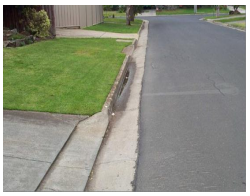
Wyndham City Council

July 2011



Road Asset Management Plan

wyndhamcity

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Infrastructure Management Consultants

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Contents

1.0 Introduction

The Wyndham City Council (WCC) is custodian of an extensive range of community assets it provides to facilitate delivery of its services to the community. This includes the roads for which it has responsibility under the Road Management Act 2004, including Ancillary Areas, in accordance with the Road Management Plan.

The City of Wyndham "*Register of Public Roads"* provides additional details of each of the roads for which Council is responsible; however the Register is not an "incorporated document" in this Plan.

This Road Asset Management Plan has been developed to manage Wyndham's municipal road system, taking into consideration the important links provided by the State road network. The plan has been established to provide Council with a road system, which caters for the needs of those who reside within the City or visit its many attractions.

The road network in Wyndham comprises of:

- 1,079 km of Roads both Sealed and Unsealed;
- 888 km of Pathways;
- 1,601 km of Kerb and Channel;
- 46 Bridges;
- 82 Culverts;
- 8,522 Street Furniture;
- 9,750 Signs;
- 69 Road Signals and Crossings; and
- 2,018 Traffic Management Devices.

The road networks are shown in the following figure:

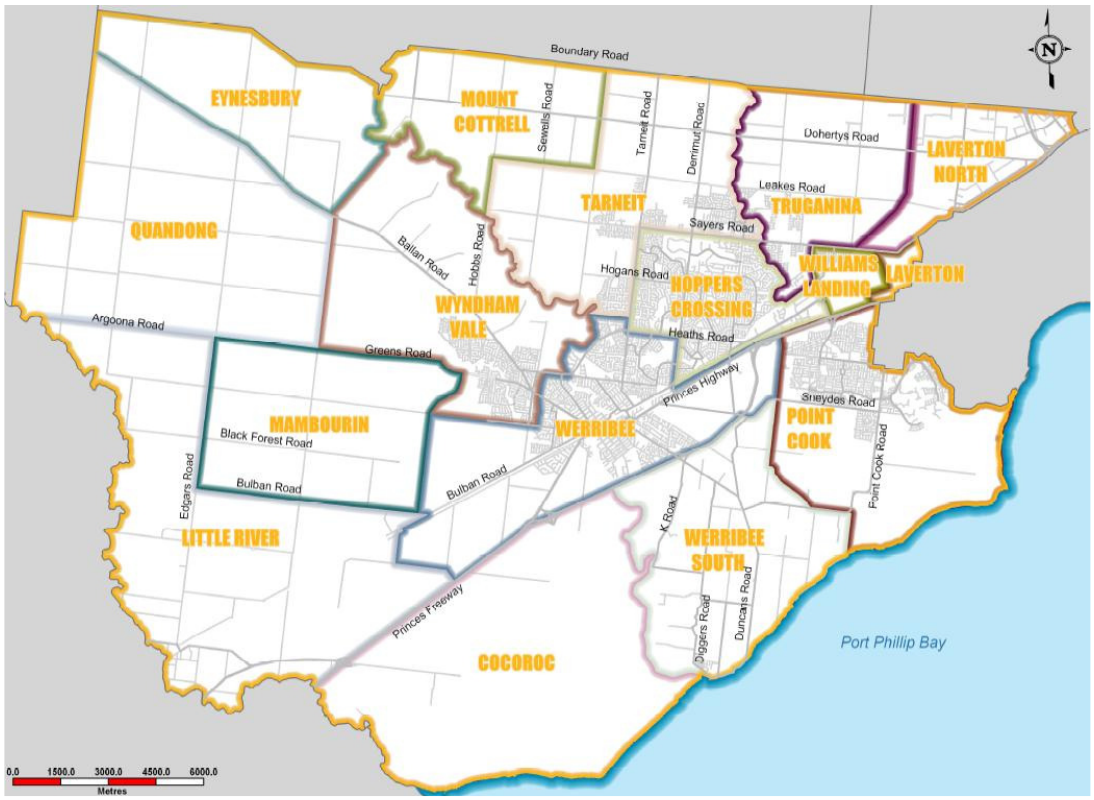

Figure 1: Road Network

1.1 PURPOSE OF THIS PLAN

Council's road infrastructure represents a significant investment by the community and is vital to its health and wellbeing. The overall objective of asset management (AM) is to demonstrate responsible stewardship of infrastructure in delivering Council services.

In addition, Council's objective is to ensure that it has well planned, constructed and maintained infrastructure and establish management strategies and practices, which maximise the life and community benefit of our assets.

The overall objective of this RAMP is to implement an action plan that will as a minimum, continue to provide the current level of service for road and related infrastructure for the optimum cost. In order to meet this objective a number of subordinate objectives need to be addressed:

- Define a hierarchy for roads and related infrastructure;
- Identify the asset base managed by Council and the value it holds;
- Align the plan to the corporate intent to ensure management practices are consistent with Corporate direction;
- Satisfy the needs of the audience by demonstrating that their requirements are being met;
- Meet the requirements of the Road Management Act;
- Identify the current and target levels of service provided by Council in line with customer expectations;
- Define the impacts of demand on infrastructure;
- Identify infrastructure risks in line with Councils current risk processes;
- Consider asset performance such as condition monitoring techniques and outcomes;
- Detail the current lifecycle management practices and future plans;
- Overview of the short and long term financial requirements of maintaining Council's road infrastructure; and
- Define actions required to improve asset management practices related to the asset groups.

The outcomes of this plan identify the future funding requirement for service delivery accounting for the following factors:

- Adopted levels of service;
- Future demand for infrastructure;
- Current asset performance;
- Risk;
- Required works; and
- Funding constraints.

A separate Road Management Plan supporting this AM plan was first produced in 2004. Since then the document has had several revisions. The plan was last modified in 2009 in accordance with the RMA. Council's Road Management Plan is not an 'incorporated document' in this plan.

1.2 THE ASSET MANAGEMENT PLAN

The AM Plan is a tactical plan that translates broad strategic goals and plans into specific goals and objectives relevant to a particular activity for the organisation. It may be regarded as a tactical plan for implementing infrastructure related strategies, which arise from the strategic planning process.

The AM plan is also a tool combining management, financial, engineering and technical practices to ensure the level of service required by customers is provided at the most economical cost to the community. The plan is intended to protect the environmental and cultural values of the assets providing the service.

Tactical planning involves the development of separate sub-plans that allocate resources (natural, physical, financial, etc.) to achieve strategic goals through meeting defined levels of service. Council's Road Management Plan is one such sub-plan.

This plan is the medium by which Council articulates its management of infrastructure to achieve the desired outcomes.

1.3 ASSET MANAGEMENT PLAN FORMAT

The plan contains eight sections, each of which are explained below:

- **Introduction:** This provides an introduction to AM, outlines the objectives, scope and format of the plan, identifies the key stakeholders and legislative requirements, and describes the relationship with other plans including the rationale for asset ownership.

- **Asset Portfolio:** This section outlines Councils portfolio of assets including quantity and value.

- **Levels of Service:** This outlines the levels of service required based on customer research and expectations, statutory requirements and strategic and corporate goals. It also contains tables detailing expected and current performance measures.

- **Demand Forecast:** This section details the future growth trends, the impact of these trends on infrastructure and demand management strategies to deal with the projected growth.

- **Risk Management:** This section outlines Council's risk management framework. It also contains tables of risk events, their severity and consequence.

- **Lifecycle Management Plan:** This gives an overview of the whole of life management of each asset type. For each asset type it details (where applicable) the operations and maintenance plan, renewal plan, enhancement/upgrade plan, new works plan and disposal plan.

- **Financial Summary:** This section details the 10-year financial forecast with its associated assumptions and sensitivity analysis. It contains an asset valuation for each asset type and their associated confidence levels. It also outlines the Council's funding strategy.

- **Asset Management Improvement and Monitoring:** This section deals with methods of monitoring performance by detailing improvements to AM processes, systems and data. It outlines a 3-year AM improvement plan. It also details procedures for monitoring and reviewing this AM Plan.

All Asset Management Plans are based on the framework recommended in the Institute of Public Works Engineering Australia's International Infrastructure Management Manual (Australia / New Zealand Edition), Version 3.0 dated October 2006.

1.4 RELATIONSHIP WITH OTHER PLANS

AM plans are a key component of the Council planning process, linking with the following plans and documents:

2010- 2014 City Plan: The strategic plan is a long term plan which sets out the broad strategic direction for the development of WCC over the next 5 years. The plan reflects the common goals of all stakeholders and demonstrates a commitment by council to seek and respond to the wants and needs of the wider community.

Annual Report: The Annual Report 2008/09 supports the City Plan and the details for each financial year:

- Wyndham's achievements and performance in key result areas;
- Service highlights;
- Council's governance structures; and
- Council's financial performance during 2008/09.

The Quality Community Plan 2007: Wyndham City's long term vision is documented in our Quality Community Plan (QCP). This important document outlines our community's vision and aspirations for the future, and guides the City's daily planning and decision making.

WCC Policies: The policies are needed to provide direction for AM tactics. Policies that apply to the management of Road assets include:

- Asset Management Policy; and
- Risk Management Policy.

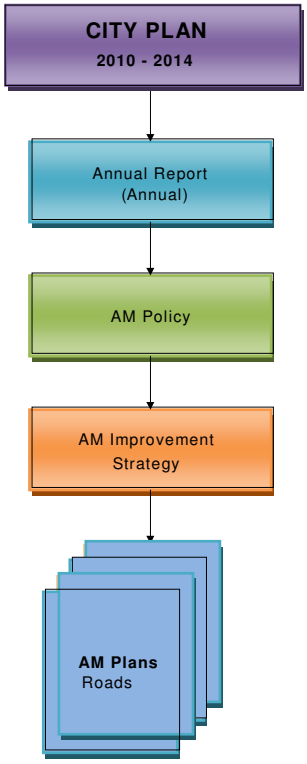

Figure 2: Corporate Links to AM Plans

Risk Management Strategy: The purpose of the Risk Management Strategy is to assist council to manage and/or minimise the adverse effects of risks from its strategies and operations and maximise the benefits from opportunities and speculative risks.

The figure above depicts the links and information flows between the Council Plan and the Asset Management Plans which provide the context and framework for the management of the infrastructure.

2.0 Asset Portfolio

This plan focuses on road and related infrastructure and is inclusive of the assets contained in the table below. While replacement values may not have been nominated for some asset types the plan seeks to incorporate the assets even though specific values for these asset types are not presently nominated. It is also noted that Council does not own streetlights however provides annual funds for the operations, maintenance and replacement (OMR) undertaken/organised by the street light owner. Council also pays the power tariff associated with the municipality's street light power consumption. Any 'non-standard' lights e.g. decorative poles, Council retain ownership and OMR responsibilities.

2.1 Our Road Network

The Road hierarchy used for the WCC Road assets is shown in the figure below. The definitions for each of the hierarchical levels are:

- **Road Pavement:** Roads include road base and surface for sealed, unsealed and unmade roads. This also includes on-road carparks;
- **Pathways:** Pathways made from concrete, brick pavers, tiles, asphalt or gravel;
- **Kerb and Channel:** Road drainage whether concrete or bluestone it comes in many types: mountable, semi-mountable, barrier and semi-barrier;
- **Bridges and Major Culverts**: Consisting of both vehicle and pedestrian bridges as well as major and minor culverts; and
- **Streetscapes and Traffic Management**: Furniture, trees and signage found alongside the road such as bus shelters, bins, seats, bollards, public lighting, regulatory signs, and directional signs. Traffic Management including road humps, roundabouts, speed cushions, school crossings, pedestrian operated signals and crossings as well as traffic signals.

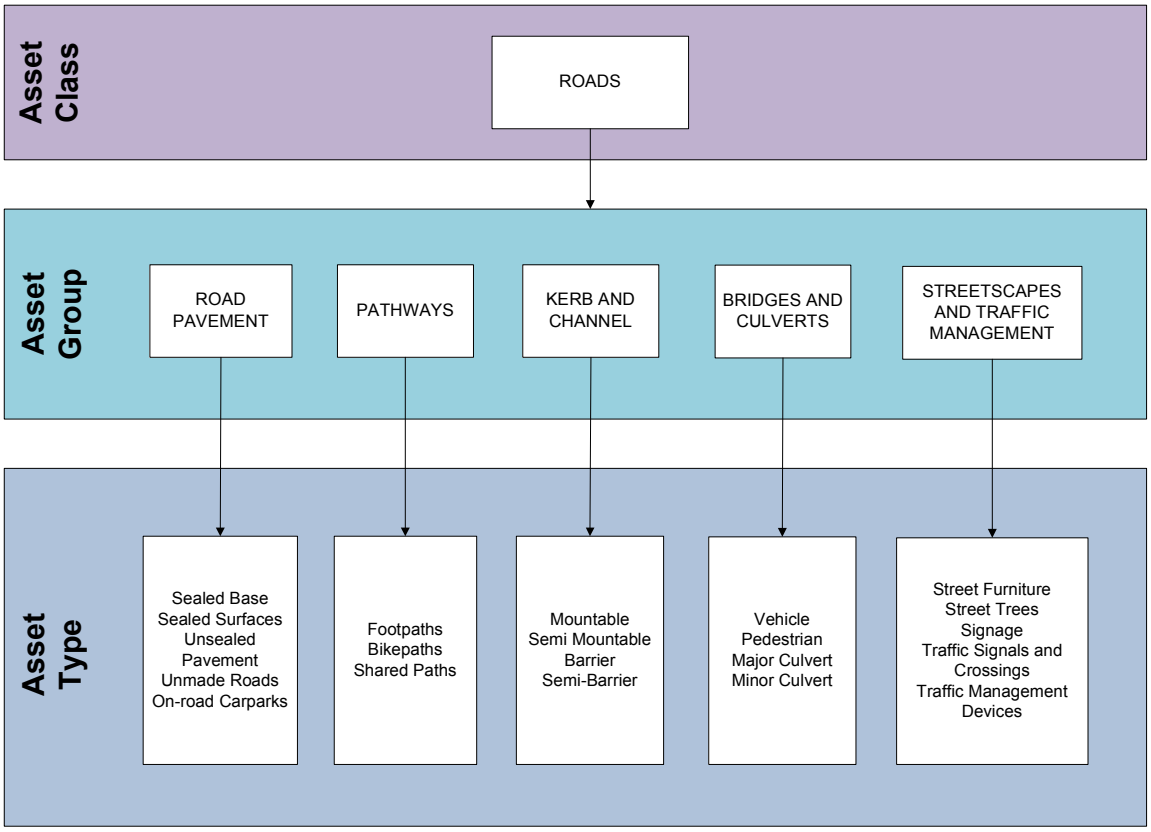

Figure 3: Road Hierarchy

Wyndham's road infrastructure included in this AM Plan is summarised below:

ASSET GROUP	ASSET TYPE	UNIT	QUANTITY	REPLACEMENT VALUE JUNE 2010	WRITTEN DOWN VALUE JUNE 2010
Road Pavements	Sealed Base	km	994	$714,771,281	$523,063,467
	Sealed Surface	km	994	$151,727,167	$103,427,017
	Unsealed Pavements	km	85	$14,845,440	$8,720,385
	Unmade Roads	km	30	NV	NV
	On-road Carparks	No.	TBA	NV	NV
Pathways	Footpaths	km	888	$49,689,955	$36,000,311
	Shared Paths	km	134	NV	NV
Kerb and Channel	Kerb and Channel	km	1,601	$86,644,399	$77,006,951
Bridges and Major Culverts	Vehicle Bridge	No.	12	$5,598,650	$2,392,670
	Pedestrian Bridge	No.	34	$2,280,000	$1,303,597
	Major Culverts	No.	70	$14,145,000	$8,400,415
	Minor Culverts	No.	120	NV	NV
Streetscapes and Traffic Management	Street Furniture[1]	No.	8,522	NV	NV
	Street Trees	No.	65,000	NV	NV
	Signage	No.	9,750	NV	NV
	Signals and Crossings	No.	69	$4,081,507	$3,238,019
	Traffic Management Devices	No.	2,018	NV	NV
	*NV – Not Valued *TBA – To be Assessed		**Total**	**$1,043,783,399**	**$763,552,832**

Table 1: Summary of Road Portfolio

The apportionment of road assets by replacement value is illustrated in the following chart.

