

Table 3.5.2: Footpath Hierarchy

Classification	Functional Description
Category 3 Shopping Zones	Footpaths in central shopping areas in each of the towns Highest Use Category
Category 2 Specific Pedestrian Generators	Footpaths serving pedestrian generators that include hospitals, schools, senior citizens centres, aged care facilities, major community facilities. The length classed as category 2 extends for the block containing the facility and one additional full block length.
Category 1 Other Areas	Footpaths in residential, commercial & industrial areas. Lowest Use Category

4. FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecast

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

4.3 *Demand Impact on Assets*

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

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position (2015)	Projection (2035)	Impact on services
Population	12,775	14,115 (with 0.5% increase)	Increase in population requires increases in road infrastructure services
Demographics	Median age is 2.41	Continued increase in median age.	Increased aged population impacts on design and safety of services
Climate Change	Very susceptible to flood damage – during 2011 there was significant damage	May be trending to be more often and at extreme levels	May require upsizing of bridge infrastructure and higher maintenance costs
Low Density Residential	Popularity of rural living increasing	Mild increase in rural living	Expectation of services high due to 'urban' experience
Size of farm machinery	Larger and heavier farm machinery using road infrastructure	Expectation is that this trend will continue	Damage of road infrastructure more regular especially road edges.
Farm produce	More intense crop growing has increased amount of produce freighted on road infrastructure	With several irrigation schemes introduced into the area the trend of higher yields is expected to continue	Increase in freight traffic and heavier loads will require increased maintenance and renewal frequencies
Timber Industry	Low amount of timber industry activity	Industry restructure means that future is unclear	If there is increased heavy vehicle movements in localised areas at harvest time it will result in the need for higher maintenance costs and/or earlier capital renewal/upgrade
Tourism	Local events on road infrastructure, and several tourism attractions	Expected to increase generally, and with Asian market	Increase for safety, signage and traffic calming devices
Land Use	State Planning Scheme controls areas of future development	Perth Bypass Highway construction will change access into townships of Perth and Longford	Increase in residents as commuter time to city is reduced therefore greater demand for new subdivisions and associated infrastructure
Employment	Low unemployment rates	Greater commuter traffic	Increase usage resulting in greater maintenance and renewal costs
Application to the National Heavy Vehicle Regulator for increased vehicle size and mass	Permits being assessed	Greater amount of permits due to more efficient movement of produce	Potential increased demand for roads suitable for heavier vehicles
Technology			Technology changes are expected to have little effect on the delivery of road services during the time of this plan

It is anticipated with the low level of projected growth within Northern Midlands, there will be little need for change to either the adopted 'Levels of Service' or road hierarchy.

However, there is a general expectation within the community for ongoing improvements to basic services. This is particularly relevant in road infrastructure where Council receives a number of requests for upgrades and improvements to residential streets.

Council's forward financial plan ensures that significant funds are provided in relation to the refurbishment and rehabilitation of road infrastructure assets in order to cater for community expectations.

Statistics reveal that Northern Midlands local government area (LGA) has the longest total length of roads owned by local government (959 kms), with the majority of roads being rural (88%).

What is a concern is the potential for development of new commercial and industrial sites, including forest harvest areas that generate significantly increased volumes of heavy vehicles on specific roads.

The issue is that while the generation of new jobs and income for some within the community is important, the impact of increased maintenance on those roads can cause a significant financial burden to all ratepayers if these organisations do not contribute to the maintenance costs.

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[4]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Council has to be able to sustain the level of maintenance & renewals of the road asset over the long term if it is to provide the community with the road network it wants. The community has to recognise that to do so requires funding.

Opportunities for funding are generally limited to income from Government Grants and from Council rates. Where practicable an alternative is perhaps contributions from special use groups that may be causing damage outside what is reasonable for the type of road being used.

The other alternative is to reduce maintenance costs. Reductions can result from use of improved work techniques and practices, new technology & materials, and also by reducing the level of service being provided.

If there is little opportunity to improve funding through the various sources, then the only practical option is to reduce levels of service.

Where new development or redevelopment is proposed within the municipality, any impacts that they may have on Council's infrastructure assets are considered with the development process, including application of appropriate infrastructure design standards. Input is sought from the Engineering officers so that conditions can be applied to address the impacts wherever practicable. It is vital that neighbouring Councils do consult with Northern Midlands when developments adjoining the municipal boundary may impact Northern Midlands Council infrastructure.

Other external factors & influences that may arise from Government actions, such as highway realignment proposals, are usually undertaken with consultation with Council so that impacts on Council's infrastructure assets can addressed with the development and processing of the proposal.

External factors can also impact maintenance of Council operations such as changing environmental standards, community safety standards, WH&S, etc. These can all add to the cost of maintaining and operating Council infrastructure assets and must be accounted for in the annual budget process.

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[4] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

Means of Reducing Costs –

- If the Hierarchy classification of a road is reduced it will cause a corresponding reduction in maintenance costs as well as renewal costs. However any downgrading of hierarchy needs to be considered in conjunction with the introduction of load limits.
- Placing of load limits has the following consequences - Causes heavy trucks to move to more suitable roads, preferably the State's arterial network intended for heavy vehicles

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

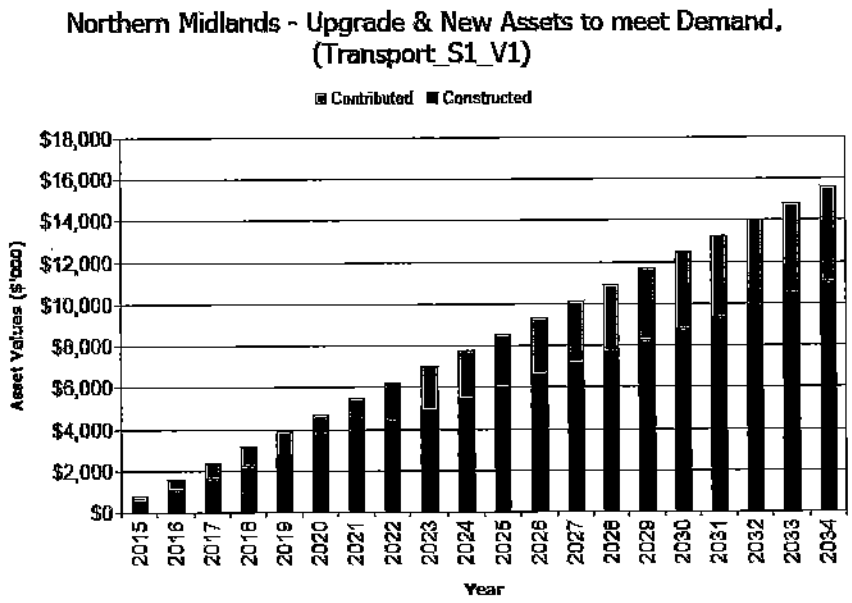
Table 4.4: Demand Management Plan Summary

Demand Driver	Impact on Services	Demand Management Plan
Review Road Hierarchy	Identify priority heavy vehicle routes	Consult with stakeholders to review Road Hierarchy
Load Limits	Implement traffic controls devices where appropriate	Direct traffic to priority routes and avoid unnecessary maintenance and renewal costs
Midland Highway Upgrade	Transfer of responsibility of sections of road to Council	Active involvement in planning negotiations with State Growth

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



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

5. LIFECYCLE MANAGEMENT PLAN

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

5.1 Background Data

5.1.1 Physical parameters

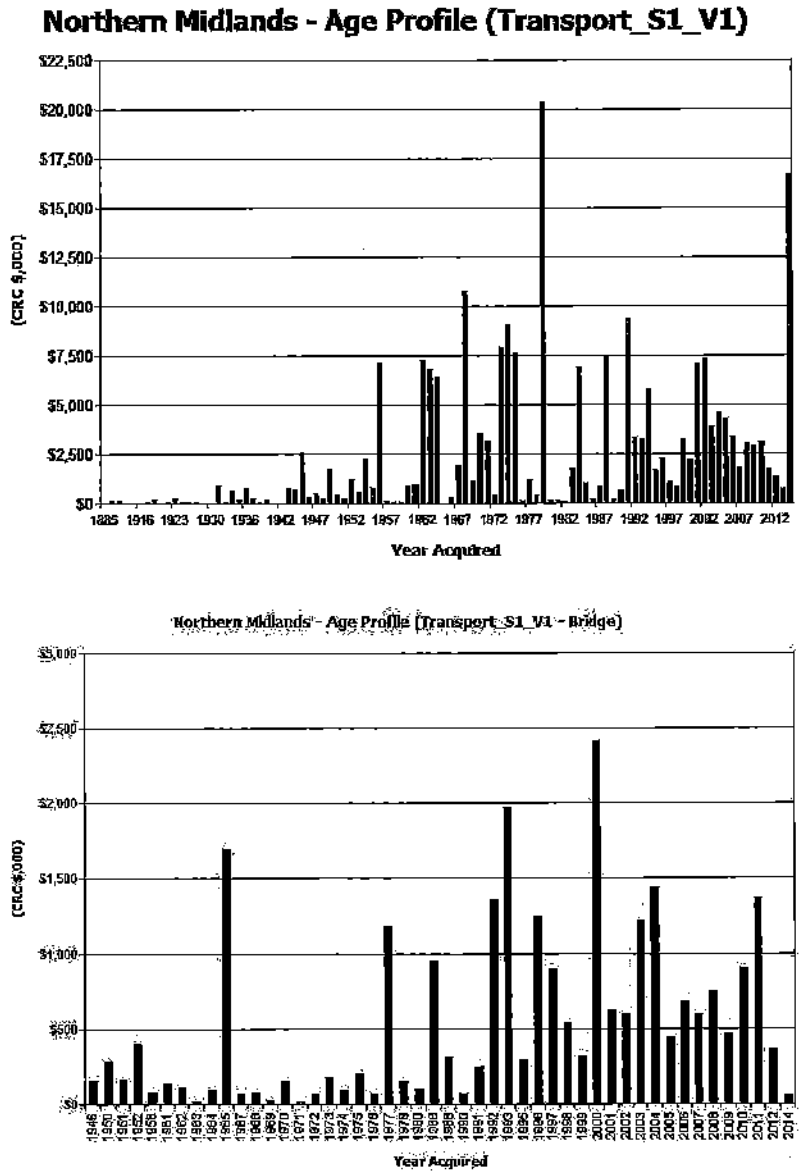
The assets covered by this asset management plan are shown in Table 5.1.1.

Asset Component	Length (kms)	Useful Life (Yrs)	Replacement Cost
Cat 4 - Link Roads	117.792		$30,565,799
Pavement	117.792	60	$26,393,958
Seal	117.792	20	$4,171,841
Unsealed Pavement	0.000	10	$0
Cat 3 - Collector Roads	272.69		$52,203,448
Pavement	257.776	70	$45,703,753
Seal	257.776	20	$6,164,467
Unsealed Pavement	14.911	10	$335,228
Cat 2 - Local Access Roads – Sealed	357.59		$57,755,724
Pavement	197.390	80	$47,175,094
Seal	197.390	20	$7,533,795
Unsealed Pavement	160.200	20	$3,046,835
Cat 1 - Limited Access Roads	211.784		$3,719,128
Pavement	Incl in Cat 2	80	$
Seal	Incl in Cat 2	20	$
Unsealed Pavement	211.784	25	$3,719,128
Formation			
Pavements			23,715,311
Unsealed Pavements			$11,567,022
Sub-Total Roads	959.856		$179,526,432
Street Furniture			$648,153
Footpaths	66.98		$7,819,898
Concrete	27.27	70	$4,024,498
Asphalt	31.05	30	$3,551,694
Seal	0.77	20	$54,928
Paved	0.15	50	$23,104
Gravel	7.74	15	$165,674
Kerb & Channel	134.319	111	$14,165,562
Bridges	252		$25,623,262
Concrete	128	100	$19,771,752
Steel	4	100	$775,748
Timber	20	30	$2,535,748
Composite	1	40	$76,800
Footbridge	2	90	$283,750
Culverts	97	70	$2,179,464
Road Component Total			$227,783,308

The road pavement and seal/surface assets are divided up into the specific road categories as defined in the Moloney Road Assets Review - 2014, indicating that the differing traffic volumes and design standards between categories results in varying deterioration rates and useful lives for pavement and seal/surface assets.

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

Figure 2: Asset Age Profile



The ages as indicated on the above graph have been derived based on the assets current condition and expected remaining life compared to the standard expected useful life for each asset category.

5.1.2 Asset capacity and performance

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

There are a number of assets within the road reserve that council does not have an obligation to maintain. However, Council has a duty of care to ensure that these assets are in a safe condition for the public in general and may serve a notice on the property owner to have defects repaired. They are often a point of conflict with residents who have an expectation that Council will maintain them as they are within the road reserve.

These assets and the responsibility for addressing their defects are as follows:

A. Vehicle crossings/driveways

The portion of a vehicle crossing located between the carriageway and the property boundary is the responsibility of the adjoining property owner to maintain.

This area should only be repaired by council if council activities have caused damage to it or it is part of a reinstatement operation. Works carried out on a vehicle crossing at the owners' request shall be treated as private works or be in accordance with Council's Policy no. 16 to ensure consistency in construction of driveways.

B. Single property stormwater drains

These stormwater drains are constructed within the reserve from the property boundary to a discharge outlet in the kerb or into the drain. They are there to benefit the property and as such are the responsibility of the owner of the property being served to maintain.

C. Nature strip & infill areas within urban areas

These are those residual areas between the edge of the road or back of the kerb and the property boundary not occupied by the footpath and private road crossings. These are normally sown to grass with responsibility for maintenance of the grass generally being left to the property owner. Street trees are controlled by Council.

Where the adjoining property owner has 'landscaped' or otherwise created a situation that is hazardous to the public using the nature strip area Council may after inspection require the property owner to rectify it.

D. Responsibility for defect rectification

Where, on any of these areas within the road reserve for which Council has a responsibility, there is a defect that is liable to cause any injury to a member of the public it must be repaired.

In such instances, the owner must be notified and directed to make the area safe and repair the defect within a period of 2 weeks and that in the event that the defect is not repaired Council will repair it as a charge against the property.

Where the owner does not undertake the work in the timeframe allowed, appropriate remedial measures action must be followed up as a matter of urgency.

There are also assets located in the road reserve that are clearly the responsibility of other agencies. These include:

- Railway level crossings
- Utility assets such as water, sewer, telecommunications and electricity.

Table 5.1.2 Known Service Performance Deficiencies

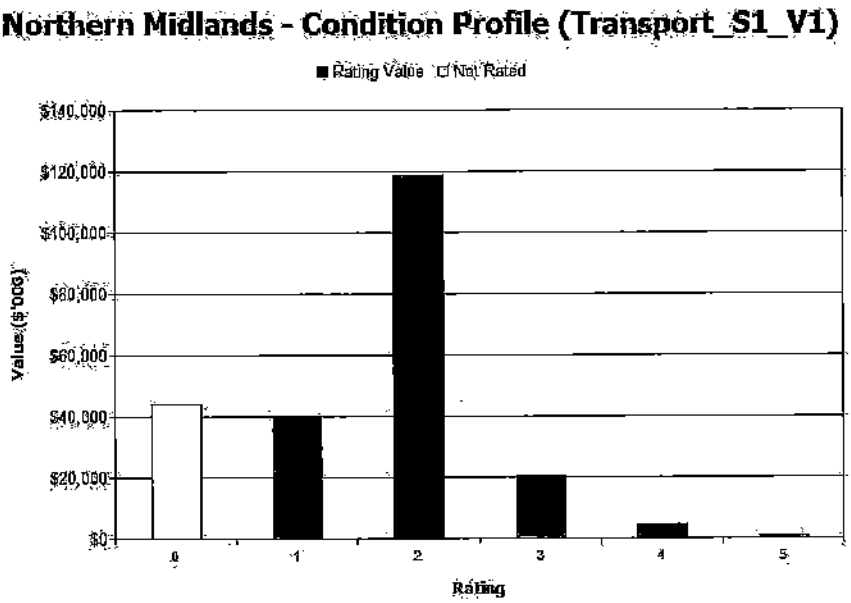
Location	Service Deficiency
Heavy Vehicle Access	Many roads in the municipality are not constructed to an appropriate design width and strength to cater for modern heavy vehicles resulting in premature failure of such roads where there is significant heavy vehicle usage
Urban areas	Footpaths and kerb required for the outer areas of the town.

5.1.3 Asset condition

An assessment of all Council's sealed & unsealed road Pavement, Sealed Surfaces and Kerb & Channel, and footpaths was undertaken in 2014 by Maloney Asset Management Systems (MAMS). The following condition profile and comments regarding Council's assets were produced as part of the Report following the Survey of Road Assets for, as shown below.

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

Fig 3: Asset Condition Profile



Condition is measured using a 1 – 5 grading system[5] as detailed in Table 5.1.3.

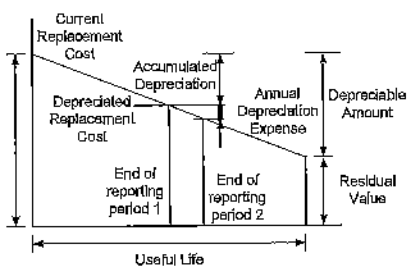
Table 5.1.3: Simple Condition Grading Model

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

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 1 July 2014 covered by this asset management plan is shown below. Assets were last revalued at 1 July 2014. Assets are valued at Fair Value as defined by Australian Accounting Standards.

Current Replacement Cost	$227,783,308
Depreciable Amount	$192,500,975



[5] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

Depreciated Replacement Cost[6]	$161,651,115
Annual Depreciation Expense	$3,557,958

Useful lives were reviewed by Moloney Asset Management Systems during their Assessment during 2014..

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

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	1.8%
Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount)	1.5%
Annual Upgrade/expansion (Capital new or upgrade exp/Depreciable amount)	0.4%

[6] Also reported as Written Down Current Replacement Cost (WDCRC).

5.2 Infrastructure Risk Management Plan

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

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

Table 5.2. Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Rural Roads – All areas	Bridge structural failure/ defects	Very High	Erect warning signage, monitor failure/ defect prioritise maintenance/renewal works in accordance with assessed risk. Timely investigation and response to reported deficiencies		
Urban & Rural roads	Pavement failure/ defects	High	Inspection and routine maintenance program to be prioritised to suit the road category and risk rating. Timely investigation and response to reported deficiencies		
Urban & Rural roads	Gravel shoulder deterioration, edge seal breaks	High	Inspection and routine maintenance program to be prioritised to suit the road category and risk rating. Timely investigation and response to reported deficiencies		
Urban & Rural roads	Seal failure/ defects	High	Inspection and routine maintenance program to be prioritised to suit the road category and risk rating. Timely investigation and response to reported deficiencies		
Urban & Rural roads	Insufficient road drainage	High	Inspection and routine maintenance program to be prioritised to suit the road category and risk rating.		

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

The only practicable means of readily identifying risk is by undertaking the inspection regime of the road network which is based on the road hierarchy. This process should enable significant risks to be discovered and remedied in advance of possible injury.

Safety audits need to be undertaken where specific risks (potential safety deficiencies) are identified.

The table on the following page takes the broad qualitative measures of AS/NZS4360 to a dimension that is relevant to Council's areas of responsibility.

It provides a detailed measure of consequence or impact in a number of key areas that will impact upon Council and its operations, namely:

- Revenue, cost or liability - 3rd party damages or business loss incurred as an outcome of a risk occurrence;
- People – public health and safety issues;
- Environment – negative environmental impact;
- Social/Cultural/Heritage – negative impacts to these important community aspects;
- Disruption to Business or Level of Service Delivery – to ensure that due consideration is given to the importance of those vital services necessary to the community in its normal everyday operations;
- Asset Network Integrity – this accounts for those works essential in protecting the long-term integrity of the asset such as renewal or rehabilitation of an asset or asset component;
- Corporate image – probity, political and economic impacts arising from the event.

The financial consequences are based on the Council's ability to pay or bear the loss and therefore relate to the impact on the overall Rate income - not overall income including grants. The values of the cost of maintaining the asset network integrity relate directly to the values in Revenue, Cost or Liability – the ability of council to pay although in this case grant funds such as 'Roads to Recovery' may be used.

Other than for the consequence on revenue, which specifically relates to size, the other risk elements should be similar between various Councils.

When assessing consequences, each of these issues is examined to ensure that all key risk elements have been covered.

Risk Score	Risk Rating	Revenue, Cost or Liability (3rd Party Business Loss)	People (Health & Safety)	Environment	Social/Cultural/ Heritage	Business Interruption or Level of Service Delivery	Asset Network Integrity	Corporate Image (Probity/Political/ Economic)
5	Catastrophic	• Liability cost or business loss to Council > $500k; • Council officer or Councillor gaoled	• Multiple loss of life; • Municipal wide epidemic.	• Serious damage of national significance; • Prosecution (cost as per revenue impact); • Impact not fully reversible.	• Social impacts that impede the ability of the community to function satisfactorily; • Considerable irreparable damage to items of cultural/heritage significance	• Critical loss of service for a crucial period of time (> 30 days)	• Renewal or rehabilitation work required Cost > $500k	• Official Public Investigation; • Public/media outrage; • International media coverage; • Public pressure to curtail operations of the Council; • Management changes demanded
4	Major	• Liability cost or business loss to Council of between $200k & $500k; • Council officer and/or Councillor with significant fine	• Loss of life; • Serious health impact on multiple members of public or staff.	• Serious damage of State significance; • Prosecution likely (cost as per revenue impact); • Impact reversible within 10 yrs.	• Major ongoing social issues • Some irreparable damage to items of cultural/heritage significance	• Critical loss of service for up to 1 month (16 – 30 days)	• Renewal or rehabilitation work required Cost $200k to $500k	• Loss of community confidence in Council; • Public/media concern; • National media coverage; • Damage to Council's reputation • Council subject to formal inquiry/sanctioned
3	Moderate	• Liability cost or business loss to Council of $25k to $200k; • Council personnel fined	• Serious health impact on a member of the public; • Hospitalisation required	• Serious damage of local significance; • Prosecution probable (cost as per revenue impact); • Impact reversible within 1 yr.	• Moderate ongoing social impacts locally • Minor irreparable damage to items of cultural/heritage significance, other damage repairable.	• Critical service loss not back in agreed time (6 – 15 days)	• Renewal or rehabilitation work required Cost $25k to $200k	• Community discussion and concern; • Broad adverse media coverage
2	Minor	• Liability cost or business loss to Council of $5k to $25k	• Moderate injury/health impact on staff or public; • Medical attention required	• Material damage of local significance; • Prosecution possible (cost as per revenue impact); • Impact reversible within 3 months.	• Minor medium-term social impacts locally • Minor repairable damage to items of cultural/heritage significance	• Brief loss of service for minimum period (3 – 5 days)	• Renewal or rehabilitation work required Cost $5k to $25k	• Minor/isolated concerns raised by members of public, customers, suppliers; • Local media adverse report
1	Insignificant	• Minimal liability cost or business loss to Council < $5k	• Minor First Aid required; • Temporary, minor health impact on staff or public.	• Minor release of pollutants which does not require notification to third parties • Brief, non-hazardous temporary pollution, reversible within a week	• Minimal short-term social impacts locally • Minimal repairable damage to items of cultural/heritage significance	• Business disruption but no loss of service (1 – 2 days)	• Renewal or rehabilitation work required Cost of up to $5k	• Event only of interest to individuals; • No impact on community; • Marginal impact on Council operations; • Resolved in day to day management

1-215

Qualitative Risk Analysis Matrix

Table 5.2.3: Qualitative Risk Analysis Matrix

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
	1	2	3	4	5
A	H	H	VH	VH	VH
B	M	H	H	VH	VH
C	M	M	H	H	VH
D	L	M	M	H	H
E	L	L	M	M	H

Legend:

VH	-	Very High risk, immediate action
H	-	High risk, attention required
M	-	Moderate risk, manage responsibly
L	-	Low risk, manage by routine procedures

Once the risks have been assessed and rated, the most significant risks (for example, those of extreme or high risk) are isolated for treatment or control.