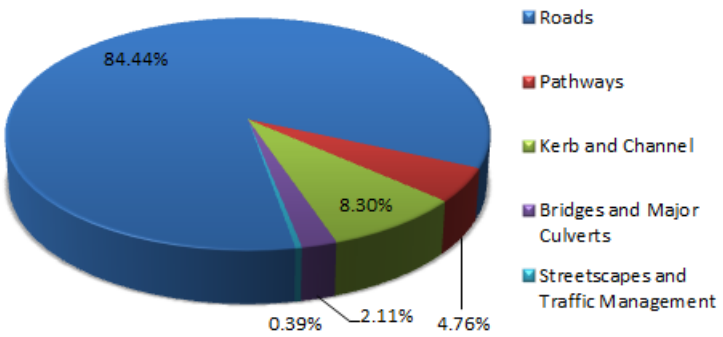

Figure 4: Asset Type by Replacement Value

[1] Includes bus shelters and public lighting

3.0 Level of Service

This section defines the service levels that are required and the basis of the decision behind their selection. The service levels support Council's strategic goals and are based on customer expectations and statutory requirements.

3.1 BACKGROUND

The life cycle management section provides information on the extent to which the target service levels are being achieved and the management strategies including planned capital works for addressing any service gaps identified.

A key objective of this AM plan is to match the level of service (LOS) provided by the asset with the expectations of customers. This requires a clear understanding of customers' needs and preferences. The levels of service defined in this section will be used:

- To inform customers of the proposed type and level of service to be offered;
- As a focus for the AM strategies developed to deliver the required level of service;
- As a measure of the effectiveness of this AM plan;
- To identify the costs and benefits of the services offered; and
- To enable customers to assess suitability, affordability and equity of the services offered.

The adopted levels of service are based on staff knowledge and:

- **Community Research and Expectations;**
  Information gathered from customers on expected quality and cost of services.
- **Strategic and Corporate Goals;**
  Provides guidance for the scope of current and future services offered, the manner of the service delivery and defines the specific levels of service that the Council wishes to achieve.
- **Legislative Requirements;**
  Legislation, Regulations, Environmental Standards and Council by-laws that impact on the way assets are managed.
- **Design Standards and Codes of Practice.**
  Australian Design Standards also provide the minimum design parameters for infrastructure delivery by the Professional Engineer.

3.2 LEVELS OF SERVICE TABLES

The service levels are divided into two types:

- Community based; and
- Operations (Technical) based.

WCC have embarked on defining their community and technical Levels of Service, and current activities are portrayed in this plan. WCC have the relevant processes, intervention levels, response times and standards in place to support technical aspects of service delivery. Setting key performance indicators allows Council to monitor progress and measure performance.

Community based levels of service relate to the function of the service provided and need to be in line with what our customers expect as part of service delivery. The key performance indicators relating to Road assets are included in the table below:

Community Service Levels
Public Liability Compliance
Accessibility
Customer Satisfaction
Safety

Table 2: Key Performance Indicators – Customer

Technical Service Levels
Condition

Table 3: Key Performance Indicators - Technical

Technical service levels are supported by intervention levels as identified in the Road Management Plan and included in Appendix D.

The following table identifies WCC's Levels of Service against key performance indicators, and will be used to monitor progress and report achievement.

KEY PERFORMANCE INDICATOR	COMMUNITY / TECHNICAL	SERVICE LEVEL CHARACTERISTIC	PERFORMANCE MEASUREMENT PROCESS	TARGET PERFORMANCE	CURRENT PERFORMANCE	ACTIONS TO MEET PERFORMANCE TARGET	RESOURCES REQUIRED
Public Liability Compliance	COMMUNITY	Compliance with Wyndham Road Management Plan	Outcomes of road management plan audits	98% Compliance at any point in time		Monitor the performance of the maintenance activities against the road management plan	
Accessibility	COMMUNITY	% of compliance with DDA requirements for new pathways constructed as of January 2011 (only where existing topography conditions allow)	Assess compliance to DDA for each design project	97% Compliance			
Customer Satisfaction	COMMUNITY	% satisfaction with local roads and footpaths as identified in the DVC Annual Survey	% Satisfaction in the Excellent, Good and Adequate score range	70%	60%	Address the reasons identified as requiring improvement	
Safety	COMMUNITY	No. of successful claims as a percentage of total claims on the road	Report number of claims annually	<5%	14%[2]		
		No. of successful claims as a percentage of total claims on pathways	Report number of claims annually	<5%	14%[3]		

[2] Assumed 50-50 split between roads and pathways. Data currently combined. Claims need to be identified separately for future analysis.
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KEY PERFORMANCE INDICATOR	COMMUNITY / TECHNICAL	SERVICE LEVEL CHARACTERISTIC	PERFORMANCE MEASUREMENT PROCESS	TARGET PERFORMANCE	CURRENT PERFORMANCE	ACTIONS TO MEET PERFORMANCE TARGET	RESOURCES REQUIRED
Condition	TECHNICAL	Percentage of Wyndham roads in the Excellent to Average range	Analysis of condition results	85%			
	TECHNICAL	Percentage of Wyndham kerb and channel in the Excellent to Average range	Analysis of condition results	75%			
	TECHNICAL	Percentage of Wyndham pathways in the Excellent to Average range	Analysis of condition results	90%			

Table 4: Levels of Service for Road Infrastructure

4.0 Demand Forecast

This section of the plan analyses factors affecting demand including population growth, demographic changes and the impacts of these changes on WCC's existing infrastructure as well as the demand for new infrastructure.

Impacts identified within this section have been determined using WCC's planning and strategic documentation. Where information was not available assumptions have been made.

4.1 BACKGROUND

Wyndham is located in Melbourne's south-west, located between Melbourne and Geelong. The City is bounded by the City of Brimbank and the Shire of Melton to the north, Moorabool Shire and the City of Greater Geelong to the west and south and Port Phillip Bay and the City of Hobsons Bay to the east.

The City of Wyndham is the fastest growing municipality in Victoria and the fourth fastest in Australia. Wyndham is currently home to 147,508 people, with the population expected to reach over 286,000 by 2026. With the City experiencing unprecedented growth, it is on track to become the largest local government area in Victoria. With the population forecast to increase between 4.6% and 7.1% annually over the next five years this has resulted in increased service inputs (materials, employee costs) to service growth in demand.

This popularity has been achieved as a result of many attractive features, including Wyndham's proximity to Melbourne and Victoria's largest regional centre, Geelong. Wyndham offers available land set among beautiful natural assets including the Werribee River, Port Phillip Bay, Skeleton Creek, wetlands and grasslands. The municipality is also home to a variety of parks, gardens and recreational facilities, including the State Rose Garden at Werribee Mansion, Victoria's Open Range Zoo, State Equestrian Centre, Point Cook Homestead and Point Cook RAAF Museum. Once described as 'the country suburb' Wyndham is a vibrant City with a strong pastoral heritage. Now a thriving locality, Wyndham boasts first-class shopping precincts and quality entertainment outlets while still supporting the development of close-knit communities.

The growth Wyndham is experiencing provides many opportunities for residents and Council. This growth also puts pressure on Wyndham's infrastructure, which requires strong management from Council, in consultation with the community.

Great results have already been achieved through extensive infrastructure planning and investment. The Wyndham community sought the opportunity to be involved in this development and is the driving force behind the success of many projects.

Wyndham is home to a young population eager to see their City continue to prosper. The Wyndham community recognises the benefits associated with high levels of growth, but is also committed to ensuring sustainable development that will serve future communities.

Demand management as related to the provision of services and associated infrastructure is a dynamic process used to cater for the change in population, demographics, and expectations of the community over a long period of time e.g. 20 years.

It is a complex area supported by sound planning that integrates with AM to provide for future services. To achieve an outcome that benefits the community there is a need to coordinate planning activities for the provision of infrastructure through the Planning and Development department.

Over the past years WCC has produced the following planning documents which have been reviewed for the purpose of understanding the impacts of future growth in the community, the need for future infrastructure to support services and impacts on existing infrastructure.

- Growth Boundary Review;
- Planning for Community Infrastructure in Growth Areas, 2008;
- Point Cook Concept Plan;
- Truganina Employment Precinct;
- Werribee South Green Wedge Plan;
- Wyndham North Growth Front; and
- Wyndham Waterways Strategy.

4.2 DEMAND OUTCOMES

Impacts on Existing Infrastructure

Road and related infrastructure improvement works required in response to development works are discussed below:

Truganina Employment Precinct

The Truganina Employment DCP provides for the following transport infrastructure:

- Arterial roads and their intersections;
- Intersections of mid-block connector roads (mostly planned bus routes) with arterial roads, and crossings of such mid-block connectors over streams and floodways;
- Pedestrian and cycle, or combined paths along arterial roads, and their connections to other paths, including paths on or across tree reserves;
- Bus stops; and
- The land to provide or widen reserves for that infrastructure. The DCP does not provide for any other "development" or "community" infrastructure, but relies on tree and floodway reserves required under the PSP or other mechanisms, where appropriate.

Infrastructure projects required as part of the development are included in Appendix D.

Wyndham North

Tarneit West Outline Development Plan

Arterial Roads

Regional and local traffic demands will necessitate the upgrading and widening of the existing arterials.

As the existing road reservations are only 20 meters wide, an additional widening of 12 meters for each road is required in the following locations:

- The western side of Tarneit Road; and
- The northern side of Hogens Road.

Tarneit Road requires widening to a dual carriageway to maintain consistency with the standard south of Hogens Road. This road has been identified as a north-south arterial, extending from Railway Avenue to link with Boundary Road in the north.

The Tarneit West Outline Development Plan Stage A identifies two collector roads within the development area.

These are:

- Woolten Road plus extension, which will link with the collector road network south of Hogens Road, and feed local traffic onto the regional network at Hogens or Sayers Road; and
- An east-west collector which will function as an extension of Bethany Street.

Woolten Road
It is proposed that the existing section of Woolten Road be upgraded from a local rural road to a residential street. It will not be a main or 'arterial' road, as is the case with Hogens and Tarneit Roads. However, it is planned that Woolten Road will be:

- Used as a local bus route; and
- The main local access road to a proposed primary school and recreation reserve.

Point Cook
The existing road network was essentially developed to serve the local farming community and access to the Point Cook RAAF Base. Road reservations are generally 20 metres although roads are not fully constructed. Point Cook Road is constructed to 2 lanes while others are single lane sealed and unsealed roads.

Access roads such as Sneydes Road and Point Cook Roads, and the two existing interchange areas, are capable of providing only limited access. Major road infrastructure works will be needed to upgrade the level of service as residential development intensifies in Point Cook.

Road Network
The purpose of this section is to identify a main (sub arterial) road network and major connections onto the Princes Freeway.

The PCCP Area has, as a foundation for a road network, the existing road grid based internally on Dunnings, Sneydes, Point Cook and Hacketts Roads. The road grid enables the development of an arterial road network based upon separations of approximately 1.6 kilometre development (if current alignments are utilised).

Upgrades will be required for the existing major freeway interchanges at Point Cook Road and Forsyth Road.

A future "northern outlet" road between Point Cook Road and the Forsyth Road extension has been planned to ease future traffic pressures on the Princes Freeway interchange by providing an outlet for northbound traffic.

Possible External Arterial Links

Northern Outlet

As shown in Figure 19, provision has been made for a link from the development area to the north over the Princes Freeway. This proposal will link the Westpoint Park Industrial Precinct with the Point Cook sub-region and consequently, provide easier access to the north. This will relieve congestion on interchanges to the Princes Freeway.

Links to the East

The existing links between the study area and areas east of Skeleton Creek are limited to Central Avenue. Whilst an additional crossing of the Skeleton Creek may be desirable to improve access to employment opportunities in Altona and Williamstown, existing urban residential development east of Skeleton Creek severely limits feasible options. The Werribee Strategic Transport Study identifies a possible link being made.

Links to the West

Potential exists to connect Forsyth Road and Hacketts Road to Duncans Road (probably via Aviation Road) to provide an additional link to Werribee Central. This would require significant upgrading of the nominated roads.

The following figure details the Point Cook Arterial Road network:

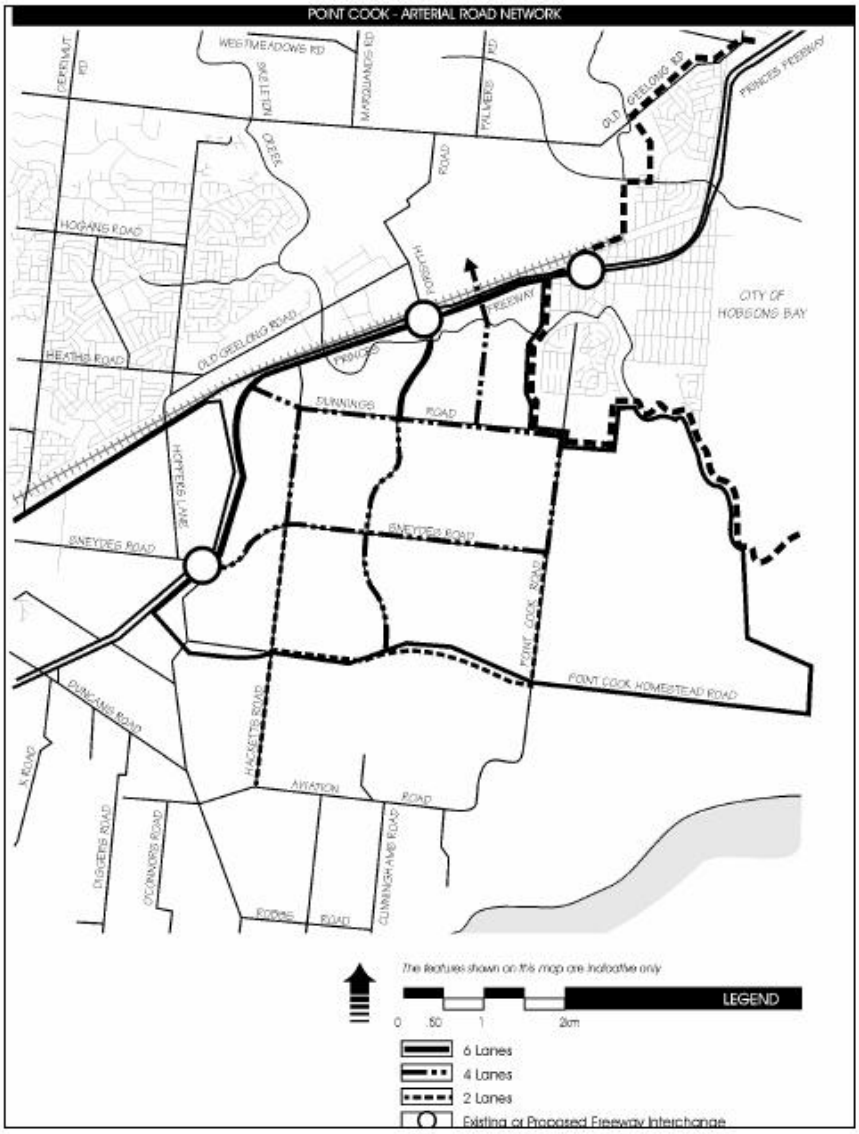


Table 5: Point Cook Arterial Road Network

"Freeway Interchanges" identify the works required to accommodate full development of the Concept Plan for the existing freeway interchanges or crossroads within the area, but does not include the Duncans Road Interchange outside the area.

INTERCHANGE	FACILITIES REQUIRED
Forsyth Road	• Duplication of on-ramp. • Duplication of off-ramp. • Duplication of a bridge. • Traffic signals at the junction of ramps and Forsyth Road.

INTERCHANGE	FACILITIES REQUIRED
Point Cook Road	• Duplication of a bridge. • Duplication of on-ramps. • Duplication of off-ramps. (Note: Investigation into feasibility of above is to be undertaken)
Sneydes Road	• Construction of new interchange with:- – 4 lane bridge – Dual on-ramps – Dual off-ramps – Traffic signals at junction off-ramps and Sneydes Road.

Table 6: Freeway Interchanges

The following table identifies the sub-arterial roads which will be required to be widened as part of the Point Cook development. The table also represents the road related infrastructure costs:

ROAD WORKS	SUB-TOTAL
Point Cook Road	**$5,810,000**
Forsyth Road	**$13,128,000**
Hacketts Road	**$6,140,000**
Dunnings Road	**$9,020,000**
Sneydes Road	**$9,400,000**
Point Cook Homestead Road	**$2,624,000**
Northern Outlet Road	**$4,760,000**
TOTAL	**$50,882,000**

Table 7: Road Work Costs

For details please refer the Road Asset Strategy.

Need for New Infrastructure

New road infrastructure required as part of development within the municipality is included below:

Wyndham North

Cell A Road Works Contributions

ROADWORKS – CELL A	SUB TOTAL
Sayers Road	$3.276.000
Forsyth/Marquands Road Link	$1,844,000
INTERSECTION TREATMENTS • Sayers Road / Collector Road, east of Marquands Road • Palmers / Sayers Road • Forsyth / Marquands Link with Sayers Road	$1,275,000

ROADWORKS – CELL A	SUB TOTAL
• Signalised intersection Marquands and Sayers • Traffic signals in Sayers Road opposite Lot 3	
TOTAL	**$6,395,000**

Table 8: Proposed Wyndham North Road Works (Cell A contributions)

For details please refer the Road Asset Strategy.

Cell B Road Works Contributions

All works associated with Cell B have been completed.

Cell C Road Works Contributions

Cell C is bounded by Sayers Road, Leakes Road and Palmers Road. Sayers Road is currently a two lane single carriageway road running east-west and forms the southern boundary of the plan area. With Leakes and Palmers Road, these roads form the basis of a square mile grid typical of the arterial road network in Wyndham.

The planning of roads in and around the Cell C area must provide not only for the anticipated demand created as a result of the urban development of Cell C, but also demand created as a result of development external to the plan area itself.

The interface with adjoining uses and the means of access to individual properties is determined on the basis of the roads function, characteristics and adjoining uses.
The following requirements should be accommodated in the Cell C Development Plan as they relate to vehicle access to lots and the provision of service roads:

- Morris Road - Direct access permitted;
- Sayers Road - No direct access permitted;
- Leakes Road - No direct access permitted;
- Palmers Road - No direct access permitted;
- Forsyth Road/Marquands Road Link – No direct access permitted; and
- Collector/Local Roads - Direct access permitted.

The Wyndham North Concept Plan (1996) establishes future arterial road reservations and initial construction standards that must be incorporated into the Cell C Development Plan. The table below outlines road requirements within and around Cell C.

ROAD	EXISTING STANDARD	ADDITIONAL RESERVATION	INITIAL STANDARD	COMMENT
Sayers Road	• 20 metre reserve; • 2 lane sealed carriageway	• 20 metres to the south of existing reserve	• Additional two lanes.	The widening of Sayers Road to the south has already been planned for in Cell A and the existing development south of Sayers Road.
Leakes Road	• 20 metre reserve; • 2 lane sealed carriageway	• 20 metres to the north of existing reserve	• Two sealed lanes.	To be developed as residential development occurs.

ROAD	EXISTING STANDARD	ADDITIONAL RESERVATION	INITIAL STANDARD	COMMENT
Palmers Road	• 20 metre reserve; • 1 lane sealed carriageway	• 20 metres to the west of existing reserve	• Two sealed lanes.	Palmers Road will be realigned to intersect with the northern distributor running form Point Cook through Westpoint Business Park.
Morris Road	• Nil	• 32 metre reservation	• Two sealed lanes.	Morris Road currently ends at Sayers Road. However, it will continue along its existing alignment to Leakes Road through part of Cell B & C.
Forsyth Road / Marquands Road link	• Nil	• 32 metre reservation	• Two sealed lanes.	A new arterial road running from Forsyth Road through Cell A will continue through Cell C parallel with the existing Marquands Road.

Source:- Wyndham North Concept Plan (1996)

Table 9: Proposed Wyndham North Road Works (Cell C contributions)

Tarneit West Outline Development Plan

Local Roads

The plan nominates a series of local roads, running both north-south and east-west, which link to the collector road network.

Developers will be required to provide extended pavements and urban standard curb and channel. Where local roads abut a school site, widening will be required to incorporate a parking lane and any other treatments to the satisfaction of the responsible authority.

Intersection Treatments

Ultimately, signals will be required at 2 locations within the subject site:

- Tarneit Road/Hogens Road; and
- Bethany St/Tarneit Road.

Outside the plan area, signalling will need to be provided at other locations across the Wyndham North area including:

- Northern collector/Sayers Road; and
- Sayers Road/Tarneit Road.

A bridge will be required to link the extension of the Bethany Road principle east-west collector to the land west of Davisd Creek. However, this will not be necessary until land west of the creek is developed. This is not anticipated in the near future as the land is outside the current Urban Growth boundary.

4.3 GROWTH ANALYSIS FOR NEW ROAD INFRASTRUCTURE

Based on an analysis of the future demand the following infrastructure is required over the next 10 years. However, it is recognised that the ability of the developers to deliver the infrastructure will impact on whether the projected demand will be achieved.

ADDITIONAL INFRASTRUCTURE	QUANTITY	REPLACEMENT VALUE ($)
Road Pavement	223 km	194 million
Footpath	199 km	11.1 million
Kerb and channel	359 km	19.4 million
Streetlights	2,475 No.	WCC does not fund creation
Signs	2,230 No.	1.12 million[4]
Bridges and Culverts[5]	As needed	-

Table 10: New Infrastructure Required CATERING for Increased Demand

Assumptions made for the modelling of demand were:

- The average number of residences per property is 1.05 (5% of properties contain units);
- Each new property built will have a street frontage (in metres) of 15m;
- There will be houses on both sides of the road;
- Each km of road built will have 893 m of footpath associated with it;
- Each km of road built will have 1.66 km of kerb and channel associated with it;
- There will be 10 new signs for every new km of road; and
- There will be 25 street lights per km of road.

Details of the analysis are identified in the Road AM Strategy.

It should be noted that while the new assets will be constructed by developers the annual operations and maintenance will be funded by Council. Therefore, an allowance for the additional annual operations and maintenance will need to be budgeted each year.

[4] Assumed $500 repl. Cost per sign
[5] Bridges required on a needs basis

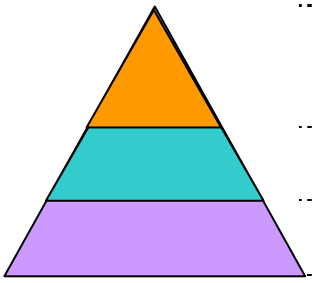
5.0 Risk Management

This section outlines WCC's risk management framework. It will form the basis of decision making for works associated with operations, maintenance and capital expenditures.

The objective of risk management is to identify the business risks associated with the ownership and management of the road infrastructure and identify the direct and indirect costs associated with these risks. Council has commenced this process and the outcomes of the register are included in this section.

5.1 Corporate Risk

Council is subject to risks at corporate, strategic and operational levels as illustrated below.



Nature of Risk	Outputs
High level corporate risk (corporate risk register)	Prioritised organisational actions
Strategic infrastructure risks	Works Program
Operational risks	Procedures (QA, Operating, Safety) Design Standards

Table 11: Risks within Council

WCC is committed to ensuring that all risks inherent in Council's service delivery are effectively managed. Risk Management is an integral part of good management practice. Council has in place the following risk documentation, data and systems:

- Risk Management Policy, 2007;
- Risk Management Strategy, 2007; and
- Risk Management System (Sentinel).

5.2 Risk Management Policy, 2007

Council's risk policy is to manage risks in compliance with, or exceeding the minimum requirements of Australian/New Zealand Standard of Risk Management (AS/NZS 4360). Council will also be guided by the Management of Advisory Board – Management Improvement Advisory Committee (MAB-MIAC) Guidelines for Managing Risk in the Australian Public Service.

WCC is committed to proactively manage all risks inherent in its operations. The purpose of the policy is to define the responsibilities of staff and management in the risk management process, and provide guidance to line management for the effective identification and treatment of operational risk. Council recognises that the effective management of risk will help ensure the on-going delivery of services and amenities enjoyed by all ratepayers, residents and visitors to the City of Wyndham.

The main policy objectives of managing risk are to:

- Maintain the highest possible standards for services provided by Council;
- Safeguard Council's assets – people, financial, property and fleet;

- Create an environment which enables Council to deliver services and meet performance objectives in a timely, efficient and effective manner;
- Ensure resources and operational capabilities are identified and deployed responsibly and effectively;
- Demonstrate transparent and responsible risk management processes which align with accepted best practice; and
- Ensure cost effective outcomes.

5.3 RISK MANAGEMENT STRATEGY, 2007

The Risk Management Strategy outlines the strategic approach for identifying and managing risks for all Directorates within Council. The Strategy aims to bring about a co-ordinated approach to all risk management practices. Wyndham City Council's Risk Management Strategy is endorsed by the Executive Management Team and sets the risk management direction for all Directorates.

When analysing risks the process should identify, evaluate and implement appropriate strategies to achieve Council's objectives and to continue to manage operations. Risk management includes economic well-being, social equity and environmental considerations. A thorough risk management analysis examines both the effects of risk and the ability to develop and improve Council's performance.

The goals for 2006/2008 including their current status are detailed in the table below:

GOAL	STATUS
Review Risk Management Strategy and develop an "embedded" Risk Management System (Sentinel)	Completed
Continue risk management planning process across all of Council	On-going - part of the business plan for all departments
Promote the use of Sentinel Database for the storage, monitoring & reporting of risks	On-going
Improve the CMP Audit score to 80%	Completed – the last audit results were at 86%
Develop a proactive tree inspection program on streets & Council owned reserves	In Progress

Table 12: Risk Management Strategy Status

5.4 INFRASTRUCTURE RISKS

Council has recently identified the road related risks. All high risks identified for road pavement are included below. The detailed infrastructure risk register for roads is included in Appendix B.

Main Event	Impact	Location (Area Affected)	Consequence Rating	Likelihood Rating	Level of Risk	Existing Controls	Potential Actions
Traffic Accidents	Property damage, personal injury, fatality	Urban fringe uncontrolled intersections	Major	Possible	High	Signage	Roundabout / Traffic Lights

Main Event	Impact	Location (Area Affected)	Consequence Rating	Likelihood Rating	Level of Risk	Existing Controls	Potential Actions
Extensive Growth Rate	Increased asset base	Werribee North	Major	Almost Certain	High	Capital program	Develop growth strategy and implement funding program
Highly expansive clays	Reduced Asset Life	Municipality	Moderate	Almost Certain	High	Design Standards	Continual review of standards. Review drainage standards to accommodate clays
Traffic Congestion	Public perception of Council. Reduced service levels.	Collector and Arterial roads	Moderate	Almost Certain	High	Traffic Management planning, capital programming	
Driver behaviour	Loss of life, property damage	Municipality	Major	Possible	High	Traffic Management planning, capital programming	

Table 13: High Infrastructure Risks

5.5 Operational Risk

All construction and maintenance work on local roads and pathways are undertaken in accordance with the relevant occupational, health and safety legislation, Code of Practice for Worksite Safety – Traffic Management and Council's adopted Safety Procedures.

Supervisory staff ensure road maintenance staff are aware and trained to ensure all rectification works comply with the above.

Operational risks associated with the management of road infrastructure have been identified as:

- OH&S;
- Public safety;
- Traffic management; and
- Badly lit areas.

5.6 Asset Criticality

Criticality takes into consideration low to medium risk assets that may have a high consequence should they fail. It recognises that while risk is low, assets can still fail and in doing so impact significantly on council. In this instance contingency plans are implemented should a failure occur or maintenance activities implemented to prevent failure.

A criticality analysis is used to identify the business critical infrastructure and develop a preventative maintenance program to manage the critical infrastructure as well as identify those assets where inspections or minimal maintenance can be applied without a detrimental impact on the business.

The application of criticality provides a level of certainty and confidence that the preventive maintenance program is appropriate and that the level of attention needed for the assets with respect to future planning is also appropriate. The prioritisation of future works can be based on criticality in conjunction with its counterpart, ***"Risk".***

6.0 Lifecycle Management Plans

This section presents asset condition and performance information and considers the risks described in Section 5 to develop the broad strategies and specific work programmes required to achieve the goals and standards outlined in Section 3 and 4.

As Wyndham's asset base continues to grow at a rapid rate, Council needs to allocate a greater proportion of its overall budget funding to maintain these assets. As the asset base increases through the building of roads, community centres and public open space, staff levels will also need to increase to allow these facilities to be properly serviced and maintained.

As future budgets increase, ratepayers are likely to see a significant increase in the overall cost of services. Federal and State Government cost shifting can also have an impact on Council's future service budgets. Cost shifting is a practice that Federal and State Governments have employed by various means in the past, but is generally where other tiers of government impose additional legislative or service obligations on local government without an adequate financial allowance (i.e. government grants) for these additional burdens. The result is the imposition of higher costs imposed on Council budgets.

Council has also strongly advocated in the past that State and Federal grant monies have not kept up with Wyndham's rapid population growth. This has a significant impact on future budgets as service costs in Wyndham are increasing due to inflationary factors and demand factors. If funding levels do not reflect Wyndham's rapid population growth, the end result is a higher nett cost to Council and higher rate increases.