Table 5.2.4: Treating Risks

Risk		Control
Very High Risk	VH	Immediate Action Required
High Risk	H	Priorities action required
Medium Risk	M	Planned action required
Low Risk	L	Actioned by routine procedures
Negligible Risk	I	No action required

Appendix H outlines a risk assessment undertaken on various road and footpath defect types. The assessed risk is then related to the relevant control measure as shown in the table above.

The various defect/hazard response priorities established for each road classifications and the selected remedial treatment are outlined in the Intervention Level Schedules attached. They provide a listing of the defect remedial measure and the relevant level of response for the hierarchy category in which the defect is located.

As advice is received of defects, safety or otherwise, the works supervisors will make an assessment of how that issue is to be dealt with in terms of priority of attention. These supervisors are experienced in handling the type of defects commonly incurred by the road network and will readily be able to adjudge how they are to be treated. Priority of maintenance rectification is based on risk.

The response time will vary according to the hierarchy category, the location of the defect within the road reserve and the magnitude of the defect, obstruction or spillage.

Where a job potentially has a high risk associated with it from a safety perspective, a risk assessment is undertaken to establish what the specific risks are and develop action plans to eliminate or at least minimise the risks.

In an emergency situation, Council operates in accordance with its commitments documented in the Municipal Emergency Management Plan (MEMPlan).

A 24 hour, 7 day per week, 52 week per year After Hours Emergency Service (AHES) is operated by Council. Through this, Council operations personnel can be activated at any time.

The Works Manager has delegated authority to undertake works that may arise as a consequence of unanticipated conditions.

5.3 Routine Operations and Maintenance Plan

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

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

5.3.1 Operations and Maintenance Plan

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

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

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

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

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

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	Unplanned
2014/15	$2,147,000	$78,000
2013/14	$1,932,000	$243,000
2012/13	$1,751,000	$21,000
2011/12	$1,529,000	$70,000
2010/11	$1,902,000	$123,000

Planned maintenance work is currently 89 percent of total maintenance expenditure.

Reactive maintenance includes sealed pavement dig-outs, unsealed road pothole filling and expenditure to rectify storm/flood damage.

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

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

5.3.2 Operations and Maintenance Strategies

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

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

Critical Assets

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

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.

Table 5.3.2: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Woolmers Bridge		Regular inspections and routine maintenance
Longford Flood Levee access		Regular inspections and routine maintenance
Lake River Bridge		Regular inspections and routine maintenance

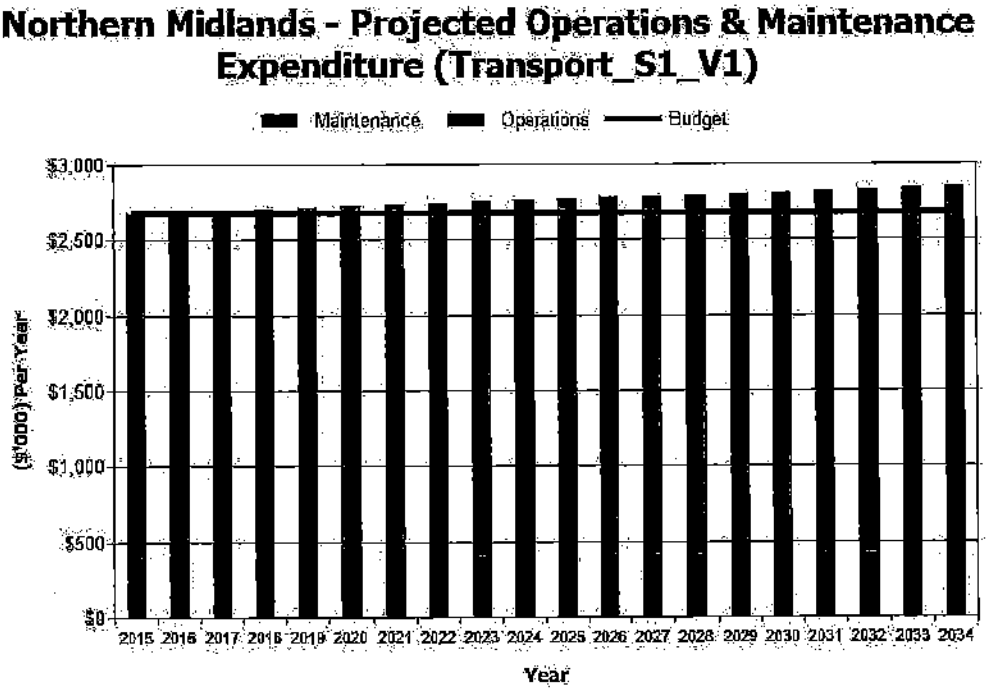
Standards and specifications

Maintenance work is carried out in accordance with the Works Manager's works procedures.

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2015 dollar values (ie real values).

Figure 4: Projected Operations and Maintenance Expenditure



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

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

5.4 Renewal/Replacement Plan

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

5.4.1 Renewal plan

Assets requiring renewal are identified from condition assessments and estimated remaining life obtained from the asset register. Identified assets are inspected to verify accuracy of the remaining life and to develop a preliminary renewal estimate. Verified proposals are prioritised based on the assessed risk of the condition and available funds are scheduled into the future works program.

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.1.1. Asset useful lives were last reviewed on 1 July 2014.

5.4.2 Renewal and Replacement Strategies

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

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
    - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
    - the project objectives to rectify the deficiency,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - and evaluate the options against evaluation criteria adopted by the organisation, and
    - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (eg replacing a bridge that has a 5 tonne load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road).[7]

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

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,

[7] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.

- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[8]

Renewal and replacement standards

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

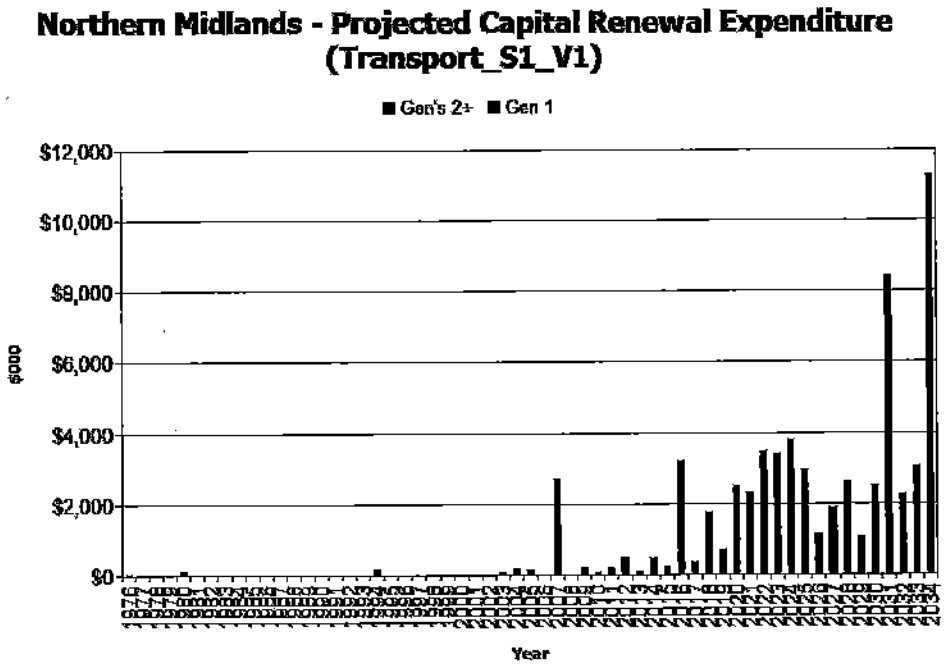
- Municipal Standard Drawings – IPWEA Tasmanian Division
- Municipal Standard Specifications – IPWEA Tasmania Division
- Workplace Health and Safety Act 2000 and Regulations
- Traffic Control Act
- Department of State Growth standards and specifications
- Australian Road Research Board Publications
- Northern Midlands Council: Workplacel Health & Safety Policy
- Other documents may be referred to where additional information or direction is required.

5.4.3 Summary of future renewal and replacement expenditure

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

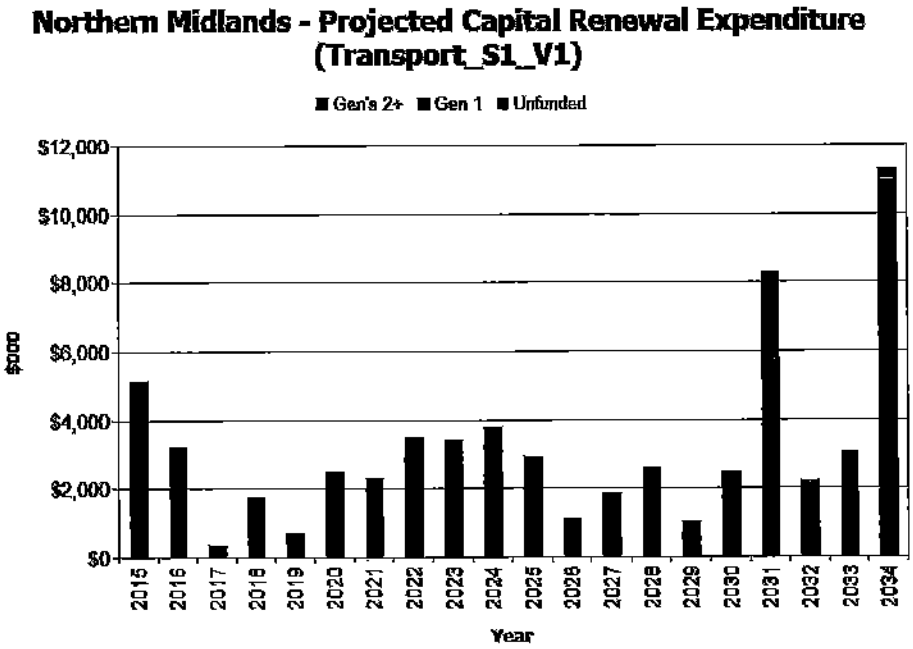
The projected capital renewal and replacement program is shown in Appendix B.

Fig 5: Projected Capital Renewal and Replacement Expenditure



The different generations indicate assets that have relatively short useful lives and are identified for 2nd 3rd asset renewals within the 20 year period (therefore indicating the next generation of asset renewals).

[8] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.



The above figure shows required renewal expenditure for bridge asset components based on the estimated average useful life. This figure is fundamentally derived from the condition assessment performed by Moloney Asset Management Systems (MAMS) in 2014.

Northern Midlands' approach to "just in time" asset management is to renew an asset just prior to spending significant maintenance expenditure that would not have prolonged the life of the asset sufficiently to recover the annualised replacement cost had that asset not been replaced.

In some cases infrastructure assets such as reseals and gravel re-sheets can be renewed or rehabilitated throughout their lifecycle so that their lives may be almost infinite.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2. The unfunded component shown in Year 2015 will be funded from specific additional grant funding allocated to Council under the Stronger Bridge Program and from special additional Roads to Recovery Program.