6.1 Overview

Council must ensure that it manages all assets on a life cycle basis, with full knowledge of the social, environmental and financial costs, benefits and risks associated with the asset. The life cycle model must give proper consideration to each phase of an asset's life from inception through to disposal. This life cycle model is illustrated in the figure below:

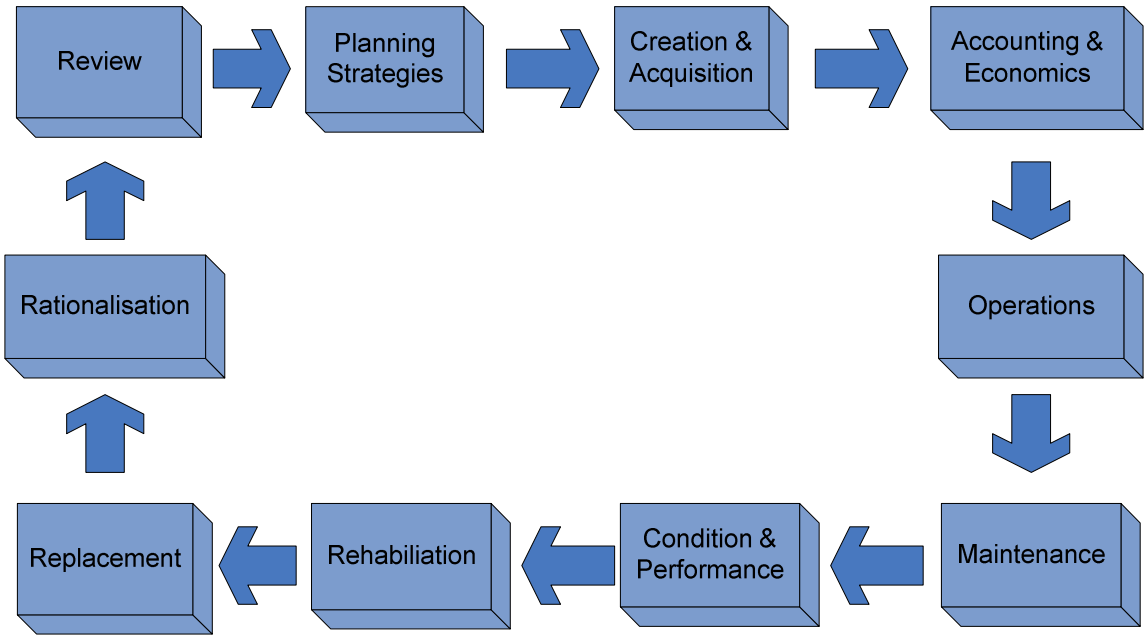


Figure 5: Lifecycle for Asset Management

This lifecycle management plan has been developed to cover the following asset groups:

- Road Pavement;
- Pathways;
- Kerb and Channel;
- Bridges and Major Culverts; and
- Streetscapes, Street Trees and Traffic Management.

Lifecycle Activities

Council is responsible for the management of the infrastructure over its lifecycle. Definitions for the primary activities are defined below.

Operations - An activity that has no direct effect on asset condition, consumes resources and is necessary to keep the asset functioning. The operations expenditure is not readily distinguished from maintenance expenditure in Council's financial systems.

Typical operational activities include:

- Street sweeping;
- Inspections; and
- Rubbish removal.

Maintenance – An activity that will retain / maintain the asset's current condition or performance level. Routine maintenance is the day to day work required to keep assets operating at required service levels, and falls into two broad categories:

- Planned (proactive) Maintenance: Proactive inspection and maintenance works planned to prevent asset failure; and
- Unplanned (reactive) Maintenance: Reactive action to correct asset malfunction and failures on an as required basis (i.e. emergency repairs).

Typical activities include:

- Road pavement – crack sealing, pothole repairs (minor and major works);
- Kerb and channel – minor repairs, segment replacement;
- Drainage – Repair/replacement of drainage pit lids;
- Traffic management assets – minor repairs and replacement;
- Signs and street furniture – repair and replacement;
- Pathways – repair and replacement; and
- Street trees – pruning.

A key element of AM planning is determining the most cost-effective blend of planned and unplanned maintenance.

Renewal / Replacement – An activity that replaces an asset with one that meets contemporary functional requirements. These works are defined as being the:

- Renewal and rehabilitation of existing assets to their original size and capacity, or,
- Replacement of the entire component of the asset with the equivalent size or capacity.

Examples of renewals activities include:

- Road pavement - asphalt renewal or pavement reconstruction;
- Kerb and channel – kerb replacement;
- Signs, street furniture, street lights – replaced primarily due to damage;

- Footpaths – replacement of lengths of footpaths; and
- Street trees – replacement due to damage or sick trees.

Upgrades – Upgrade work is related to the extension or augmentation of an asset in response to growth or an increase in the defined levels of service.

Upgrades are defined as assets either being:

- Works which improves an asset beyond its original size or capacity; or
- Works which increase the capacity of an asset; or
- Works designed to produce an improvement in the standard and operation of the asset beyond its original capacity.

Upgrade activities may include:

- Road pavement - road widening due to increased traffic, defined bus route;
- Kerb and channel – combined with road rehabilitation;
- Traffic management assets – provision of higher service levels;
- Pathways – path widening; and
- Bridges and major culverts – bridge strengthening/widening due to increased traffic or increases in mass limits for trucks.

New Works – creation/acquisition, purchase of assets.

New assets required for growth are distinguished from those required for improvements to levels of service, because of differences in how these assets can be funded. Growth related works can also be separated into those that are Council funded (including those funded by developer contributions), and those that are vested in the Council as a condition of development. The following table identifies the reasons for the construction of new assets.

ASSET TYPE	REASON
Road Pavement	• Inherited assets from Developers • Construction of unmade roads • Installation of traffic management assets and street furniture in existing streets to address identified needs
Pathways	• Link existing footpath networks or bicycle routes • Provide local pedestrian access in existing streets where none exists
Street Trees	• Inherited assets from Developers • Provide trees in existing streets where they are lacking
Bridges and Major Culverts	• Inherited assets from Developers • Provided by Council in response to a need or as part of a broader traffic management strategy

Table 14: Reasons for New Assets

Disposal – Sale, removal or decommissioning of an asset.

Roads including footpaths are rarely if ever disposed. However, laneways are more likely to be disposed by way of formal discontinuance and sale to adjoining property owners, subject to compliance with statutory requirements.

An example of laneways that may be discontinued and sold are those which exist on a plan of subdivision (and may or may not be constructed) along the rear of private properties. These laneways are not normally used by the public at large and are predominantly used exclusively by abutting property owners.

Usually laneways are discontinued at the request of an adjoining property owner. In this instance, the initiator is required to seek the approval of all other affected property owners before Council will formally consider the request.

These work categories must be separately identified and accounted for because, broadly:

- **Operational** expenditure must be expensed in the financial year it is incurred: it can be a "life-cycle" asset cost in that it may influence the timing of renewals, but unlike maintenance, the activity does not physically alter the condition of the asset;
- **Maintenance** expenditure must also be expensed in the financial year it is incurred, and is a "life-cycle" asset cost as it physically changes the asset and is a determinant to the timing of renewals;
- **Renewal** expenditure is capitalised, replaces the existing asset base, and is directly related to the on-going replenishment of "service potential";
- **Upgrades** are capitalised, and the asset base modified (as appropriate);
- **New** assets are also capitalised, and add to the asset base; and
- **Disposals** reduce the asset base.

Responsibilities for Various Road Reserve Assets

There are assets within the road reserve for which Council is either wholly or partially responsible.

"Normal Vehicle Crossings"

Under Schedule 10, Clause 12 of the Local Government Act 1989, Council has the power to assign responsibility for the provision, maintenance, repair or reconstruction of any crossing to the relevant property owner. As such, under Council's Local Law No. 11 (Part 4, Clause 42), the relevant property owner has the responsibility for the "upkeep" of his/her crossing. Specifically this responsibility extends to:

- The in-fill between the kerb and channel and the footpath;
- The associated relevant section of footpath; and
- The kerb, layback and channel.

"Extended Vehicle Crossings"

There are some situations where more than one property is served by what (in other circumstances) would be seen as a single crossing. In these situations, for the purposes of provision, maintenance, repair and reconstruction, the "common" section of the crossing is deemed to be road and therefore the responsibility of Council. This does not apply where two single crossings abut. In these circumstances, the crossings remain the responsibility of the relevant property owner.

Crossings Abutting Behind Kerb Parking Bays

Where there is a parking bay (for which construction has been previously approved by Council) immediately adjacent to a vehicle crossing, Council will be responsible for that section of the vehicle crossing up to the boundary of the parking bay furthest from the road pavement.

Public Lighting

In general, public lighting infrastructure is owned by the relevant distribution company. Powercor is the electricity distribution company in Wyndham.

As well as paying for energy usage, Council pays a charge to the relevant distribution company for the on-going Operations, Maintenance and Replacement (OMR) of public lighting. For this OMR

charge the distribution company provides services to ensure that public lighting is maintained and operational.

There are also a number of "non-standard" lights, e.g. decorative poles, for which Council retains ownership and OMR responsibility.

Laneways, Rights of Way and Private Roads
There are a number of laneways which are not included on the Register of Public Roads and which are not maintained by Council but by the owner of abutting land. There are also a number of roads on private land which are open to the public but are not "public roads" and which are the responsibility of the relevant land owner. These roads are appended to the Register of Public Roads.

Other Road Related Assets
Council manages all of its assets within the road reserve apart from fire hydrants which are maintained by City West Water via a maintenance agreement with Council.

Works Construction/Maintenance Arrangements
Capital works and major works are generally carried out by contract, with surveillance and auditing conducted by Council. Maintenance works are generally managed in-house. Vested assets (subdivisional works) are managed by consultants engaged by the developer under a QA arrangement. Council audits the works and carries out a final inspection before accepting the infrastructure.

Footpaths and Obstructions/Overhanging Vegetation
All property owners have a responsibility to keep the road and footpath adjacent to their property clear of any vegetation which is growing from within their property. Under the provisions of Council Local Law No 11, Council may direct landowners to trim any overhanging branches to a height of 3 metres above the road.

Also, a property occupier may not place tables and/or chairs on footpaths or otherwise occupy or obstruct the footpath unless authorised to so do by Council in accordance with Council's normal terms and conditions.

Nature Strips
Council does not maintain nature strips. Owners of abutting lands are expected to maintain the nature strip including such things as mowing the grass as part of the presentation of their property. Refer to Council's Beautification of Nature Strips Policy.

Parking is prohibited on nature strips under Schedule 3, Section 4 of the Road Management Act (RMA). Street trees are planted and/or maintained by Council.

Road and Related Assets for which Council is Not Responsible
Further to the items detailed above, there are other assets for which Council has no responsibility to inspect, maintain or repair as follows:

- Private Roads and related assets (e.g. within "gated" estates);
- Car parks not owned/controlled by Council;

Physical Parameters of Road Assets
Council's road network comprises 994 km of roads both sealed and unsealed (as at 30 June 2010). There is significant variation in the construction standards reflecting the standards applicable at the times of construction. Note that the length of roads will alter as new roads are vested in Council from subdivisions.

Council maintains databases to record attribute and condition details of road pavements, kerb and channel and footpaths.

Council's Maintenance Plan
Maintenance is generally defined as the regular day to day work that is carried out to ensure Council's assets are functional and safe for public use. All road maintenance activities are managed by Council's Infrastructure Directorate. For details of the key maintenance activities, refer Appendix D.

Coordination with Other Organisations

There are various assets within the road reserve for which Council is either wholly or partially responsible.

Roads on Municipal Boundaries
There are a number of roads which form the municipal boundary with adjoining municipalities. Council has negotiated practical arrangements with those Councils to manage boundary roads.

These arrangements are documented in Memoranda of Understanding which exist between Wyndham and Brimbank, Greater Geelong, Hobsons Bay, Melton and Moorabool. These memoranda explain the practical management arrangements for roads on Municipal boundaries.

Declared Arterial Roads
VicRoads is the Co-ordinating Road Authority for Declared Arterial Roads and is responsible for all components and facilities on the through carriageway between back of kerbs in urban areas or outside the line of table drains in rural areas including intersections. Further details are contained in the Code of Practice, Operational Responsibility for Public Roads.

Rail
All assets associated with the operation of train services are the responsibility of the relevant rail authority. Where a road crosses a railway line the relevant rail authority is responsible for the road pavement on which the tracks are situated and for a distance of 2.135 metres from the outside tracks.

Utilities
All infrastructure including manholes, valves, or other fixtures required to deliver utility services such as gas, water, telecommunications, electricity, and street lighting is the responsibility of the relevant company, agency or authority to maintain.

The principal organisations which own utility infrastructure in Wyndham include:

- Gas: TRU Networks; GPU Australia;
- Water/Sewerage: City West Water; Melbourne Water;
- Electricity/street lighting: Powercor; Powernet;
- Telecommunications: Telstra; Optus; Hutchison; and
- Major Drains: Melbourne Water.

Vehicle Crossings

There is no programmed inspection of vehicle crossings. Faults may be identified via customer complaints or by Council staff during the conduct of operational duties. Under Schedule 10, Clause 12 of the Local Government Act 1989, and Council's Local Law No. 11 (Part 4, Clause 42), the relevant property owner has the responsibility for the "upkeep" of his/her driveway (refer Clause 4.4.3 and Clause 4.4.4 of this RMP).

Road Safety

Every two years Council investigates the top 40 crash sites. In mid-September of 2010 Council submitted to VicRoads a submission for 'Blackspot' funding for up to three intersections. Using current data from VicRoads it is possible to identify where 3 or more casualties have occurred over a 5 year period. This information assists in undertaking road related treatments in blackspot areas.

Council is now committed to applying preventative/proactive intervention at accident sites deemed to be in grey spot areas (potential for accidents). Council is trying to predict the rate of accidents to apply treatments in the most appropriate places. Traffic management installations are taking place such as signals, signage i.e. prepare to stop, speed humps and roundabouts to improve driver safety.

Pedestrian signals that are triggered by side traffic will be incorporated into Council's Pedestrian Signal Strategy.

Contractors

Contractors are currently used to provide a support role to Council staff where required. Activities undertaken by contractors include:

- Drainage repairs and cleaning (jet blasting);
- Traffic control for asphalt and grading works;
- Provide grading services when backlog is extensive;
- Supply material for road works;
- Mowing open drains, around culverts and table drains;
- Weed spraying;
- Garbage removal;
- Street surveying support;
- Trucks for removal of illegally discarded rubbish (i.e. asbestos);
- Sweeping of shopping centre footpaths at Point Cook shopping centre and CBD; and
- 'Correction Victoria' personnel to assist with litter collection.

Asset Creation

When new municipal assets are created from private developers' activities, they are taken over by Council and Council's road data base is updated accordingly and the Register of Public Roads when roads are declared as Public Roads.

The standards required are contained in Council's subdivisional guidelines and specifications and other State guidelines e.g. ResCode.

In the main, Council's subdivisional guidelines and specifications are based on the engineering practice prevailing at the time of approval of the engineering plans. Council checks and approves engineering plans and provides surveillance of the works associated with the creation of Council assets.

Lifecycle Management Structure

The management structure established by Council for managing the lifecycle of its road infrastructure is identified in the following figure:

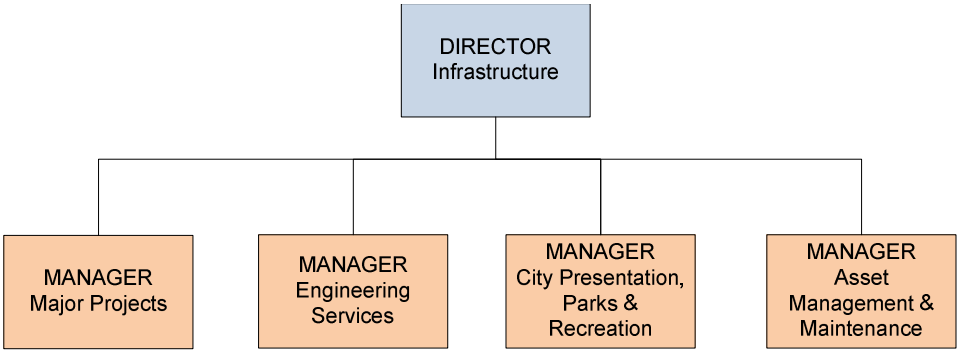


Figure 6: Management Structure

6.2 ROAD PAVEMENTS

Key Issues

The key issues related to the management of WCC roads are:

- Roads that were built in the 1970s and constructed on granitic sands are being replaced earlier than modern day roads;
- The Res Code allows construction of narrower roads that were previously not allowed in the new subdivisions;
- Increased traffic volumes on the road network is causing increased deterioration, traffic control issues and congestion;
- Mixture of traffic types has changed and now heavy loads i.e. heavier garbage trucks are impacting on pavements;
- The underlying sub-soil is expansive clay which severely impacts on the structural performance of the road pavement;
- Flat topography is highly susceptible to flooding and slower runoff allowing extra time for penetration into the road surface;
- Excessive and premature cracking of seals resulting from expansive sub grades; and
- Reinstatement standards by various service authorities.

Asset Description

Road Pavements

The purpose of the road pavement is to provide a road network that is suitable for the efficient movement of vehicles and people in and through the Wyndham City.

The road pavement (or carriageway) comprises the largest component of the road network and includes base and surface components.

Road Surfaces

The network of Council's local roads has surface components as well as the base section. The surface consists generally of asphalt or a spray seal layer and can vary in thickness between 10mm of spray seal to 100mm asphalt seal on a heavily trafficked road section. In rural areas significant length of roads are unsealed with gravel surface.

Sealed wearing surfaces provide an abrasive hard wearing surface on top of a constructed pavement (base). This provides a protective membrane which enables good all weather skid resistance, dust suppressant, pavement marking abilities and protection of the underlying pavement material. A summary of road pavement and surfaces by asset type is shown in the following table:

ASSET TYPE	QUANTITY (KM)	REPLACEMENT VALUE	WRITTEN DOWN VALUE
Sealed Base	994	$714,771,281	$523,063,467
Sealed Surface	994	$151,727,167	$103,427,017
Unsealed Pavements	85	$14,845,440	$8,720,385
Unmade Roads	30	Unknown	Unknown
On-road Carparks	Unknown	Unknown	Unknown
TOTAL	**1,190**	**$881,343,888**	**$635,210,869**

Table 15: Road Pavement and Surfaces Covered in the Lifecycle Management Plan

Asset Performance

Asset performance may be measured by:

- Age;
- Condition; or
- Asset Maintenance Histories (not currently available).

Age

To retain the base of the road pavement in a condition for adequate support of road surface, long term planning, regular inspections and recurrent maintenance together with programmed renewal works are necessary.

Wyndham's local road network is growing steadily every year with 45% of the total length of road pavement constructed prior to 1980.Therefore almost half of the road pavements within the municipality have ages greater than 20 years.

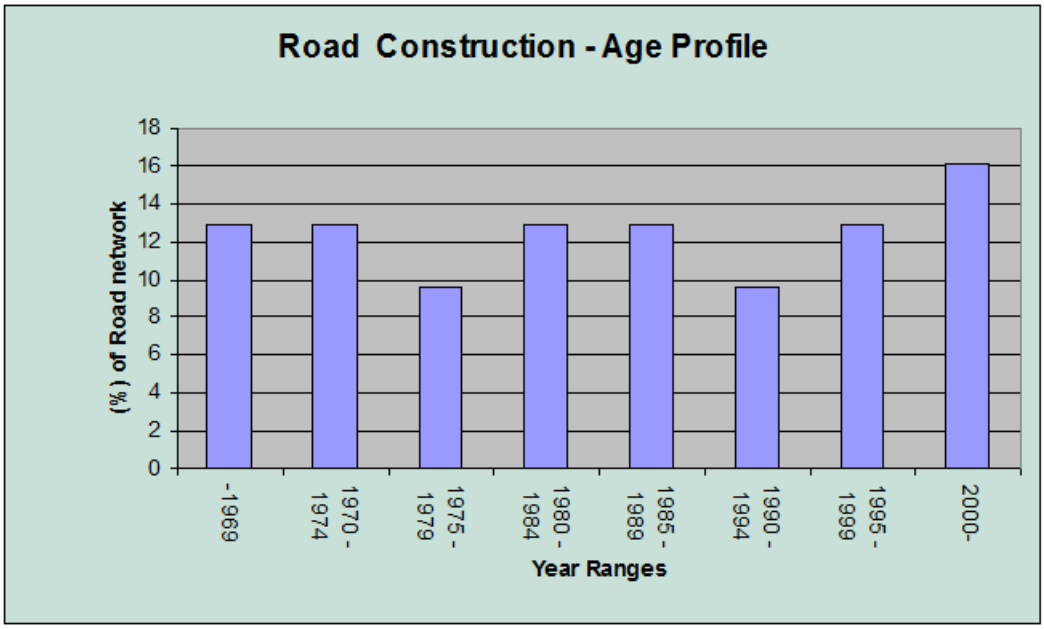


Figure 7: Roads Age Profile

In accounting terms, a road pavement is assumed to have a useful life of 25-55 years. In theory however road pavement can have an indefinite life. Geological and environmental factors of Wyndham along with the adopted maintenance regimes greatly influence the final position on whether the asset life is closer to 55 years or not.

Asset Condition

Asset condition is collected for all asphalt road surfaces. The last condition assessment process was undertaken in 2008 and a new audit is being undertaken in 2011. The parameters that are assessed are:

- Crocodile cracking;
- Linear cracking;
- Shape Loss;
- Ravelling; and
- Texture.

Crocodile cracking and texture defects are the poorest scoring parameters, showing very poor condition across the network with 5% and 4% respectively. The current network condition results for all parameters as listed above are included in Appendix C.

In order to calculate the Overall Condition Index (OCI) Council has considered the above parameters in its calculation based on the 2008 data. The chart below portrays that 66% of Wyndham's road network is in excellent condition. Only a small proportion, 2% of the whole network is in condition 5 (very poor). It does however show that 20% of the road network is condition 4 meaning 22% of all Wyndham's roads are in poor condition. Once available, the OCI will be re-calculated using the 2011 data.

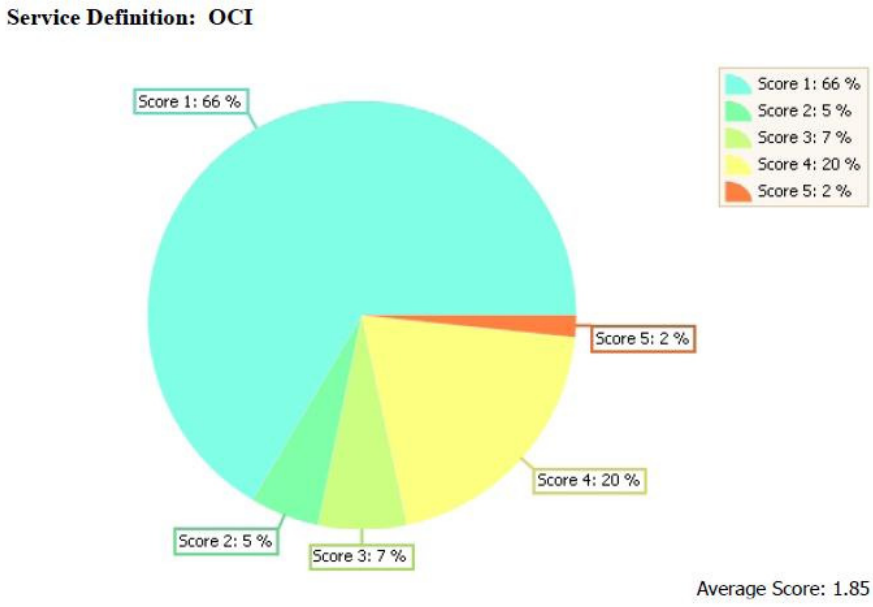


Figure 8: Overall Condition Index across the Road Network

Road Functional Hierarchy

The road hierarchy is key in the management of the road assets as the road classification that is assigned to each segment of road is used to determine the inspection frequencies, maintenance regimes and standards for new construction.

The Wyndham road network is characterised by the following:

MUNICIPAL ROAD CLASSIFICATION	RESPONSIBILITY	GENERAL FUNCTIONAL DEFINITION
Freeway	VicRoads	Service high volume traffic movements

MUNICIPAL ROAD CLASSIFICATION	RESPONSIBILITY	GENERAL FUNCTIONAL DEFINITION
Declared Arterial	Shared Responsibilities between VicRoads and Council (as detailed in the RMA and Code of Practice)	Form the principal avenue routes for traffic movement across the metropolitan areas.
Main	Council	Distribute Traffic between the VicRoads network and provide access to the local network.
Collector	Council	Distribute traffic between the main network and the local system.
Local Access	Council	Provide abutting properties with access to the road network.

Table 16: WCC Functional Road Hierarchy

Historical Expenditure

Historical expenditure for roads is detailed below:

	2006/07 $(000)	2007/08 $(000)	2008/09 $(000)	2009/10 $(000)	2010/11 (Budget) $(000)	TOTAL $(000)
Operations	706	721	915	1,028	1,677	**5,047**
Maintenance	1,919	2,154	2,017	1,878	2,312	**10,280**
Renewal	4,087	7,620	7,707	4,280	0	**23,694**
Upgrade	1,556	3,133	888	1,012	0	**6,589**
New Works	80	434	1,709	5,796	0	**8,019**
Total	**8,348**	**14,062**	**13,236**	**13,994**	**3,989**	

Table 17: Road Historical Expenditure

Asset Value

The table below identifies the current financial valuation of the road pavement network.

SURFACE TYPE	REPLACEMENT VALUE $(000)	WRITTEN DOWN VALUE $(000)
Surface	714,771	523,063
Base	729,617	531,784
TOTAL	1,444,388	1,054,847

Table 18: Road Pavement Value

Works Identification and Prioritisation

Works related to road pavement are identified as follows, either through:

- Customer Requests;
- Internal or Stakeholder notification; or
- Inspections undertaken in line with the Road Management Plan.

Maintenance works identified are prioritised based on safety. Capital works are prioritised using condition ratings and other parameters deemed important to WCC such as road hierarchy, traffic counts etc.

6.3 PATHWAYS

Key Issues

The key issues related to the management of WCC pathways are:

- Growth;
- Interconnectivity;
- Res Code guidelines specifies the requirement for footpaths on one side of the road;
- Unauthorised openings – private works (e.g. plumbers);
- Damage caused by developers and service authorities;
- Vehicle access to properties other than via vehicle crossings;
- Council is not currently auditing whether the Developer is supplying adequate footpath provision within Developments. If the developer does not provide adequate pathways, then Council is required to fund them;
- Managing a network with two different standards; old standard width of 1.2m versus new standard width of 1.5m; and
- Damage and misalignment of footpath sections arising from the intrusion of tree roots.

Asset Description

The purpose of the pathway pavement is to provide a pathway network that is suitable for the efficient movement of pedestrians and bike riders in and through the Wyndham City.

Approximately 982km of formed all weather footpaths throughout the municipality play a vital role in allowing pedestrian traffic in a safe manner. They provide segregation of pedestrian movements from vehicular traffic, thereby reducing risks to pedestrians.

The life of the concrete footpath is assumed to be approximately 40 years. Asphalt footpaths have an assumed life of 25 years while brick footpaths have an assumed life of 40 years. As with kerb & channels, external factors can influence the life of footpaths. It is important therefore to regularly monitor the condition of footpaths.

The pathway network consists of a variety of surface types. A summary of pathways by asset type is shown in the table below:

ASSET TYPE	LENGTH (KM)
Footpaths	982
Shared paths	134
Total	**1,022**

Table 19: Pathways Covered in the Lifecycle Management Plan

Asset Performance

Asset performance may be measured by:

- Age (at a broad level);
- Condition; or
- Asset Maintenance Histories (not currently available).

Asset Condition

Asset condition is captured every three years for pathways. The next survey is planned for 2010/11 and is currently underway. The data collected though the next assessment cycle is intended to improve the confidence in the condition data as the confidence in the existing condition information for pathways is quite low.

Pathway Functional Hierarchy

The pathway hierarchy is key in the management of the pathway assets as the pathway classification that is assigned to each segment of pathway is used to determine the inspection frequencies, maintenance regimes and standards for new construction.

The WCC pathway network is characterised by the following:

HIERARCHY	DEFINITION
3	High
2	Moderate
1	Low

Table 20: WCC Functional Pathway Hierarchy

Historical Expenditure

Historical expenditure for pathways is detailed below:

	2006/07 $(000)	2007/08 $(000)	2008/09 $(000)	2009/10 $(000)	2010/11 (Budget) $(000)	TOTAL $(000)
Operations	0	0	0	0	0	**0**
Maintenance	525	617	581	422	696	**2,841**
Renewal	291	72	391	116	0	**870**
Upgrade	137	43	115	73	0	**368**
New Works	75	4	97	200	0	**376**
Total	**1,028**	**736**	**1,184**	**811**	**696**	

Table 21: Pathways Historical Expenditure

Asset Value

The table below identifies the current financial valuation of the pathway network:

ASSET TYPE	REPLACEMENT VALUE $(000)	WRITTEN DOWN VALUE $(000)
Footpaths	49,690	33,316
Shared paths	Unknown	Unknown
Total	**49,690**	**33,316**

Table 22: Pathway Values

Works Identification and Prioritisation

Works related to pathways are identified as follows, either through:

- Customer Requests;
- Internal or Stakeholder notification; or

- Inspections undertaken in line with the Road Management Plan.

Maintenance works identified are prioritised based on high risk areas and to ensure coverage of the municipality is achieved through the subsequent programmes. Capital works are prioritised using condition ratings and other parameters deemed important to WCC such as pathway hierarchy, risk levels etc.

6.4 KERB AND CHANNEL

Key Issues

The key issues related to the management of WCC kerb and channel are:

- Damage and misalignment of kerb sections arising from the intrusion of tree roots;
- The deformation of sections of kerb & channel due to ground movement in expansive clay sub grades;
- Water ponding along deformed sections of kerb and channel; and
- Movement as a result of inadequate subsoil drainage.

Asset Description

Kerb and Channels play an important role in the protection and enhancement of the road pavement. They assist in taking stormwater from the road surface and channelling it into underground drainage systems. This greatly reduces the entry of water into the pavement structure, one of the main causes of pavement deterioration.

The network of kerb and channels within the municipality totals 1,601km.

The useful life of kerb and channel is assumed to be approximately 40 years. Many factors influence the attainment of this figure including tree root damage, vehicle damage, poor construction techniques, etc. Therefore each section requires on-going condition assessment to determine the remaining life.