5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

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

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
Risk/Safety Risk priority is assessed in accordance with Councils' Infrastructure Risk Management Plan which is based on the probability and consequence of failure.	25%
Technical Technical priority is assessed based on the project's ability to improve the road condition and function	20%
Corporate Corporate priority is linked to whether the projects are commitments through a Council resolution or included in Council policy and strategic plan. E.g. extending infrastructure from the town centres out.	20%
Transport – Road Category Is related to the specific road category in Council's road hierarchy of the asset.	15%
Social/Community Impact Priority based on the amount of community benefit through project completion	10%
Environment Environmental impact is assessed based on the significants of the surrounding environment, including the appearance of the built environment.	10%
Total	**100%**

5.5.2 Capital Investment Strategies

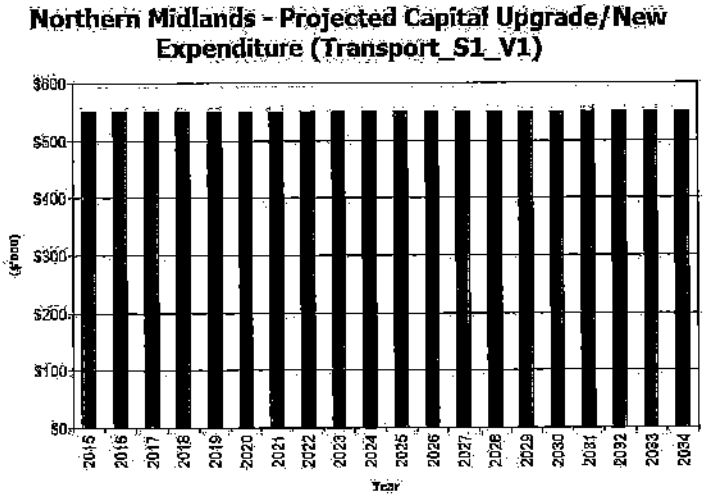
The organisation will plan capital upgrade and new projects to meet level of service objectives by:

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

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

5.5.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6.



The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in 2015 real values.

The upgrade/new projects identified in Council's Capital Works Program are indicative only in regards to the scope and construction costs, design and estimate of works are to be undertaken for all upgrade/new projects.

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

5.6 Disposal Plan

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

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

There is generally no market for sale or transfer of decommissioned road assets, and no assets currently identified for disposal.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
No current identified assets				

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (ie what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- No items identified at this stage.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- No service consequences identified at this stage.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

- No associated risk consequences identified at this stage.

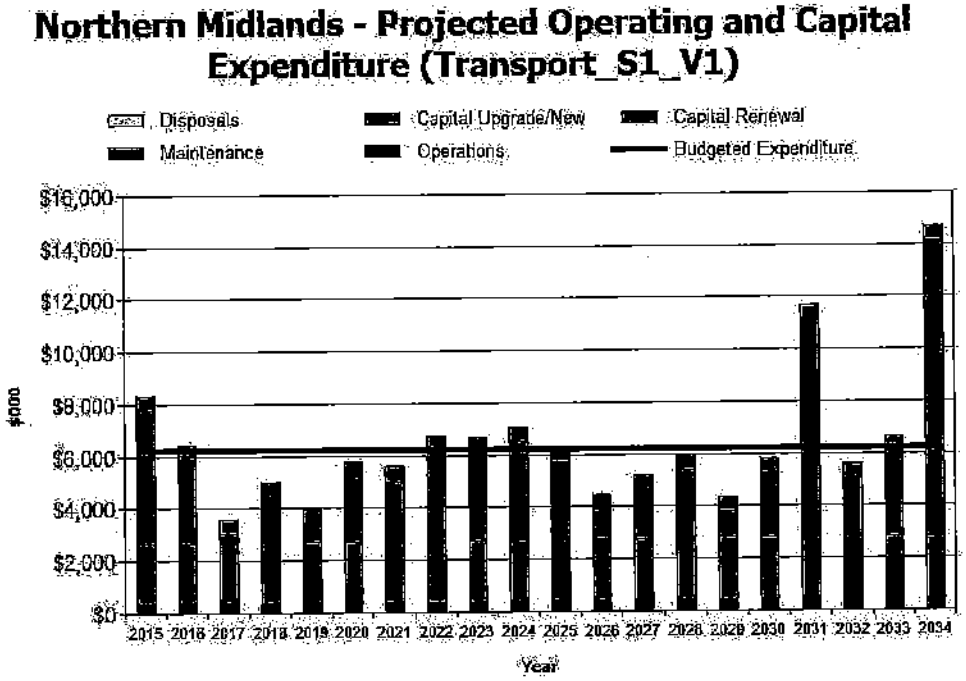
6. FINANCIAL SUMMARY

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

6.1 Financial Statements and Projections

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

Fig 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

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

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[9] 107%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 107%.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is $6.2 million per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $5.5 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

[9] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is $758,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 88% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term – 10 year financial planning period

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

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

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $5.377 million on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $5.516 million on average per year giving a 10 year funding surplus of $139,000 per year. This indicates that Council expects to have 103% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

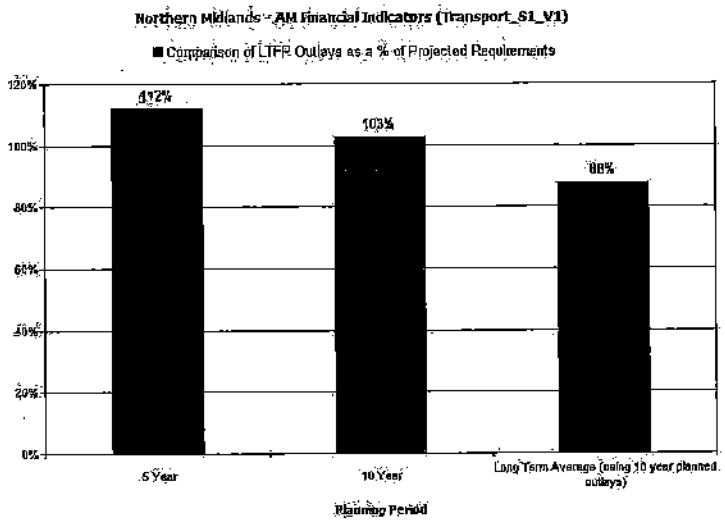
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $4.926 million on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $5.516 million on average per year giving a 5 year funding surplus of $590,000. This indicates that Council expects to have 112% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

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

Figure 7A: Asset Management Financial Indicators



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

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

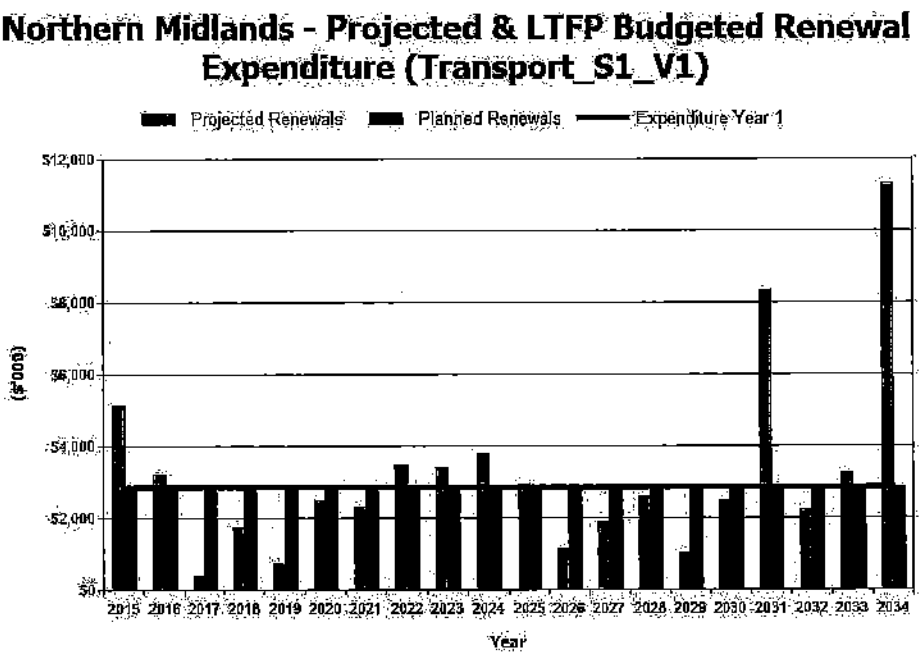


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2015	$5,127	$2,841	$-2,286	$-2,286
2016	$3,201	$2,841	$-360	$-2,645
2017	$364	$2,841	$2,477	$-168
2018	$1,751	$2,841	$1,090	$922
2019	$722	$2,841	$2,119	$3,041
2020	$2,502	$2,841	$339	$3,380
2021	$2,300	$2,841	$541	$3,922
2022	$3,477	$2,841	$-636	$3,286
2023	$3,390	$2,841	$-549	$2,737
2024	$3,776	$2,841	$-935	$1,802
2025	$2,929	$2,841	$-88	$1,714
2026	$1,120	$2,841	$1,721	$3,434
2027	$1,875	$2,841	$966	$4,401
2028	$2,617	$2,841	$224	$4,624
2029	$1,007	$2,841	$1,834	$6,458
2030	$2,474	$2,841	$367	$6,825
2031	$8,321	$2,841	$-5,480	$1,345
2032	$2,211	$2,841	$630	$1,975
2033	$3,235	$2,841	$-394	$1,581
2034	$11,303	$2,841	$-8,462	$-6,880

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

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

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap.**

Council's long term financial plan covers the first 10 years of the 20 year planning period. The total capital renewal expenditure required over the 10 years is $26 million.

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

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2015 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$395	$2,280	$5,127	$550	$200
2016	$396	$2,288	$3,201	$550	$0
2017	$398	$2,296	$364	$550	$0
2018	$399	$2,303	$1,751	$550	$0
2019	$400	$2,311	$722	$550	$0
2020	$402	$2,319	$2,502	$550	$0
2021	$403	$2,327	$2,300	$550	$0
2022	$404	$2,335	$3,477	$550	$0
2023	$406	$2,342	$3,390	$550	$0
2024	$407	$2,350	$3,776	$550	$0

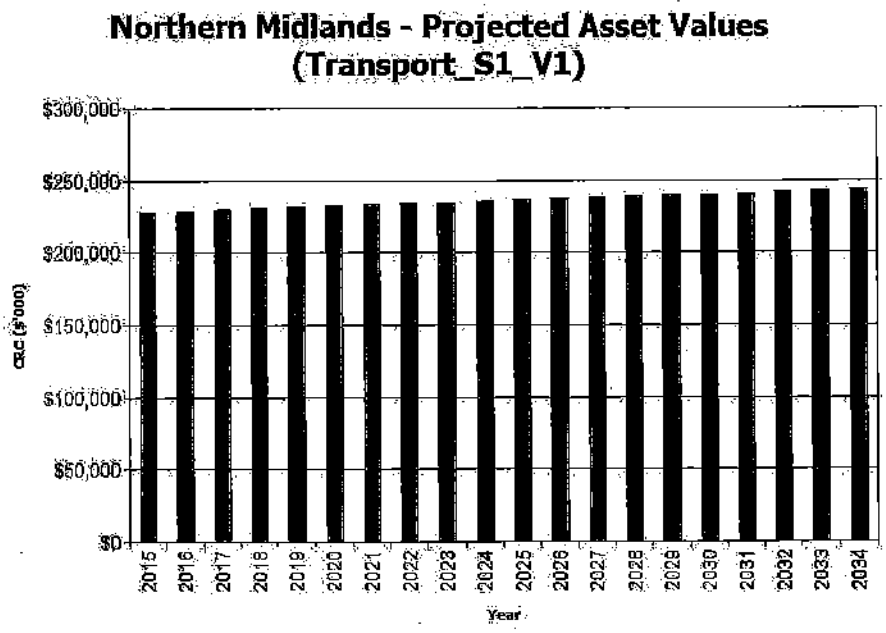
6.2 Funding Strategy

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

6.3 Valuation Forecasts

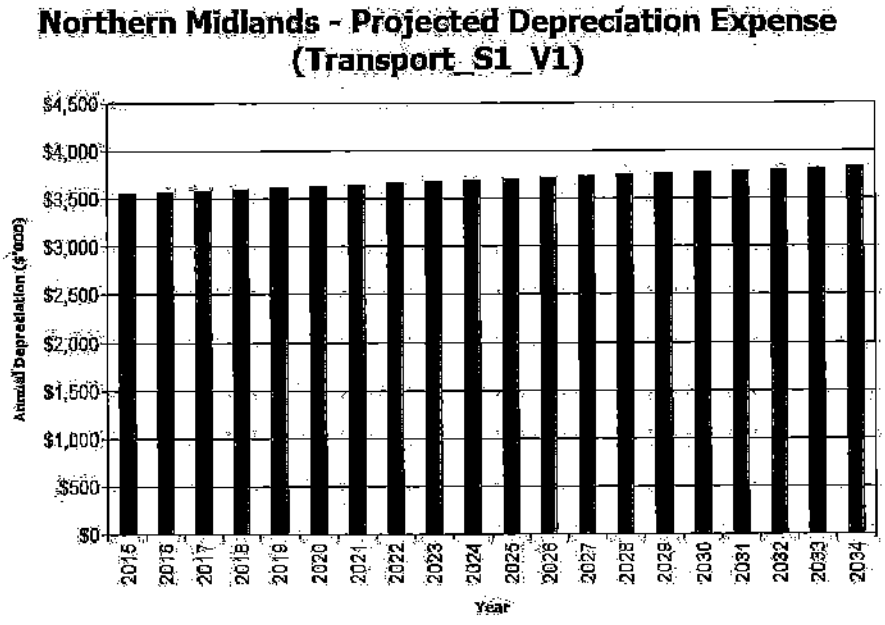
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in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

Figure 9: Projected Asset Values



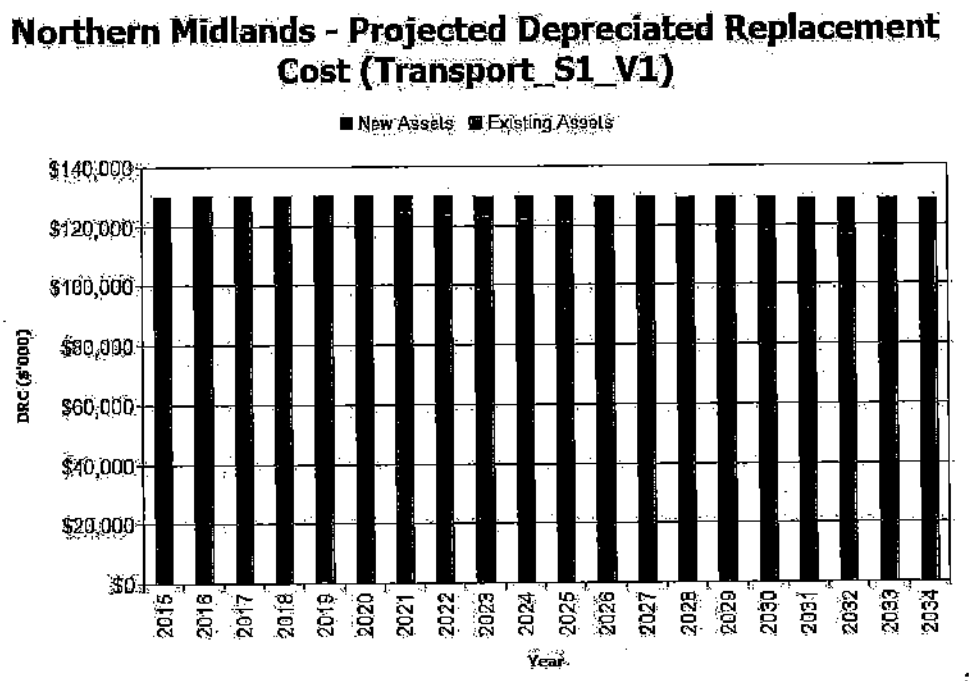
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



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

Figure 11 Projected Depreciated Replacement Cost



6.4 Key Assumptions made in Financial Forecasts

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

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

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

Key Assumption	Risk of Change to Assumption
Average population growth over the planning period to be 0.5%	Higher population growth may lead to greater property subdivision activity resulting in higher future maintenance and renewal costs for Council
Population density to remain reasonably stable	Lower future population density could lead to greater property subdivision activity resulting in higher future maintenance and renewal costs for Council
Asset construction costs to remain stable in real (current dollar) terms	If asset construction costs rise faster than the general rate of inflation, then Council's projected future asset renewal costs will be higher than indicated by this plan.

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale[10] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

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

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

Data	Confidence Assessment	Comment
Demand drivers	Reliable	
Growth projections	Reliable	
Operations expenditures	Reliable	Comparable to long term average actual costs, little variance except for added staff resources
Maintenance expenditures	Reliable	Comparable to long term average actual costs
Projected Renewal exps. - Asset values	Reliable	Standard unit costs based on current pricing and checked to recent capital projects
- Asset residual values	Reliable	Unit costs based on current pricing and compared by other councils by independent expert
- Asset useful lives	Reliable	
- Condition modelling	Reliable	Condition assessments by independent expert undertaken in 5 year intervals and trends compare with visual checking.
- Network renewals	Reliable	Based on condition assessments
- Defect repairs	Reliable	Inspection program assists to manage
Upgrade/New expenditures	Reliable	10 Year program based on condition assessment and visual checking of assessment
Disposal expenditures	Reliable	

Over all data sources the data confidence is assessed as reasonable confidence level for data used in the preparation of this AM Plan.

[10] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Northern Midlands Council currently has four software systems utilised for managing asset data. These are: Technology One 'ECM' Customer Request System; Open Office 'Community - Finesse' Financial System; Intramaps - Geographic Information System for electronic mapping; and 'Moloney Asset Management' System for data storage and asset registers. These four systems contribute to the overall management of the long term planning of its infrastructure assets in order to:

- Know what and where its assets are;
- Know their condition;
- Establish suitable operational, maintenance and renewal regimes to suit the assets and level of services required of them by present and future customers;
- Establish asset function and asset maintenance to meet the needs of the present and future customers;
- Review maintenance practices and optimising operational procedures;
- Implement management strategies for resources and work programs;
- Improve risk management techniques; and
- Identify the true cost of operations and maintenance and predict future capital investments and maintenance expenditure required to optimise the asset function and lifecycle.

The Moloney Asset Management System is not linked to the accounting system, however it is constantly reconciled to the Finesse system.

The ongoing responsibility of the Asset Management system is primarily that of the Asset Management Officer, including the annual valuation adjustments, upkeep of the existing and new/acquired assets, and depreciation calculations of the assets.

Accounting standards and regulations

Council is required to prepare its annual financial report in accordance with Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board and the Local Government Act 1993 (as amended).

AASB 116 Property, plant and equipment, AASB 136 Impairment of Assets, AASB 140 Investment Property and AASB 5 Non-current Assets held for Sale and Discontinued Operations are applied when preparing council's annual financial statements.

The cost method of accounting is used for the initial recording of all assets acquired. Cost is determined as the fair value of the assets given as consideration plus cost incidental to the acquisition including architects fees, engineering design fees, consulting fees, administration charges and all other costs incurred in getting the assets ready for use. In addition the cost of non-current assets constructed by Council, 'cost' includes all material used in construction, direct labour used on the project and an appropriate proportion of overheads.

Non-monetary assets received in the form of grants and donations are recognised as assets and revenues at their fair value at the date of receipt. Fair value means the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

Capital/maintenance threshold

Generally maintenance, repair costs and minor renewals are charged as expenditure when incurred unless the total value exceeds 10% of the assets written down value or increase the economic life by more than 10%. Road reseals, reconstructions, and resheeting are capitalised. Road shouldering, roadside drainage and hotmix patching are expensed.

Expenditure is capitalised when it provides a future economic benefits which extends beyond one year and can be measured reliably. The following limits apply to the recognition of the acquisition of new assets:

Table 7.1.1: Limits to the recognition of the acquisition of new assets

Asset Class	Capitalisation Threshold
Road Infrastructure	$5,000
Bridges	$5,000
Stormwater infrastructure	$5,000
Buildings	$5,000
Heritage	$1,000
Land	Nil
Land Under Roads	Nil
Flood Levee Infrastructure	$5,000
Office Furniture and Equipment	$1,000
Fleet	$1,000
Minor Plant	$1,000

7.1.2 Asset management system guidelines

The asset management policies and references used by Northern Midlands Council include:

- Northern Midlands Asset Management Policy – March 2016
- Northern Midlands Asset Management Strategy – March 2016
- International Infrastructure Management Manual, Association of Local Government
- Australian Infrastructure Financial Management Guidelines

Linkage from asset management to financial system

The key information flows into this asset management plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by council.

The key information flows from this asset management plan are:

- The assumed Works Program and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Plan, annual budget and departmental business plans and budgets.

One of the essential aspects of asset management is to maintain data records to ensure that they are up to date and accurate. Asset Managers are responsible for updating and maintaining the asset data to meet the organisations operational and financial requirements in delivering efficient and effective asset management.

7.2 Improvement Plan

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

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Review depreciable lives of asset categories for better understanding and confidence of intervention levels			
2	Review data collection and recording of street furniture asset class			
3	Review capital works priority assessment criteria			
4	Improve and automate the data collection process			
5	Undertake revaluation earlier in each financial period			
6				
7				
8				
9				
10				

7.3 Monitoring and Review Procedures

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

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

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 12 months of each Council election.

7.4 Performance Measures

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

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

8. REFERENCES

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

Sample Council, 'Strategic Plan 20XX – 20XX',

Sample Council, 'Annual Plan and Budget'.

9. APPENDICES

Appendix A Projected 10 year Capital Renewal and Replacement Works Program

Appendix B Projected 10 year Capital Upgrade/New Works Program

Appendix C LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix D Planned Expenditure for LTFP – in old doc

Appendix E Road Hierarchy and Target Design Standards

Appendix F Inspection Requirements

Appendix G Defect Tolerance levels

Appendix H Risk Assessment

Appendix I Projected Capital Works –

- Road Pavement & Seal Improvement program (based on age, condition, & visual assessment)

- Footpath Improvement Program

- Bridge Improvement Program

Appendix J Road Map

Appendix K Road Project Business Case (Draft)

Appendix L Abbreviations

Appendix M Glossary

Appendix A Projected 10 year Capital Renewal and Replacement Works Program (based on age)

Appendix A Projected 10 year Capital Renewal and Replacement Works Program

Northern Midlands - Report 6 - Appendix B 10 year Renewal & Replacement Program (Transport_S1_V1)

1573	Pavement	Gay St	Geoderich St	Howick St	-39	1976	$26,928	90
1189	Pavement	Story's Creek Rd	19.87 Bridge Seal	Bridge - Storys Ck Bridge	-35	1980	$101,400	80
562.1	Kerb	High St Ross	Church St	Bond St	-24	1991	$6,600	80
923	Pavement	New St Camplb. T	M'Lands H'Way	Leake St	-21	1994	$137,592	90
116	Pavement	Bellevue	00 Midlands Hwy	Seal Change	-12	2003	$69,300	80
1.3	Footpath	Abel Tasman Av.	Union St	Levey Bank	-11	2004	$17,525	70
364	Pavement	Delmont	00 Macquarie River Rd	Seal Change	-11	2004	$161,160	80
774	Pavement	Macquarie River Rd	00 Poatina Hwy	Seal Change	-10	2005	$153,675	70
5241	Bridge	Bridge Street	Un-named Creek	TC	-8	2007	$58,900	30
2030	Bridge	Powranna Road	Macquarie River	T	-8	2007	$1,850,000	30
3177	Bridge	Powranna Road	Macquarie River	TC	-8	2007	$90,600	30
2150	Bridge	Snow Hill Road	Snow Creek	TC	-8	2007	$36,000	30
160	Pavement	Bond St Ross	High	Bridge	-8	2007	$43,240	90
1218	Pavement	Tooms Lake Rd	Seal Change	Seal Change	-8	2007	$216,975	70
1219	Pavement	Tooms Lake Rd	Seal Change	Seal Change	-8	2007	$149,250	70
1400	Pavement	Wilmores La	00 Cressy Main Rd	Loading Ramp	-8	2007	$251,100	70
1567	Unsealed Pavement	Clare St	Grant St	Railway X-ing	-7	2008	$1,888	20
109	Pavement	Bedford St	Start of Seal	Franklin	-6	2009	$8,664	90
307	Pavement	Donara Rd	Bend Right	Start K&C	-6	2009	$145,200	90
1208	Pavement	The Stock Route	Saundridge St	Seal Change	-6	2009	$20,740	90
1573	Seal	Gay St	Geoderich St	Howick St	-6	2009	$1,331	16
1368	Pavement	West St Camplb. T	Seal Change	Pedder St	-5	2010	$15,600	90
1189	Seal	Story's Creek Rd	19.87 Bridge Seal	Bridge - Storys Ck Bridge	-5	2010	$16,224	18
676	Unsealed Pavement	Lakeview Rd	Valleena	Cont Into Forest	-5	2010	$21,200	25
737	Unsealed Pavement	Long Marsh	00 Lake Leake	11.8 Evenville	-5	2010	$13,350	25
802	Seal	Main St Cressy	Stock Route	End RH K&C	-4	2011	$2,674	18
1017	Seal	Ploughmans Crt	Stockmans Rd	End	-4	2011	$10,566	30
1191	Seal	Story's Creek Rd	21.9 Old Storys Ck Rd	Rossarden Rd	-4	2011	$20,160	18
1190	Seal	Story's Creek Rd	Bridge - Storys Ck Bridge	21.9 Old Storys Ck Rd	-4	2011	$41,880	18
112	Unsealed Pavement	Bedford St	End of Seal	End	-4	2011	$3,955	20