A summary of kerb and channel by asset type is shown in the table below:

ASSET TYPE	LENGTH (KM)
Mountable	Unknown
Semi-mountable	Unknown
Barrier	Unknown
Semi-Barrier	Unknown
Total	**1,601**

Table 23: Kerb and Channel Covered in the Lifecycle Management Plan

Asset Performance

Asset Condition

The kerb and channel condition survey is undertaken as part of the road condition assessment process. The current (2008) condition data for kerb and channel is represented in the pie chart below:

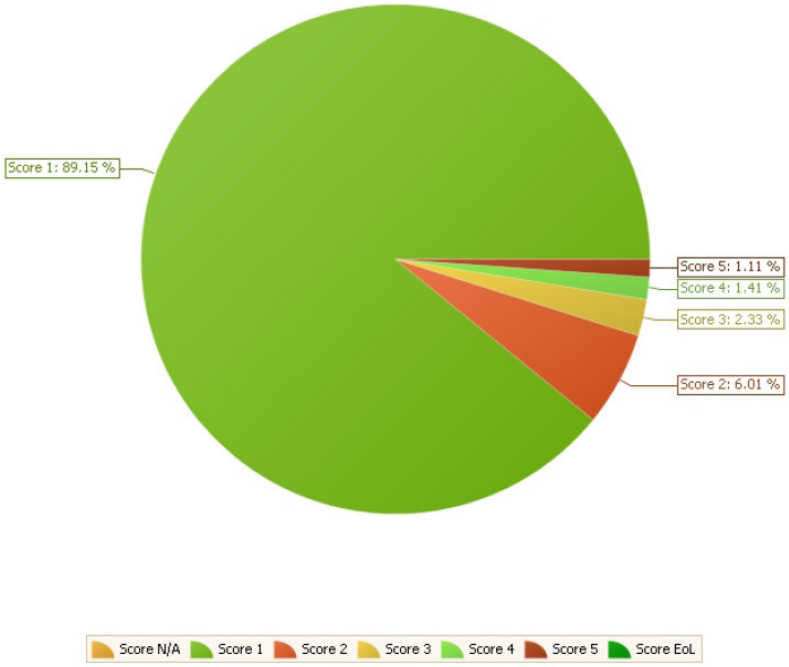


Figure 9: Overall Condition Index for Kerb and Channel

It can be seen above that only 1.11% of the kerb and channel managed by Wyndham is in very poor (rating 5) condition, a further 1.41% in condition 4. 89.15% of the kerb and channel assets are in excellent condition. Using the results from the 2011 condition assessment, WCC will be able to identify whether the kerb and channel condition has improved, deteriorated or has remained static over the past three years.

Kerb and Channel Functional Hierarchy

The kerb and channel hierarchy is defined in line with the road hierarchy (refer section 7.2).

Historical Expenditure

Historical maintenance expenditure for kerb and channel is detailed below:

	2006/07 $(000)	2007/08 $(000)	2008/09 $(000)	2009/10 $(000)	2010/11 (Budget) $(000)	TOTAL $(000)
Operations	0	0	0	0	0	**0**
Maintenance	176	156	179	157	261	**929**
Renewal	434	1,111	781	403	0	**2729**
Upgrade	176	437	86	162	0	**861**
New Works	36	61	165	599	0	**861**
Total	**822**	**1,765**	**1,211**	**1,321**	**261**	

Table 24: Kerb and Channel Historical Expenditure

Asset Value

The table below identifies the current financial valuation of the kerb and channel network.

ASSET TYPE	REPLACEMENT VALUE	WRITTEN DOWN VALUE
Concrete	$86,644,300	$77,006,951
Blue Stone	Unknown	Unknown
TOTAL	**$86,644,300**	**$77,006,951**

Table 25: Kerb and Channel Value

Works Identification and Prioritisation

Works related to kerb and channel is identified as follows, either through:

- Customer Requests;
- Internal or Stakeholder notification; or
- Response inspections undertaken in line with the Road Management Plan.

Maintenance works identified are prioritised based on high risk areas. Capital works are prioritised using condition ratings and other parameters deemed important to WCC such as road hierarchy, risk levels etc.

6.5 Bridges and Major Culverts

Key Issues

The key issues related to the management of WCC bridges and major culverts are:

- Load restrictions; and
- Culvert blockages causing flooding upstream.

Asset Description

The purpose of the bridges is to enable greater accessibility and ease of movement of vehicles and people over watercourses and major roadways in and around the Wyndham City.

Wyndham City Council is responsible for 12 vehicle and 34 pedestrian bridges within its boundaries.

A culvert is defined as a structure which functions as a drain along a waterway, and is open at both ends. Council manages both major and minor culverts.

A summary of bridges and culverts by asset type is shown in the following table.

ASSET TYPE	QUANTITY (NO.)
Vehicle	12
Pedestrian	34
Major Culverts	70
Minor Culverts	120
Total	**236**

Table 26: Bridge Covered in the Lifecycle Management Plan

Boundary bridges include:

- Kirks Bridge – Kirks Bridge Road;
- Grants Bridge – You Yangs Road; and
- Rothwell Bridge – Old Melbourne Road.

A major culvert is one which has a waterway area > 1.0sq m. Anything below this is classified as a minor culvert.

Asset Performance

Asset Condition
Bridge condition assessments are undertaken in line with the Level 2 bridge inspections undertaken every 3 years. The next assessment is planned for 2012/13. Major culverts with waterway areas greater than $1m^2$ are subject to a similar condition assessment.

Bridge Functional Hierarchy

All bridges and culverts are inspected and maintained under the same frequencies independent of any classification.

Historical Expenditure

Historical maintenance expenditure for bridges and culverts is detailed below:

	2006/07 $(000)	2007/08 $(000)	2008/09 $(000)	2009/10 $(000)	2010/11 (Budget) $(000)	TOTAL $(000)
Operations	14	18	22.5	18.5	21	**94**
Maintenance	3	3.6	4.5	7.3	11	**29.4**
Renewal	0	0	0	0	0	**0**
Upgrade	0	0	0	0	0	**0**
New Works	0	0	0	0	0	**0**
Total	**17**	**21.6**	**27**	**25.8**	**32**	

Table 27: Bridges and Culverts Historical Expenditure

Asset Value

The table below identifies the current financial valuation of bridges and major culverts:

ASSET TYPE	REPLACEMENT VALUE	WRITTEN DOWN VALUE
Vehicle	$5,598,650	$2,392,670
Pedestrian	$2,280,000	$1,303,597
Major Culverts	$14,145,000	$8,400,415
Minor Culverts	Unknown	Unknown
TOTAL	**$22,023,650**	**$12,096,682**

Table 28: Bridge and Major Culverts Value

Works Identification and Prioritisation

Works related to bridges and major culverts are identified as follows, either through:

- Customer Requests;
- Internal or Stakeholder notification; or
- Inspections undertaken in line with the Road Management Plan.

Maintenance works identified are prioritised based on safety as identified from the Level 2 inspections. Capital works are prioritised using condition ratings and other parameters deemed important to WCC such as traffic counts, risk levels etc.

6.6 STREETSCAPES AND TRAFFIC MANAGEMENT

Key Issues

The key issues related to the management of WCC streetscapes and traffic management are:

- Vandalism and graffiti;
- Lighting installed within subdivisions is non-standard and power utilities will not take ownership; and
- Damaged infrastructure.

Asset Description

A summary of streetscapes and traffic management by asset type is shown in the table below:

ASSET TYPE	QUANTITY
Street Furniture	8,522
Street Trees	65,000
Signage	9,750
Traffic Signals and Crossings	69
Traffic Management Devices	2,018
Total	**85,359**

Table 29: Streetscapes and Traffic Management Covered in the Lifecycle Management Plan

The WCC street furniture and signs are characterised by the following:

ASSET TYPE	CATEGORY	DEFINITION
Street Furniture	Street Furniture	Furniture located on streetscapes such as litter bins, bollards, benches, tables, bicycle racks, planter boxes, chairs, flag poles,
	Public Lighting	Street lights owned by Council
Street Trees	Street Trees	65,000 street trees are located within the road reserve
Signage	Information Signs	Signs providing information useful to the resident or visitor
	Directional Signs	Guiding signage
	Regulatory Signs	Includes parking, warning and traffic regulation signs
Traffic Signals and Crossings	School Crossings	Crossings located at schools for school children use
	Traffic Signals	Signals found at intersections
	Pedestrian Signals	Signals found at pedestrian crossings
Traffic Management Devices	Road Humps	Raised devices in the road to reduce vehicle speed
	Speed Cushions	Raised devices in the road to reduce vehicle speed

ASSET TYPE	CATEGORY	DEFINITION
	Roundabouts	Raised pavement constructed in a circular design to allow for a continuous flow of traffic
	Traffic Islands	Raised pavement constructed to divide traffic

Table 30: Road Furniture and Signs Definitions

Asset Performance

Asset performance is not currently monitored in a structured way.

Streetscapes and Traffic Management Functional Hierarchy

The street furniture, signs and traffic management hierarchy is defined in line with the road hierarchy (refer section 7.2).

Historical Expenditure

Historical expenditure for streetscapes and traffic management is detailed below:

	2006/07	2007/08	2008/09	2009/10	2010/11 (Budget) $(000)	TOTAL
Operations	20	29	23	31	38	**141**
Maintenance	600	650	568	696	905	**3,419**
Renewal	0	219	0	0	0	**219**
Upgrade	0	0	0	297	0	**297**
New Works	315	403	738	194	0	**1,650**
Total	**315**	**403**	**738**	**194**	**0**	

Table 31: Streetscapes and Traffic Management Historical Expenditure

Asset Value

Streetscapes and traffic management values where available are shown below:

ASSET TYPE	REPLACEMENT VALUE	WRITTEN DOWN VALUE
Street Furniture including public lighting	Unknown	Unknown
Street Trees	Unknown	Unknown
Signage	Unknown	Unknown
Traffic Signals and Crossings	$4,081,507	$3,238,019
Traffic Management Devices incl. roundabouts, speed humps	Unknown	Unknown
Total	$4,081,507	$3,238,019

Table 32: Streetscapes and Traffic Management Value

Works Identification and Prioritisation

Works related to streetscapes and traffic management are identified on a reactive basis, either through:

- Customer Requests; or
- Internal or Stakeholder notification.

Maintenance works identified are prioritised based on safety. .

6.7 INSPECTIONS

Inspections are undertaken on a regular basis to ensure that the road assets are being maintained in a safe manner and that adopted intervention levels are being met.

Depending on the road hierarchy classification the inspections undertaken may be subject to different frequencies and response times. Appendix 1 in the Road Management Plan details the frequencies and response times in detail against the road hierarchy.

Inspections of assets in line with the Road Management Plan are undertaken using the RapidView - Crest Product which also allows jobs to be created in the field. Compliance audits of activities outlined in the Road Management Plan are undertaken by several different Officers in the Roads Department.

ASSET TYPE	INSPECTIONS
Road Pavement	In line with the RMP, WCC undertakes inspections for all road surfaces including: • Compliance inspections – undertaken as part of an inspection program or in conjunction with routine patrol maintenance ; • Response inspections undertaken on an adhoc basis in response to notifications; and • Condition inspections undertaken to determine the overall structural condition of the assets.
Pathways	Inspections are undertaken on a regular basis to ensure that the pathway assets are being maintained in a safe manner and that adopted intervention levels are being met. In line with the RMP, WCC undertakes inspections for all pathways including: • Compliance inspections – undertaken as part of an inspection program or in conjunction with routine patrol maintenance ; • Response inspections undertaken on an adhoc basis in response to notifications; and • Condition inspections undertaken to determine the overall structural condition of the assets. Current inspection practices to identify maintenance or repair works are summarised as follows: **Footpath Maintenance** Inspection of footpaths is undertaken as detailed above. There may be reason for repair of 'damage caused by others'

ASSET TYPE	INSPECTIONS
	activity in the road reserve. These situations are addressed below. **Building Sites** Inspections are carried out by either the owner, builder or appointed agent before or as near as practicable to the commencement of works and by Council after building activities have been completed. The details of the process and responsibilities are contained in Council's Local Law 3. **Reinstatement of Openings by "Works Managers"** The RMA requires that Works Managers reinstate the pathway or area of roadside to, as nearly as is reasonably practicable, an equivalent standard of quality and design that existed before the works were commenced. **Vehicle Crossings** The applicant is required to complete a detailed application form which includes reporting any existing damage to adjacent Council assets. The details of the process and responsibilities are contained in Council's Local Law 3.
Kerb and Channel	Inspections are undertaken on a reactive basis. If notified of a request Council will inspect to ensure that the kerb and channel assets are safe and will rectify in accordance with the intervention levels and response times in the Road Management Plan
Bridges and Major Culverts	Inspections of minor and major culverts are undertaken annually for operational purposes. Bridges are subject to a three tier inspection regime as outlined below. Council has adopted the "Vic Roads Bridge Inspection Manual" to monitor the condition of its bridges. The inspection of the bridges are categorised into three levels. <u>Level 1 – Routine Maintenance Inspection</u> Level 1 inspection are carried out at 6 monthly intervals by inspectors with relevant experience. The objective of level 1 inspection is to check the general serviceability of the bridge structure, identify emerging problems, report on significant visible signs of distress, and recommend level 2 inspection if warranted. <u>Level 2 – Bridge Condition Inspections</u> Level 2 inspections are comprehensive visual inspections carried out by an accredited bridge inspector. The frequency of this inspection depends on the risk profile of the structure. The objective of level 2 inspection is to rate the condition of the bridge structure and give it an overall bridge score (OBS). Level 2 inspections would also recommend maintenance

ASSET TYPE	INSPECTIONS
	works, modelling and forecasting future changes in condition, and estimating future budget requirements. Level 3 – Detailed Engineering Inspections and Analysis Level 3 inspections are specific, special and detailed. The intention of level 3 inspections is to address issues identified at the level 2 inspections. Level 3 inspections may include detailed visual inspection, sampling and testing of materials, identifying structurally critical components and identifying causes of deterioration. All major culverts and bridges are inspected every 3 years for structural condition (Level 2 inspection).
Streetscapes and Traffic Management	Regulatory signs are inspected in line with the RMP compliance audits. Traffic management devices are inspected as part of the road compliance inspections. All other inspections related to streetscapes and traffic management are reactively undertaken.
Vehicle Crossings	There is no programmed inspection of vehicle crossings. Faults may be identified via customer complaints or by Council staff during the conduct of operational duties. Under Schedule 10, Clause 12 of the Local Government Act 1989, and Council's Local Law No. 11 (Part 4, Clause 42), the relevant property owner has the responsibility for the "upkeep" of his/her driveway (refer Clause 4.4.3 and Clause 4.4.4 of Council's RMP).
Road Safety	Every two years Council investigates the top 40 crash sites. In mid-September of 2010 Council submitted to VicRoads a submission for 'Blackspot' funding for up to three intersections. Using current data from VicRoads it is possible to identify where 3 or more casualties have occurred over a 5 year period. This information assists in undertaking road related treatments in blackspot areas. Council is now committed to applying preventative/proactive intervention at accident sites deemed to be in grey spot areas (potential for accidents). Council is trying to predict the rate of accidents to apply treatments in the most appropriate places. Traffic management installations are taking place such as signals, signage i.e. prepare to stop, speed humps and roundabouts to improve driver safety. Pedestrian signals that are triggered by side traffic will be incorporated into Council's Pedestrian Signal Strategy.

Table 33: Inspection Activities

6.8 Operations and Maintenance Plan

Maintenance is generally defined as the regular day to day work that is carried out to ensure Council's assets are functional and safe for public use. All road maintenance activities are managed by Council's Infrastructure Directorate. For details of the key maintenance activities, refer Appendix C.