689	Unsealed Pavement	Lewis St West	Burghley St	Catherine St	-4	2011	$2,250	20
1020	Unsealed Pavement	Portugal St	Waterloo St	End of Pavement	-4	2011	$1,260	20
1284	Unsealed Pavement	Tunbridge Lane	Cattle Grid	End	-4	2011	$91,350	20
1524	Unsealed Pavement	Wellington St Ross	End of Seal	Waterloo St	-4	2011	$2,976	20
361	Pavement	Delmont	00 Macquarie River Rd	Seal Change	-3	2012	$113,025	80
421	Pavement	Ekkley Perth Nursing Home Rd	Seal Change	Home Ent.	-3	2012	$124,080	80
1190	Pavement	Story's Creek Rd	Bridge - Storys Ck Bridge	21.9 Old Storys Ck Rd	-3	2012	$261,750	80
4	Seal	Adelaide St	Adelaide SBL	Seal Change	-3	2012	$768	18
180	Seal	Bridge St Campb T	Church	Midlands Hwy	-3	2012	$1,971	16
398	Seal	Elizabeth Crt	M'Lands H'Way	Change	-3	2012	$11,201	30
91	Seal	Barclay St	Cambock East	Seal Change	-2	2013	$31,450	30
152	Seal	Blenheim St	St Pauls Pl NBL	Falmouth	-2	2013	$5,376	18
1496	Seal	Bridge Access Rd	Seal Change	Bridge	-2	2013	$1,934	18
177	Seal	Bridge St Campb T	King	Queen	-2	2013	$10,881	20
634	Seal	Kalangaroo Rd	Lake Leake Rd	Ends at Lake	-2	2013	$19,459	18
923	Seal	New St Campb. T	M'Lands H'Way	Leake St	-2	2013	$12,636	18
1058	Seal	Rodgers Ln	Macquarie	Russell	-2	2013	$1,909	20
1260	Seal	Torlesse St	Midlands Hwy	Seal Change	-2	2013	$2,177	20
1364	Seal	West St Campb. T	Start of Seal	M'Lands H'Way	-2	2013	$4,232	18
232.4	Kerb	Burnett St	Pulteney St	Change	-1	2014	$7,130	100
281.2	Kerb	Churchill St	St Pauls Pl NBL	Falmouth	-1	2014	$27,500	80
442.4	Kerb	Falmouth St	Gray	EBL Churchill	-1	2014	$16,610	80
1069.3	Kerb	Rossarden Rd	00 Story Ck	Schell St	-1	2014	$9,240	80
1598.1	Kerb	Russell St Extra Kerb	High St	Junction	-1	2014	$4,400	80
1071	Pavement	Rossarden Rd	Pole No 161	Culvert	-1	2014	$267,300	80
182	Seal	Bridge St Campb T	Pedder St	Bond	-1	2014	$7,455	16
194	Seal	Bridge St South	Adelaide St	Broad St	-1	2014	$2,774	18
195	Seal	Bridge St South	Broad St	Seal Change	-1	2014	$1,640	18
198	Seal	Broad St	Bridge St South	End of Seal	-1	2014	$2,916	18
849	Seal	Marlborough St Longford	00 William St	Chatsworth	-1	2014	$18,096	18
951	Seal	Nivelle St	Badajos St Fence Line	End of Seal	-1	2014	$2,798	16
1095	Seal	Royal George	00 St Pauls SBL	Merrywood	-1	2014	$34,384	18
1205	Seal	The Boulevards Pt 1	Chiswick Rd	Bond	-1	2014	$4,368	16
1529	Seal	U/N Rd Evandale	Logan Rd	End of Seal	-1	2014	$4,419	30
1368	Seal	West St Campb. T	Seal Change	Pedder St	-1	2014	$1,200	18
449	Unsealed Pavement	Forest Hall	00 Midlands Hwy	Old Data Segment	-1	2014	$18,450	25
653	Unsealed Pavement	Kingston Rd	00 Nile Rd	Driveway	-1	2014	$8,000	25

1-240

675	Unsealed Pavement	Lakeview Rd	Gate	Yellceria	-1	2014	$4,000	25
732	Unsealed Pavement	Long Marsh	00 Lake Leake	Pave Change	-1	2014	$32,000	25
1203	Unsealed Pavement	Tasman St Pt 2	Waterloo St	Gate	-1	2014	$4,020	20
1525	Unsealed Pavement	Waterloo St	Wellington St	Portugal St	-1	2014	$3,990	20
310	Pavement	Conara Rd	Gate	End	0	2015	$31,440	90
107	Seal	Beaufront St	Bridge St EOS	Bond St EOS	0	2015	$4,512	18
110	Seal	Bedford St	Franklin	Pavement Change	0	2015	$3,485	18
111	Seal	Bedford St	Montagu	End of Seal	0	2015	$4,858	18
115	Seal	Bellevue	00 Midlands Hwy	Seal Change	0	2015	$24,525	18
267	Seal	Chiswick Rd Ross Access	00 Midlands Hwy	The Boulevards	0	2015	$28,930	18
275	Seal	Church St Pt 1	Glenelg St	West St	0	2015	$24,684	20
438	Seal	Falls Crt	Logan Rd	End	0	2015	$4,752	30
492	Seal	Glenelg St	Pedder St BOK	Church	0	2015	$10,132	20
774	Seal	Macquarie River Rd	00 Poatina Hwy	Seal Change	0	2015	$13,363	16
786	Seal	Macquarie St Cressy	Condition Change	Seal Change	0	2015	$15,493	30
852	Seal	Mason St Campb T	Leake St	Midlands Hwy	0	2015	$4,956	18
865	Seal	Merrywood	00 Royal George Rd	End of Seal	0	2015	$4,770	18
879	Seal	Montague St	Midland Hwy	Forster	0	2015	$6,080	20
1133	Seal	Shearers Crt	Stockmans Rd	End	0	2015	$12,402	30
1134	Seal	Shepherds Crt	Stockmans Rd	End	0	2015	$13,159	30
1169	Seal	Stockmans Rd	Logan Rd	End	0	2015	$37,440	30
1366	Seal	West St Campb. T	Seal Change	Seal Change	0	2015	$6,882	18
						Subtotal	$5,126,615	
7350	Bridge	Macquarie Road	Lake River	T	1	2016	$1,250,000	30
1130	Bridge	Woolmers Lane	Macquarie River	T	1	2016	$1,500,000	30
276.4	Footpath	Church St Ross	The Boulevards	Badagos	1	2016	$900	15
562.4	Footpath	High St Ross	Church St	Bond St	1	2016	$3,210	15
1427.3	Footpath	William St Extra F/P	M'Lands H'Way	East St	1	2016	$228	15
522	Pavement	Green Rises	4.79 Armstrongs	Maitland	1	2016	$256,500	70
5	Seal	Adelaide St	Seal Change	End of Seal	1	2016	$2,340	18
116	Seal	Bellevue	00 Midlands Hwy	Seal Change	1	2016	$6,468	16
189	Seal	Bridge St Campb T	Bond	Clare	1	2016	$7,600	16
191	Seal	Bridge St Campb T	Midlands Hwy	Pedder St	1	2016	$5,963	20
255	Seal	Chatsworth La	00 Marlborough	Golf Club	1	2016	$5,004	18
305	Seal	Conara Rd	Midland Hwy	Railway X-Ing	1	2016	$2,400	14
372	Seal	Drovers Crt	Stockmans Rd	End	1	2016	$12,157	30

1-241

417	Seal	English Town Rd	00 Deddington Road	end of seal	1	2016	$4,776	20
431	Seal	Fairdough St	Midlands Hwy	Elizabeth St	1	2016	$7,409	16
449	Seal	Forster St	Franklin St	Seal Change	1	2016	$8,052	16
450	Seal	Forster St	Seal Change	Montagu	1	2016	$2,124	16
475	Seal	George St Perth	End Kerb	Gate	1	2016	$4,149	20
493	Seal	Glenelg St	Church St	Queen	1	2016	$12,620	20
514	Seal	Grant St	Bond St	End Seal	1	2016	$3,858	16
543	Seal	High St Camp/T	Church	Cond Change	1	2016	$1,839	18
545	Seal	High St Camp/T	Elizabeth	Queen	1	2016	$11,794	18
615	Seal	Isis Rd	00 Macquarie River	Seal Change	1	2016	$13,152	18
721	Seal	Logan Rd	00 Fluxtable St Evendale	Seal Change	1	2016	$3,276	18
1088	Seal	Royal George	00 St Pauls SBL	10.32 St Pauls Dome	1	2016	$13,104	18
1206	Seal	The Boulevards Pt 1	Bond	End Seal	1	2016	$7,874	18
1233	Seal	Tooms Lake Rd	Seal Change	15.43 Cattle Grid	1	2016	$8,700	18
1265	Seal	Truelands Rd	East St	Seal Change	1	2016	$497	18
1267	Seal	Truelands Rd	Seal Change	Seal Change	1	2016	$17,127	18
1304	Seal	Union St	Seal Change	Wellington St	1	2016	$4,828	18
1325	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	1	2016	$19,380	18
1365	Seal	West St Campb. T.	M'Lands H'Way	Seal Change	1	2016	$5,551	18
						Subtotal	$3,200,881	
B12	Pavement	Main St Perth	Clarence	Start RH K&C	2	2017	$24,000	70
59	Seal	Auburn Rd	00 Midlands Hwy	Culvert	2	2017	$7,020	18
89	Seal	Barclay St	High St NBL	Murray	2	2017	$15,101	14
109	Seal	Bedford St	Start of Seal	Franklin	2	2017	$547	18
113	Seal	Bellevue	00 Midlands Hwy	Seal Change	2	2017	$14,301	16
186	Seal	Bridge St Ross	West end of Bridge	Church St	2	2017	$11,029	14
279	Seal	Church St Ross	Change	Divided Rd	2	2017	$11,280	14
278	Seal	Church St Ross	High	Change	2	2017	$24,998	14
474	Seal	George St Perth	Clarence St	End Kerb	2	2017	$8,942	20
495	Seal	Glenesk Rd	00 Nile Rd	Seal Change	2	2017	$29,222	18
656	Seal	Lake River Rd	00 Macquarie River	Seal Change	2	2017	$19,976	18
717	Seal	Logan Rd	Seal Change	Seal Change	2	2017	$20,558	30
755	Seal	Macquarie River Rd	Seal Change	11.29 Macquarie Settlement	2	2017	$21,174	18
851	Seal	Mason St Campb T	Davidson St	Leake St	2	2017	$4,469	18
888	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	2	2017	$11,600	18
941	Seal	Nile Rd	00 High St Evendale	Seal Change	2	2017	$9,936	18

921	Seal	Panoc St	Pave Change	Start K&C	2	2017	$1,503	16
922	Seal	Panoc St	Start K&C	Conara Rd	2	2017	$2,880	16
1039	Seal	Pulpney St	Packenham St	Catherine	2	2017	$4,560	16
1064	Seal	Rossarden Rd	00 Story Ck	Culvert	2	2017	$48,320	18
1094	Seal	Royal George	00 St Pauls SBL	Bridge	2	2017	$38,184	18
229	Unsealed Pavement	Burghley St Longford	Bulwer	Lewis	2	2017	$2,800	20
337	Unsealed Pavement	Davidson St	Mason St	End of Loop	2	2017	$1,440	20
442	Unsealed Pavement	Falmouth St	Gray	EBL Churchill	2	2017	$2,490	10
445	Unsealed Pavement	Fitzroy St	End of Seal	End of Road	2	2017	$270	20
924	Unsealed Pavement	New St Campb. T	Leake St	Change	2	2017	$663	20
1569	Unsealed Pavement	Portugal St (South)	Beaufort Rd	Female Factory Ent	2	2017	$795	20
1063	Unsealed Pavement	Rossarden 101	EOS Rossarden Rd Ch 3795	Rossarden 10	2	2017	$3,810	20
1283	Unsealed Pavement	Tunbridge Lane	00 Tunbridge Tier	Cattle Grid	2	2017	$28,050	20
						Subtotal	$363,916	
2380	Bridge	Royal George Road	Lewis Hill Creek	TC	3	2018	$78,276	30
81.4	Footpath	Badajos St	Church St	Seal Change	3	2018	$450	15
82.4	Footpath	Badajos St	Seal Change	Bond St	3	2018	$2,760	15
91.2	Footpath	Barclay St	Cambock East	Seal Change	3	2018	$2,940	15
89.4	Footpath	Barclay St	High St NBL	Murray	3	2018	$3,927	15
90.1	Footpath	Barclay St	Murray	Cambock East	3	2018	$24,221	30
107.4	Footpath	Beaufront St	Bridge St EOS	Bond St EOS	3	2018	$3,570	15
159.4	Footpath	Bond St Ross	Badajos St	High	3	2018	$3,060	15
302.4	Footpath	Collins St Evendale	Huxtable WBL	High St	3	2018	$6,510	15
820.2	Footpath	Cox St	Nile EBL	End	3	2018	$2,682	15
552.2	Footpath	High St Evandale	Collins	Seal Change	3	2018	$4,393	15
562.2	Footpath	High St Ross	Church St	Bond St	3	2018	$3,210	15
795.3	Footpath	Main St Cressy	Seal Change	Saundridge	3	2018	$10,974	30
805.3	Footpath	Main St Perth	Phillip	Railway X-Ing	3	2018	$6,438	30
347.2	Footpath	Nile Rd	Start Kerb Left	Seal Change	3	2018	$3,515	15
999.4	Footpath	Paton St	Burghley St	End of Seal	3	2018	$600	15
1058.2	Footpath	Rodgers La	Macquarie	Russell	3	2018	$885	15
1150.2	Footpath	Spencers Lane	Cressy Rd	Gatenby St	3	2018	$1,640	15
1361.9	Footpath	West Cambok La	Main Rd NBL	Side Entry Pit	3	2018	$852	15
1389.4	Footpath	William St Longford	George St	Burghley St	3	2018	$8,074	30
1108	Pavement	Saundridge Rd	Change	Seal Change	3	2018	$473,825	70
21	Seal	Armstrongs La	00 Bishopbourne	Green Rise	3	2018	$21,492	18

20	Seal	Armstrongs La	00 Bishopbourne	Seal Change	3	2018	$22,664	18
24	Seal	Arthur St	Seal Change	Falmouth	3	2018	$2,052	18
48	Seal	Ashby Rd	00 Midlands Hwy	Seal Change	3	2018	$10,735	18
72	Seal	Auburn Rd	00 Midlands Hwy	Gate RHS	3	2018	$21,400	18
58	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	3	2018	$22,746	18
60	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	3	2018	$2,256	18
90	Seal	Barclay St	Murray	Cambock East	3	2018	$18,595	14
192	Seal	Barton Rd	00 Midlands Hwy	Bridge	3	2018	$8,352	18
139	Seal	Blackwood Creek Rd	00 Saundridge	Seal Change	3	2018	$1,269	18
156	Seal	Bond St Camph. T	Midlands Hwe.	Grant St	3	2018	$7,333	18
197	Seal	Bridge St South	Montagu	Mason	3	2018	$5,165	18
235	Seal	Cairns St	Union St	End	3	2018	$5,124	18
249	Seal	Catherine St	End Kerb	Cressy Rd	3	2018	$16,845	18
1447	Seal	Chintah Rd	Seal Change	Seal Change	3	2018	$19,494	18
1446	Seal	Chintah Rd	Seal Change	Seal Change	3	2018	$20,292	18
277	Seal	Church St Ross	Badagos	High	3	2018	$17,298	14
276	Seal	Church St Ross	The Boulevards	Badagos	3	2018	$10,687	14
310	Seal	Conara Rd	Gate	End	3	2018	$3,054	16
309	Seal	Conara Rd	Panac St	Gate	3	2018	$5,666	16
320	Seal	Cox St	Nile EBL	End	3	2018	$6,870	18
368	Seal	Devon Hills	00 Midlands Hwy	Christine	3	2018	$31,155	18
387	Seal	East St	Pedder St	Change	3	2018	$11,437	18
441	Seal	Falmouth St	Arthur	Gray	3	2018	$4,283	18
440	Seal	Falmouth St	Blenheim	Arthur	3	2018	$4,677	18
452	Seal	Franklin St	M'Lands H'Way	Forster	3	2018	$2,863	16
511	Seal	Goderich St	Seal Change	Gay St	3	2018	$3,281	18
507	Seal	Goderich St	William St	Archer St	3	2018	$4,482	18
546	Seal	High St Camp/T	Queen	King	3	2018	$9,995	18
720	Seal	Logan Rd	00 Huntable St Evendale	Seal Change	3	2018	$27,132	18
785	Seal	Macquarie St Cressy	Gatenby St	Condition Change	3	2018	$14,866	30
822	Seal	Malcombe St	Wellington St	Lycock	3	2018	$3,373	18
846	Seal	Marlborough St Longford	00 William St	End of Seal	3	2018	$24,416	18
999	Seal	Paton St	Burghley St	End of Seal	3	2018	$1,747	16
1037	Seal	Pultney St	Wellington St	Marlborough St	3	2018	$9,311	16
1065	Seal	Rossarden Rd	00 Story Ck	Seal Change	3	2018	$32,160	18
1069	Seal	Royal George	00 St Pauls SBL	Seal Change	3	2018	$21,412	18
1109	Seal	Saundridge Rd	Seal Change	Seal Change	3	2018	$11,400	18

1204	Seal	Tasmania St	Lewis St	Bulwer	3	2018	$6,182	18
1241	Seal	Tooms Lake Rd	19.28 Cattle Grid	End Seal	3	2018	$2,340	18
1218	Seal	Tooms Lake Rd	Seal Change	Seal Change	3	2018	$28,167	18
1259	Seal	Torlesse St	Seal Change	Midlands Hwy	3	2018	$1,368	18
1268	Seal	Truslands Rd	Seal Change	Seal Change	3	2018	$13,910	18
1317	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	3	2018	$30,674	18
1318	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	3	2018	$16,064	18
1369	Seal	West St Campb. T	Pedder St	Church	3	2018	$5,800	18
1367	Seal	West St Campb. T	Seal Change	Seal Change	3	2018	$1,656	18
1401	Seal	Wilmores La	Loading Ramp	Seal Change	3	2018	$38,065	18
1418	Seal	Woolmers La	00 Midlands Hwy	9.56 Brickendon	3	2018	$27,610	12
199	Unsealed Pavement	Brookdene Rd	Bishopsbourne	End	3	2018	$18,375	25
202	Unsealed Pavement	Brumby St	00 Brickendon	Weston	3	2018	$9,790	25
299	Unsealed Pavement	Cleveland Stat.	Midlands Hwy	End	3	2018	$1,375	25
506	Unsealed Pavement	Freelands Rd	Cressy Rd	End at Gate	3	2018	$24,750	25
586	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	0.51 Cattle Grid	3	2018	$26,600	25
595	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Change	3	2018	$38,850	25
594	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Wilderness Tk	3	2018	$52,850	25
734	Unsealed Pavement	Long Marsh	00 Lake Leake	Change	3	2018	$40,000	25
733	Unsealed Pavement	Long Marsh	00 Lake Leake	Pave Change	3	2018	$48,000	25
908	Unsealed Pavement	Murlett St	Change	Bend	3	2018	$5,940	25
1077	Unsealed Pavement	Rothbury	00 Macurarie River	End	3	2018	$22,500	25
1160	Unsealed Pavement	St Pauls Dome	00 Royal George Rd	Bridge	3	2018	$9,625	25
1162	Unsealed Pavement	St Pauls Dome	00 Royal George Rd	Gate	3	2018	$6,575	25
1167	Unsealed Pavement	Stanhope Rd	00 Esk Hwy	Gate	3	2018	$29,900	25
1166	Unsealed Pavement	Stanhope Rd	Creek Rd	Change	3	2018	$37,500	25
1272	Unsealed Pavement	Truslands Rd	Start of Seal	End Seal	3	2018	$3,125	25
1278	Unsealed Pavement	Tubbs Rd	00 Rop Valley	ends at gate	3	2018	$10,290	25
1385	Unsealed Pavement	Wilderness Tk	00 Honeysuckle Rd	End	3	2018	$47,513	25
1384	Unsealed Pavement	Wilderness Tk	00 Honeysuckle Rd	Gate	3	2018	$11,988	25
1421	Unsealed Pavement	Woorak	00 Midlands Hwy	Ends at Gate	3	2018	$15,700	25
1422	Unsealed Pavement	Yalleena Rd	Lakeview	Kalangadoo	3	2018	$9,275	25
						Subtotal	$1,751,038	
235	Pavement	Carins St	Union St	End	4	2019	$76,225	70
34	Seal	Arthur St Perth	Seal Change	Seal Change	4	2019	$859	16
57	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	4	2019	$23,789	18

1-245

56	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	4	2019	$1,152	18
100	Seal	Barton Rd	00 Midlands Hwy	Pave Change	4	2019	$44,746	20
99	Seal	Barton Rd	00 Midlands Hwy	Seal Change	4	2019	$36,194	20
140	Seal	Blackwood Creek Rd	00 Saundridge	Seal Change	4	2019	$13,406	16
153	Seal	Blenhiem St.	Falmouth	Seal Change	4	2019	$7,571	18
178	Seal	Brickendon St	00 Woolmers Lane	Cressy	4	2019	$15,680	18
196	Seal	Bridge St South	Seal Change	Montagu	4	2019	$1,201	18
225	Seal	Burghley St Longford	High St	Pultney St	4	2019	$8,891	18
263	Seal	Chintah Rd	00 Powarranna	Seal Change	4	2019	$7,342	18
1445	Seal	Chintah Rd	Seal Change	Seal Change	4	2019	$8,436	18
295	Seal	Clarendon Stat.	00 Nile Road	Seal Change	4	2019	$39,672	18
371	Seal	Devon Hills	00 Midlands Hwy	Devon Hills	4	2019	$22,226	18
370	Seal	Devon Hills	00 Midlands Hwy	Seal Change	4	2019	$26,420	18
381	Seal	Drummond St pt.2	Youll Main Rd	End Seal	4	2019	$2,133	20
384	Seal	East Cambok La	Barclay St	Change	4	2019	$14,976	30
394	Seal	Edgar St	Forstor St	Midlands Hwy	4	2019	$3,143	16
422	Seal	Esplanade Camp. T	Midlands Hwy	Change	4	2019	$8,282	20
464	Seal	George St Longford	Packenham St	William St	4	2019	$3,800	18
517	Seal	Goose Green Pl	Pultney St	Change	4	2019	$16,878	30
522	Seal	Green Rises	4,79 Armstrongs	Maldand	4	2019	$34,200	18
534	Seal	Hay St	Burghley St	Smith St	4	2019	$9,464	18
555	Seal	High St Longford	Marlborough St	Packenham St	4	2019	$6,257	16
579	Seal	Hobhouse St	Catherina St	Burghley St	4	2019	$6,323	18
584	Seal	Honeysuckle Gr	End Brick Pave	End	4	2019	$12,204	30
701	Seal	Liffey Rd	Seal Change	Culvert	4	2019	$36,500	18
722	Seal	Logan Rd	00 Huxtable St Evendale	Seal Change	4	2019	$17,066	18
806	Seal	Main St Perth	Railway X-ing	Mary	4	2019	$4,582	20
823	Seal	Malcombe St	Lycock	Marlborough St	4	2019	$12,160	18
834	Seal	Marchington	Hobart Road	End	4	2019	$800	18
907	Seal	Muriett St	Church St	End Seal	4	2019	$2,501	16
1066	Seal	Rossarden Rd	00 Story Ck	Seal Change	4	2019	$9,242	18
1087	Seal	Royal George	00 St Pauls SBL	Old Seal Change	4	2019	$20,140	18
1081	Seal	Royal George	00 St Pauls SBL	Seal Change	4	2019	$23,400	18
1174	Seal	Story's Creek Rd	00 Esk Hwy	Seal Change	4	2019	$19,642	18
1202	Seal	Tasman St Pt 1	Bond St	End of Seal	4	2019	$1,726	16
1240	Seal	Tooms Lake Rd	End Floodway	19.28 Cattle Grid	4	2019	$27,262	18
1237	Seal	Tooms Lake Rd	Seal Change	17.39 Honeysuckle	4	2019	$10,700	18