In general the regular and on-going maintenance of the road network is necessary to:

- Make the infrastructure safe;
- Improve the aesthetics of the infrastructure;
- Maintain customer satisfaction; and
- Meet levels of service.

For specific assets the regular and on-going maintenance is necessary to:

- Maintain safe roads for all users;
- Retain connectivity between Council and neighbouring road networks;
- Maintain the flow of water from the road and along the kerb and channel upon a rain event; and
- Prevent pooling of water along the kerb and channel.

The objectives related to the management of bridges, are to:

- Ensure bridges provide safe access for pedestrians, cyclists and motorists;
- Provide a system of inspection and repair which would ensure the assets structural integrity and sustainability; and
- Ensure adequate funding for maintenance works and capital works for all bridges within the City of Wyndham.

ASSET TYPE	RESPONSIBILITY	OPERATIONS[6]	MAINTENANCE
Road Pavement	Maintenance Co-ordinator for Roads and Drainage	The operational activities involved in the ownership and management of the WCC roads include: • Street sweeping; • Inspections; and • Debris clearing.	Road maintenance within WCC is both reactive and proactive. Reactive maintenance activities are undertaken in line with interventions detailed in the Road Management Plan. The type of maintenance activities undertaken include:

[6] Inspections are identified in a previous section of the strategy

ASSET TYPE	RESPONSIBILITY	OPERATIONS[6]	MAINTENANCE
			• Grading of unsealed roads (program in place); • Pothole patching of asphalt surfaces; and • Spray Seals. Jobs are issued through the asset management information system (AMIS) as a printed work order and issued to the works crew.
Pathways	City Maintenance department	The operational activities involved in the ownership and management of the WCC pathways include: • Data Collection; • Inspections; and • Day to day staff management.	Pathways maintenance within WCC is both reactive and proactive. Current maintenance activities include the: • Graffiti Removal – City Presentation Graffiti Officer; • Path Cleansing – Roads & Drains Coordinator; • Inspections – Asset Rehabilitation; and • Temporary Repairs – Asset Rehabilitation (usually utilising Roads & Drains). Council's City Maintenance department is responsible for all maintenance of footpaths in road reserves, foreshores, sporting reserves, river reserves and open space reserves in accordance with the intervention levels. This plan deals only with paths located in road reserves. The maintenance schedule applicable to footpaths is provided in Appendix C.
Kerb and Channel	Maintenance Co-ordinator	The operational activities involved in the ownership and management of the WCC kerb and channel include: • Day to day staff management; • Debris removal and sweeping – Roads &	Kerb and channel maintenance within WCC is mostly reactive and undertaken in response to customer requests. Street sweeping is undertaken as an operational

ASSET TYPE	RESPONSIBILITY	OPERATIONS[6]	MAINTENANCE
		Drains Coordinator; and • Inspections and temporary repairs – Asset Rehabilitation	activity however it reduces maintenance activity by minimising the amount of blockages within the kerb and channel network.
Bridges and Major Culverts	Asset Management and Maintenance department	• Refer inspections	Regular monitoring and maintenance is required to ensure the longevity and safety of the bridges however maintenance activities are currently reactive. Programmed maintenance activities for bridge surface treatments include crack sealing, pavement repairs, drainage, guard fence repair/replacement and street sweeping. Where a flood results in the closure of a bridge/major culvert and following subsidence of the flood, the structure will be inspected by a suitably qualified person to determine if the structure is fit for purpose to re-open. Minor and major culverts are cleaned as part of an on-going program.
Street Furniture including public lighting	Asset Management and Maintenance department	• Refer inspections	Street Furniture maintenance includes: • Repair of other damaged road related infrastructure including missing guideposts, marker posts, delineators, pavement markings, line marking and damaged and missing street furniture • Street lights not functioning • Rectification where a street light has fallen across a path or road
Street Trees	City Presentation, Parks and Recreation	• Refer inspections	Street tree maintenance includes: • Rectify where a tree and/or a part of a tree has fallen across a path, road or power line • Rectify any intrusion of street tress into

ASSET TYPE	RESPONSIBILITY	OPERATIONS[6]	MAINTENANCE
			pedestrian and/or vehicle clearance zone • Attend to positioned or diseased street trees • Attend to any dead or dying street tree • Rectify where a tree is intruding into the power line clearance zone Where a street tree has one or more substantive branches in the clearance envelope and it has been determined that the branches cannot be removed without endangering the tree and that it is highly desirable to retain the tree, then the branches will be trimmed as close as practicable to the stipulated minimum clearance height to minimise the likelihood of vehicles/pedestrians colliding with the branch(es). If this action is subsequently deemed not to be sufficient, the removal of the tree will be re-assessed.
Signage	Asset Management and Maintenance department	• Refer inspections	General maintenance in response to the repair of damaged or missing regulatory and warning signs. The Signs Crew is responsible for repair of signage notified through customer requests or internal notification. If no reactive backlog works are identified the crew will then employ a more proactive approach and repair any damaged or graffiti signage as part of proactive identification.
Traffic Signals and Crossings	Asset Management and Maintenance department	• Refer inspections	• None undertaken
Traffic Management Devices incl.	Asset Management and Maintenance department	• Refer inspections	General maintenance in response to poor line-marking, damage to kerb and paver movement.

ASSET TYPE	RESPONSIBILITY	OPERATIONS[6]	MAINTENANCE
roundabouts, speed humps			
Street Bins	Asset Management and Maintenance department	• Refer inspections	The footpath crew is responsible for keeping the bins clean. The bins are regularly observed on a proactive basis. If any bins (or seats) are identified as damaged the variations crew are notified to repair the furniture.
Street Lighting	Engineering Services	• Refer inspections	The street lights are mostly owned by Powercor with a small proportion owned by the Council. The maintenance of the street lights is carried out by Powercor however Powercor charges Council an extra amount for maintenance, if the lights are non-standard. Council pays all the electricity costs for the lights.
Fire Hydrants	Asset Management and Maintenance department	• Refer inspections	Any repairs to fire hydrants are undertaken by City West Water however Council has a responsibility to maintain the hydrant posts, indicators and surrounds. Fire hydrants are inspected every 3 years.
Median Strips	Asset Management and Maintenance department and VicRoads as noted under maintenance	• Refer inspections	Centre medians are monitored by the street sweeping crew on an informal basis. Maintenance on medians and outer separators on municipal roads is undertaken by Council. Maintenance on median strips on Declared Arterial roads is the responsibility of VicRoads. The responsibility for maintenance on outer separators on Declared Arterial roads is as outlined in the Code of Practice, Operational Responsibility for Public Roads.

Table 34: Operations and Maintenance Activities

6.9 CAPITAL PLAN

The majority of Council's road network consists of asphalt surfaces. Council's current strategy is that when a concrete road is due for renewal it will be replaced with an asphalt road.

The annual roads rehabilitation program has been developed primarily utilising Council's Pavement Management System (PMS). However, on an annual basis the budget available for road pavement treatment is reviewed and assessed against other Council priorities before the final allocation is made. WCC utilises a strategic asset management application or PMS called 'MyPredictor' to undertake renewal forecasting activities. The model uses raw condition data against each parameter to calculate an Overall Condition Index (OCI). This information is used in conjunction with other functional characteristics such as treatment triggers and budget to identify and prioritise works.

Council is currently working with the model to produce a 20 year renewal forecast for road pavement and surfaces. The approach is to maintain the road network at an optimum condition in line with Councils ability to fund the works. New data is currently being collected to assist with this process. At present Council is working with a budget of around $12 million to renew the road network annually.

The condition of the unsealed road network is managed through the grading program. All work is reactive and no renewal works are undertaken.

ASSET TYPE	RENEWAL PLAN	ENHANCEMENT / UPGRADE PLAN	NEW WORKS PLAN
Road Pavement	Consideration is also given to other factors, such as: • Road Hierarchy – this generally correlates with the volume of traffic carried by the road and its function within the overall road network; • Safety Issues – if a road has deteriorated to a point where it is becoming hazardous, then that road will be actively considered for inclusion in the renewal program; and • Where a road has defects which	Typically road upgrade projects are identified in response to: • Demand projections; • Replacement works that improve the surface material used and extends the life of a road; • Traffic management and congestion requirements; and • Risk and safety issues commonly identified through safety audits. Upgrade work may include: • Widening of sealed or unsealed	New road assets are commonly identified in response to: • Growth (demand); • Risk; • Safety Audits; • Car Park Audits; and • Recommendations identified in planning and strategy documents. Given Wyndham is growing rapidly; new roads are commonly constructed as part of sub divisional works.

ASSET TYPE	RENEWAL PLAN	ENHANCEMENT / UPGRADE PLAN	NEW WORKS PLAN
	are deemed to be not repairable by the normal maintenance activities, then that road will be referred to the renewal program. Typical renewal treatments include: • Asphalt overlays; • Mill and re-sheet; • Rehabilitation (partial reconstruction); or • Full reconstruction.	roads; • Converting a spray sealed road to an asphalt surface; • Upgrading shoulders; and • Sealing an unsealed road. The sealing of unsealed roads takes place if required as part of development works.	
Pathways	Replacement/ reconstruction is scheduled on an area basis based on available resources. Capital renewal involves replacement of 80% of a footpath segment.	Pathways may be subject to upgrade through changes in standards or levels of services. This may involve either the installation of an improved surface material such as concrete from gravel or widening of the existing pathway to provide a shared pathway or wider single use pathway.	New pathway works are typically undertaken in response to: • The need to respond to customer requests; • The need to link areas through improving connectivity within the network; and • Created as part of sub-division. A draft footpath guidelines document is currently being prepared that identifies areas where footpaths are missing.
Kerb and Channel	Capital renewal of kerb and channel is generally combined with road pavement rehabilitation works where the kerb and channel has deteriorated to the extent it requires renewal and/or the adjacent road pavement is often in a similar condition also requiring renewal.	No upgrade/enhancement works are currently undertaken on kerb and channel assets.	New kerb and channel works are typically undertaken in response to: • The need to respond to customer requests; • The need to link areas through improving connectivity of kerb and channel within the network; and • Created as part of sub-division.

ASSET TYPE	RENEWAL PLAN	ENHANCEMENT / UPGRADE PLAN	NEW WORKS PLAN
	Kerb and channel may also be renewed where the abutting road pavement is essentially structurally sound but the kerb and channel is distressed.		
Bridges and Major Culverts	Currently renewal projects are identified through level 2 or level 3 inspections undertaken by the bridge inspection consultant and may consist of such activities as the following: • Renew Abutments; and • Renew Wearing Surface on Bridge Deck. Any activity undertaken above the $25,000 threshold is capitalised as it is deemed to affect the life of the asset.	Bridges and culvert upgrades are typically undertaken as part of sub-division works.	New bridges and culverts are typically constructed as part of sub-division works.
Streetscapes and Traffic Management	Renewal works are undertaken on a reactive basis in response to customer requests and internal or Stakeholder notification. Smaller assets such as signs, street furniture, streetlights etc. are generally renewed or replaced on a reactive basis where the assets are damaged or are no longer serviceable due to normal wear and tear. Where major refurbishment of existing Council owned/controlled bus shelters is carried out, action is taken to ensure they are compliant with the Disability Discrimination Act (DDA).	Enhancement/upgrade works may consist of: • Intersection upgrades; • Improved materials installed upon replacement; or • Replacement of street trees with more mature trees or improved species. Currently Council's on-going strategy is to replace rubber speed humps with asphalt ones at the time of replacement. Upgrade of traffic management assets,	New bus shelters are the responsibility of the Department of Transport (DoT). Metlink are responsible for any new poles and signs. Tactiles are installed as part of bus shelter installation. New school crossings are installed by Council and programmed based on safety needs and pedestrian movements. New traffic management devices are driven by: • Customer requests; • Need to control speed; and • Road safety.

ASSET TYPE	RENEWAL PLAN	ENHANCEMENT / UPGRADE PLAN	NEW WORKS PLAN
	Street trees are generally replaced on a reactive basis, where a customer service request or a routine maintenance inspection has identified a damaged tree or tree that requires renewal (based on inappropriate species or roots causing damage to footpath, kerb, pavement, property, etc.). Traffic management renewal works are typically undertaken at the time of road pavement works.	such as roundabouts, may be required to provide a higher level of service to redress functionality issues.	New pedestrian operated signals and crossings are currently being identified as part of a strategy to proactively locate suitable areas for the installation of these signals and crossings. Development contribution plans include new streetscape and traffic management infrastructure where required including street furniture, public lighting, signage, signals, traffic management devices where deemed essential as part of the development. Council is currently investigating the installation of taxi ranks within the municipality's shopping centre precincts. Installation includes signage and seats and taxi parking areas. 4 sites are currently being tested and another 4 will be tested in the next 18 months. This has been recognised as a public need and will assist in managing traffic.

Table 35: Capital Funded Activities

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7.0 Financial Summary

This section outlines the long-term operations, maintenance and capital financial requirements for the operation, maintenance, renewal and development of road assets based on long-term strategies outlined earlier in the plan. Funding issues are discussed and key assumptions made in preparing financial forecasts are noted.

7.1 10 Year Financial Forecast

The table below summarises the 10 year financial forecast for WCC's roads (from 2011/12 to 2020/21). Projections are shown in dollar values current as at 1 July 2010 under the headings of:

- Operations;
- Maintenance;
- Renewals; and
- Upgrade/New Works.

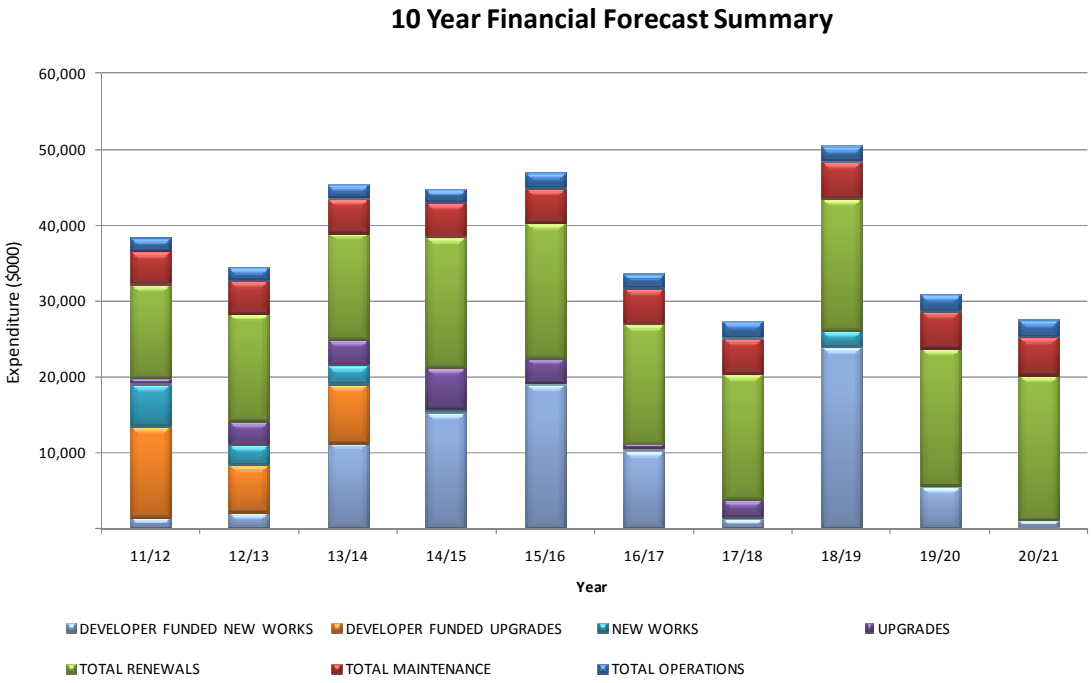

Figure 18: 10 Year Financial Projections

The amended financial forecast is provided based on the following outcomes:

- Projects identified in the Precinct Plans;
- Impacts of growth over the next 10 years; and
- Impacts of growth on the operations and maintenance activities.