1–246

1262	Seal	Torlesse St	Change	Bedford St Pt 2	4	2019	$864	18
1290	Seal	Tunbridge Tier Rd	00 Midlands Hwy	Seal Change	4	2019	$6,612	18
1328	Seal	Valleyfield Rd	00 Barton Rd	Macquarie	4	2019	$20,700	18
1329	Seal	Verwood Rd	00 Auburn Rd	2.49 Cattle Grid	4	2019	$10,677	20
1351	Seal	Wellington St Longford	Seal Change	Seal Change	4	2019	$7,612	16
1377	Seal	White Hills Rd	Barclay St at 100 kph Sign	Seal Change	4	2019	$7,788	18
1379	Seal	White Hills Rd	Seal Change	Dalmess	4	2019	$21,760	18
1394	Seal	William St Perth	Elizabeth St	End	4	2019	$3,818	18
1426	Seal	Youl Main Rd	No. 33	No 21	4	2019	$2,492	20
						Subtotal	$721,612	
3767	Bridge	Royal George Road	Un-named Creek	TC	5	2020	$72,000	30
31.3	Footpath	Arthur St Evand	Macquarie	Leopold	5	2020	$460	15
83.4	Footpath	Badajos St	Bond St	Park St	5	2020	$1,416	15
91.4	Footpath	Barclay St	Cambock East	Seal Change	5	2020	$3,480	15
89.1	Footpath	Barclay St	High St NBL	Murray	5	2020	$595	15
187.2	Footpath	Bridge St Ross	Church St	Seal Change	5	2020	$1,026	15
187.4	Footpath	Bridge St Ross	Church St	Seal Change	5	2020	$484	15
188.2	Footpath	Bridge St Ross	Seal Change	Beaufort	5	2020	$1,012	15
188.4	Footpath	Bridge St Ross	Seal Change	Beaufort	5	2020	$660	15
186.2	Footpath	Bridge St Ross	West end of Bridge	Church St	5	2020	$270	15
320.4	Footpath	Cox St	Nile EBL	End	5	2020	$3,306	15
423.2	Footpath	Esplanade Camp. T	Change	Bridge St	5	2020	$414	15
422.2	Footpath	Esplanade Camp. T	Midlands Hwy	Change	5	2020	$2,646	15
550.2	Footpath	High St Evendale	Barclay	Russell	5	2020	$9,856	15
550.4	Footpath	High St Evendale	Barclay	Russell	5	2020	$15,322	15
549.2	Footpath	High St Evendale	Cambock Loa West	Barclay	5	2020	$5,280	15
548.2	Footpath	High St Evendale	Leighlands 4 12 m	Cambock Loa West	5	2020	$627	15
610.2	Footpath	Huxtable Lane	Russell St	Collins St	5	2020	$1,680	15
642.2	Footpath	King St Cressy	Bend	Archer St	5	2020	$4,689	15
641.2	Footpath	King St Cressy	Cressy Rd	Bend	5	2020	$1,886	15
641.4	Footpath	King St Cressy	Cressy Rd	Bend	5	2020	$2,180	15
687.4	Footpath	Leopold St	Change	Barclay St	5	2020	$2,263	15
789.4	Footpath	Macquarie St Evand	Barclay St SBL	Arthur	5	2020	$1,060	15
909.4	Footpath	Murray St	Barclay St SBL	Arthur	5	2020	$546	15
1571.2	Footpath	Nile Rd	Seal Change	Bridge	5	2020	$2,340	15
921.2	Footpath	Panea St	Start K&C	Conara Rd	5	2020	$11,284	20

1354.4	Footpath	Wellington St Longford	Pultney	Malcombe	5	2020	$4,050	15
1351.2	Footpath	Wellington St Longford	Seal Change	Seal Change	5	2020	$4,728	15
1352.2	Footpath	Wellington St Longford	Seal Change	Swan	5	2020	$3,816	15
1342.2	Footpath	Wellington St SB C/W	Railway X-Ing	Start K&C	5	2020	$256	15
1361.1	Footpath	West Cambok La	Main Rd NBL	Side Entry Pit	5	2020	$30	15
1361.4	Footpath	West Cambok La	Main Rd NBL	Side Entry Pit	5	2020	$868	15
1362.3	Footpath	West Cambok La	Side Entry Pit	Change	5	2020	$1,560	15
1362.4	Footpath	West Cambok La	Side Entry Pit	Change	5	2020	$4,960	15
919.4	Kerb	Nevis St	EBL Rossarden Rd	End Seal	5	2020	$2,727	15
1045.2	Kerb	Queen St	Glenalg St	End	5	2020	$518	15
105	Pavement	Barton Rd	00 Midlands Hwy	Seal Change	5	2020	$395,175	60
9	Seal	Anstey St	Cracroft St	End K&C	5	2020	$3,101	16
37	Seal	Arthur St Perth	Rail X	Clarence St	5	2020	$9,308	18
73	Seal	Auburn Rd	00 Midlands Hwy	12.10 Verwood	5	2020	$29,300	18
101	Seal	Barton Rd	00 Midlands Hwy	10.50 Bridge	5	2020	$6,320	20
94	Seal	Barton Rd	00 Midlands Hwy	Old Seal Change	5	2020	$20,800	18
93	Seal	Barton Rd	00 Midlands Hwy	Old Seal Change	5	2020	$34,736	18
95	Seal	Barton Rd	00 Midlands Hwy	Seal Change	5	2020	$19,864	18
119	Seal	Bellevue	00 Midlands Hwy	Ends at Gate	5	2020	$35,292	18
148	Seal	Blackwood Creek Rd	00 Saunderidge	11.89 Musk Valley	5	2020	$46,800	18
145	Seal	Blackwood Creek Rd	00 Saunderidge	Change	5	2020	$22,000	18
144	Seal	Blackwood Creek Rd	00 Saunderidge	Change	5	2020	$21,000	18
146	Seal	Blackwood Creek Rd	00 Saunderidge	Hop Valley	5	2020	$34,068	18
150	Seal	Blackwood Creek Rd	00 Saunderidge	Liffey	5	2020	$30,360	18
141	Seal	Blackwood Creek Rd	00 Saunderidge	Seal Change	5	2020	$18,127	18
160	Seal	Bond St Ross	High	Bridge	5	2020	$4,343	18
179	Seal	Bridge St Campb T	Hamilton	Church	5	2020	$9,181	18
178	Seal	Bridge St Campb T	Queen	Hamilton	5	2020	$5,180	18
205	Seal	Brumby St	00 Brickendon	Haslewood	5	2020	$13,440	18
220	Seal	Bulwer St	Catherine	Burghley	5	2020	$5,837	18
223	Seal	Burghley St	Start Seal	Crossy	5	2020	$9,530	18
224	Seal	Burghley St Longford	William St	High St	5	2020	$9,996	18
246	Seal	Catherine St	Bulwer St	Talbot	5	2020	$11,632	18
248	Seal	Catherine St	Cracroft St	End Kerb	5	2020	$5,859	20
247	Seal	Catherine St	Talbot	Cracroft St	5	2020	$4,655	20
261	Seal	Chintah Rd	00 Powaranna	Seal Change	5	2020	$10,602	18
260	Seal	Chintah Rd	00 Powaranna	Seal Joint	5	2020	$27,960	18

1-248

268	Seal	Christine Av	Devon Hills Rd	End	5	2020	$11,544	18
286	Seal	Claire St	Bridge St	End Seal	5	2020	$5,244	18
302	Seal	Collins St Evendale	Huxtable WBL	High St	5	2020	$8,454	16
307	Seal	Conara Rd	Bend Right	Start K&C	5	2020	$34,485	18
306	Seal	Conara Rd	Railway X-ing	Bend Right	5	2020	$5,557	18
329	Seal	Cromwell St	End Left Kerb	Width Change	5	2020	$3,529	18
355	Seal	Deddington	00 Nile Road	15.03 Bridge	5	2020	$3,900	18
345	Seal	Deddington	00 Nile Road	9.09 Bryants	5	2020	$27,450	18
353	Seal	Deddington	00 Nile Road	End of Seal	5	2020	$4,840	18
344	Seal	Deddington	00 Nile Road	Seal Change	5	2020	$60,720	18
369	Seal	Devon Hills	00 Midlands Hwy	Loop Rd	5	2020	$26,668	18
400	Seal	Elizabeth St pt 1	Clarence	End	5	2020	$4,394	18
399	Seal	Elizabeth St pt 1	William St	Clarence	5	2020	$6,336	18
439	Seal	Falmouth St	EBL St Pauls Pl	Blenheim	5	2020	$2,322	18
444	Seal	Fitzroy St	Bridge St SBL	End of Seal	5	2020	$3,318	18
446	Seal	Fore St	Frederick St	End	5	2020	$4,259	18
465	Seal	George St Longford	William St	Archer St	5	2020	$6,963	18
500	Seal	Glenesk Rd	00 Nile Rd	Seal Change	5	2020	$23,920	18
508	Seal	Goderich St	Archer St	Smith St	5	2020	$7,288	18
523	Seal	Green Rises	Maitland	Change	5	2020	$26,680	18
554	Seal	High St Longford	Wellington St	Marlborough St	5	2020	$9,537	18
570	Seal	Hobart Rd	1.70 Marchington	Seal Change	5	2020	$53,025	18
577	Seal	Hobhouse St	Marlborough St	Packenham St	5	2020	$6,566	18
578	Seal	Hobhouse St	Packenham St	Catherine St	5	2020	$7,222	18
585	Seal	Honeysuckle Gr	Barclay St NBL	Start Brick Pave	5	2020	$4,662	30
608	Seal	Howick St	Park St	Width Change	5	2020	$4,447	18
618	Seal	Isis Rd	00 Macquarie River	Seal Change	5	2020	$16,271	18
707	Seal	Liffey Rd	00 Bishopbourne Rd	14.13 Bracknell	5	2020	$1,056	18
719	Seal	Logan Rd	00 Huxtable St Evendale	Gunn St	5	2020	$7,344	18
869	Seal	Mona Vale Rd	00 Midlands Hwy	Seal Change	5	2020	$4,680	14
903	Seal	Munden La	00 Cressy Rd	End Seal	5	2020	$40,806	18
906	Seal	Murfett St	Change	Church St	5	2020	$4,728	18
905	Seal	Murfett St	Saundridge St	Seal Change	5	2020	$1,640	16
939	Seal	Nile Rd	00 High St Evendale	11.80 Deddington	5	2020	$19,477	18
933	Seal	Nile Rd	00 High St Evendale	Bryants	5	2020	$27,083	18
975	Seal	Pakenham St	Hortle	Malcombe St	5	2020	$3,128	18
974	Seal	Pakenham St	Pultney St	Hortle	5	2020	$4,582	18

1–249