The timing of activities is an estimate only. While WCC has time before many of the issues become apparent such as pipe age, the available time represents an opportunity to make appropriate decisions on activities and their future implementation.

The difference between the current funding and projected funding over the ten year period is identified in the following table.

FUNDING CATEGORIES	EXISTING 10 YEAR EXPENDITURE	PROJECTED 10 YEAR EXPENDITURE	FUNDING DIFFERENCE
OPERATIONS	$17,670,000[7]	$19,303,000	-$1,633,000
MAINTENANCE	$43,120,000[8]	$46,770,000	-$3,650,000
RENEWAL	$162,577,000	$162,577,000	$0
UPGRADE (Council Funded)	$19,204,00	$19,204,00	$0
NEW (Council Funded)	$13,705,000	$13,705,000	$0
UPGRADE (Developer Funded)	$25,735,000	$25,735,000	$0
NEW (Developer Funded)	$80,744,000	$91,894,000	-$11,150,000
TOTAL	**$362,775,000**	**$367,528,000**	**-$16,433,000**

Table 36: Funding Gap

Note: There is insufficient condition data to review the renewal needs.

As can be seen above the funding gap is approximately $16.4million over ten years. This however assumes that renewal expenditure is currently appropriate and road infrastructure is to be upgraded in a timely fashion to meet the intended growth rates. There is sufficient analysis by Council to assume this is the case.

This however does not include the projected $229million of infrastructure over ten years being created by the developers. This implies the 10 year capital program may not be considering these impacts and may lead to a shortfall in capital expenditure.

Should the road upgrades not occur in a timely manner then there will be further traffic congestion due to the increased traffic flows. This could have a negative impact on growth resulting in a reduced demand. Traffic from Wyndham to the city has sufficient problems without creating further problems within the municipality.

The expenditure projections are provided in summary form in the following table.

[7] 2011 operations budget extrapolated over ten years
[8] 2011 maintenance budget extrapolated over ten years

All Roads - 10 Year Financial Forecast

			11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	TOTAL
COUNCIL FUNDED OPS & MAINT.	**OPERATIONS**												
		Roads incl. kerb and channel	1,715	1,753	1,791	1,829	1,866	1,905	1,945	1,984	2,023	2,062	18,871
		Pathways											
		Bridges and Culverts											
		Streetscapes and Traffic Management	39	40	41	42	43	44	45	45	46	47	432
		Total Operations	**1,754**	**1,793**	**1,832**	**1,870**	**1,909**	**1,949**	**1,989**	**2,029**	**2,069**	**2,109**	**19,303**
	MAINTENANCE												
		Roads incl. kerb and channel	2,632	2,690	2,748	2,806	2,864	2,924	2,943	2,997	3,050	3,104	28,757
		Pathways	712	727	743	758	773	789	805	821	837	853	7,818
		Bridges and Culverts	11										11
		Streetscapes and Traffic Management	925	946	966	987	1,007	1,028	1,049	1,070	1,092	1,113	10,184
		Total Maintenance	**4,280**	**4,363**	**4,457**	**4,551**	**4,645**	**4,741**	**4,797**	**4,888**	**4,979**	**5,070**	**46,770**
COUNCIL FUNDED CAPITAL	**RENEWALS**												
		Roads incl. kerb and channel	12,306	14,096	14,163	17,117	17,839	15,828	16,587	17,364	18,160	18,977	162,437
		Pathways	70	70									140
		Bridges and Culverts											
		Streetscapes and Traffic Management											
		Total Renewals	**12,376**	**14,166**	**14,163**	**17,117**	**17,839**	**15,828**	**16,587**	**17,364**	**18,160**	**18,977**	**162,577**
	UPGRADES												
		Roads incl. kerb and channel	812	3,122	3,419	5,475	3,342	758	2,276				19,204
		Pathways											
		Bridges and Culverts											
		Streetscapes and Traffic Management											
		Total Upgrades	**812**	**3,122**	**3,419**	**5,475**	**3,342**	**758**	**2,276**				**19,204**

All Roads - 10 Year Financial Forecast											
		11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	TOTAL
	NEW WORKS											
	Roads incl. kerb and channel	321	1,274	1,250					2,000			4,845
	Pathways	1,129	1,120	500	500	100	100	100	100	100	100	3,849
	Bridges and Culverts											
	Streetscapes and Traffic Management	4,086	225	700								5,011
	Total New Works	**5,536**	**2,619**	**2,450**	**500**	**100**	**100**	**100**	**2,100**	**100**	**100**	**13,705**
	Total Council Capital	**18,724**	**19,907**	**20,032**	**23,092**	**21,280**	**16,687**	**18,963**	**19,464**	**18,260**	**19,077**	**195,486**
DEVELOPER FUNDED CAPITAL	**UPGRADES**											
	Roads incl. kerb and channel	11,933	6,197	7,605								25,735
	Pathways											
	Bridges and Culverts											
	Streetscapes and Traffic Management											
	Total Upgrades	**11,933**	**6,197**	**7,605**								**25,735**
	NEW WORKS											
	Roads incl. kerb and channel	475	1,113	10,328	14,161	17,950	9,158	300	22,910	4,350		80,744
	Pathways	1,099	1,099	1,099	1,099	1,099	1,131	1,131	1,131	1,131	1,131	11,150
	Bridges and Culverts											
	Streetscapes and Traffic Management											
	Total New Works	**1,574**	**2,212**	**11,427**	**15,260**	**19,049**	**10,289**	**1,431**	**24,041**	**5,481**	**1,131**	**91,894**
	Total Developer Capital	**13,507**	**8,409**	**19,031**	**15,260**	**19,049**	**10,289**	**1,431**	**24,041**	**5,481**	**1,131**	**117,629**
	TOTAL EXPENDITURE ($'000)	**50,641**	**48,638**	**59,514**	**61,890**	**64,722**	**49,495**	**43,767**	**67,786**	**48,950**	**46,363**	**379,188**

Table 37: Total 10-Year Expenditure Forecast

The figure below illustrates the breakdown of renewal expenditure against each asset category. It can be seen that road pavement is by far receiving the most renewal expenditure over the next 10 years.

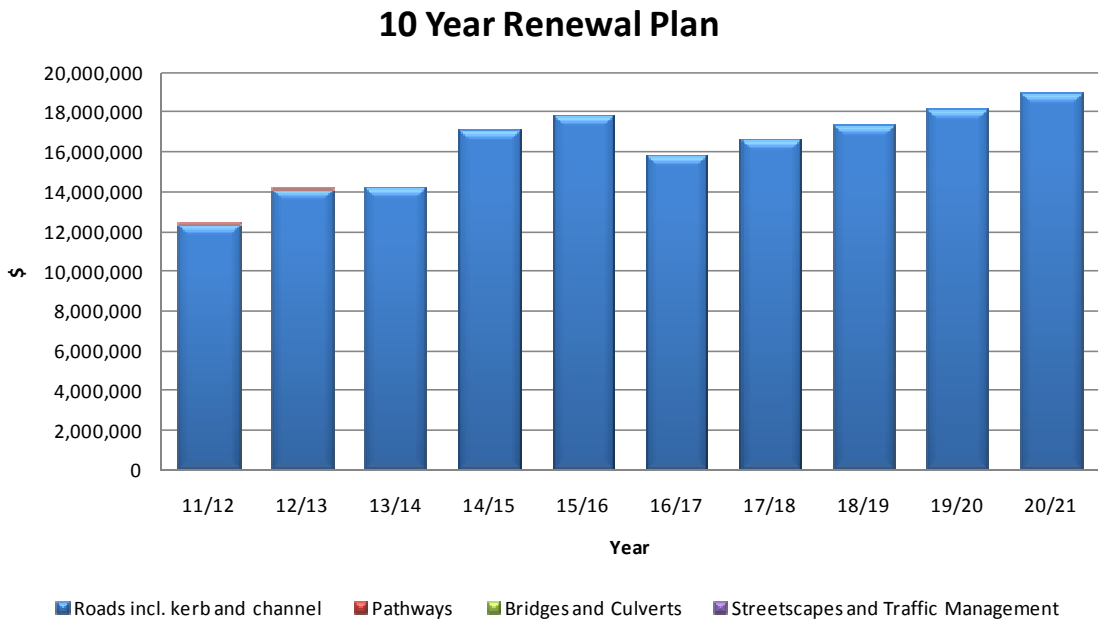

Figure 10: 10-Year Renewal Plan

7.2 Financial Forecast Assumptions and Discussion

The following general assumptions have been made in preparing the 10-year expenditure forecasts:

1. All expenditure is stated in dollar values as at 01/07/2010 with no allowance made for inflation over the 10-year planning period;
2. The projected growth of Wyndham is reflective of times to come; and
3. The renewal of the existing asset base is appropriate.

7.3 Asset Valuation

In valuing the road infrastructure assets the following methodology and approach was adopted in accordance with the Australian Accounting Standards for Financial reporting purposes:

All assets are rated at the appropriate life for the material and assessed in terms of their quantity applying the 'Fair Value' principle:

- Asset values have been based on asset data currently held in the finance database;
- Replacement values have been determined from current contract rates on the basis of the cost of replacing the asset with modern materials that provide the equivalent service in terms of capacity to the user;
- Where the useful life of the asset is extended or reduced, the resultant impact will be on future depreciation rates and charges and will not be retrospective in accordance with appropriate accounting standards; and
- All valuations and asset counts have been fully documented to provide a clear audit trail that is evident through to the accounting entries in the general Ledger.

A summary of the valuation totals are shown in the table below:

ROAD ASSET GROUP	TOTAL REPLACEMENT VALUE ($000)	TOTAL WRITTEN DOWN VALUE ($000)
Roads	881,344	635,211
Pathways	49,690	33,316
Kerb and Channel	86,644	77,007
Bridges and Culverts	22,024	12,097
Streetscapes and Traffic Management	4,082	3,238
Total	**1,043,783**	**760,868**

Table 38: Valuation Figures

Summary of the asset lives adopted as detailed in the asset accounting policy are as follows:

ROAD ASSET TYPE	ASSET LIFE (YRS)
Road Base	55
Sealed Surface	25
Concrete Surface	55
Unsealed Pavement	20
On Road Carparks - Sealed - Surface	25
On Road Carparks - Sealed - Base	55
Footpaths	40
Kerb and Channel	40
Bridges	80
Major Culverts	80
Pedestrian Signals	20
Intersection Traffic Lights	40
Right of Ways	40

Table 39: Asset Lives

7.4 Funding Sources

A major issue concerning road management is the question of who pays for needed works:

- The community through special rates;
- The developer through development contributions, or
- The consumer through recurrent charges.

To overcome this problem there should be available a range of funding options including:

- General municipal rates;
- Available grants, e.g. Roads to Recovery; and
- Black Spot.

Developers should be required to make a direct contribution to alleviate road problems resulting from their particular development. Even so the majority of upgrading works will need to be funded from municipal rates or special charges schemes.

Funding capacity covers two quite different aspects, and information has to be developed to respond to both.

- Council has to have the capacity to fund the required works – often this is well outside its capacity, however the information on needs has to be provided to assist with the development of the Corporate Funding Strategy; and
- In the event that the necessary funding is forthcoming, there has to be an awareness of the ability for the actual work to be carried out. This may involve Council's own workforce in undertaking some or all of the work, and also the use of contractors/sub-contractors. In either case, we need to ask; "Is there adequate capacity to carry out the work in addition to all other normal work tasks?"

7.5 CONFIDENCE LEVELS

Using the matrix in the table below the data availability has been given a rating of 3 which is described as "Primary data located across WCC in electronic format available to a few staff" and the data completeness a rating of 2 which is described as "Primary data for limited number of major and minor assets". This results in the data confidence being classified at 24%. This means that there is a Fair level of confidence in the plan outputs.

			Data Availability				
			1	2	3	4	5
			Primary data located across WCC in hardcopy format available to a few staff	Primary data located across WCC in hardcopy and electronic format available to a few staff	Primary data located across WCC in electronic format available to a few staff	Primary data recorded in electronic format throughout WCC available to most staff	Primary data recorded in a computer system available to all relevant staff
Data Completeness	1	Primary data for limited number of assets	POOR (4)	POOR (8)	POOR (12)	POOR (16)	POOR (20)
	2	Primary data for limited number of major and minor assets	POOR (8)	POOR (16)	FAIR (24)	FAIR (32)	FAIR (40)
	3	Primary data for some assets	POOR (12)	FAIR (24)	FAIR (36)	GOOD (48)	GOOD (60)
	4	Primary data for most assets	POOR (16)	FAIR (32)	GOOD (48)	VERY GOOD (64)	VERY GOOD (80)
	5	Complete data sets for all assets	POOR (20)	FAIR (40)	GOOD (60)	VERY GOOD (80)	EXCELLENT (100)

Table 40: Data Confidence

Improvement projects have been outlined in Section 8 that is intended to result in greater confidence in the 10 year forecasts and appropriateness of target levels of service.

To assist in improving the quality of data, improvements are also identified in section 8.0.

It should be noted that the 'availability of data' score may improve when the Asset Management System is fully implemented.

8.0 Plan Improvement and Monitoring

This section provides AM improvement tasks that will be carried out over the next 3 years intended to improve the level of confidence in this AM plan. Also included is a programme for revising this AM plan.

8.1 Asset Management Improvement Program

The AM tasks identified in the summary programme below are considered to be the most important to enable WCC to meet its legislative and business requirements over the period to 30 June 2014. The programme reflects the overall aim of improving asset management practices, which is to deliver the right level of service at lowest long-term cost to WCC's customers.

The following table identifies the primary improvements identified for asset management processes, systems and data:

PROCESS / SYSTEMS	IMPROVEMENTS	TIMEFRAME	STATUS
AM Planning	Use MyPredictor to determine a 20 year renewal and maintenance program for roads, pathways, kerb and channel, bridges and culverts and if deemed necessary streetscape and traffic management assets	2011/12	-
	Prepare a 10 year maintenance plan to support the Long Term Financial Plan	2011/12	-
Asset Performance	Undertake an 'asset lives' review to revise the asset lives for individual or like assets based on impacting parameters such as soil type, traffic volumes, road hierarchy	2012/13	-
	Analyse asset condition data to identify and develop plans to address areas in poor condition	2011/12	-
Asset Knowledge	Record maintenance/defect histories for trending/planning purposes	2011/12	-
Asset Inspections	Include bridges and culverts in road compliance inspections	2012/13	-
Asset Management Systems	Complete the implementation of the asset management system	2011/12	-
Levels of Service	Complete, adopt and monitor levels of service as defined in the LOS tables	2012/13	-
	Use customer survey results and customer request information to identify areas of improvement	2012/13	-
Risk Management	Complete the infrastructure risk register including actions, costs and timing over the next 10 years	2012/13	-
	Implement the infrastructure risk register	2012/13	-
	Identify all critical roads, pathways, bridges and culverts to establish priorities	2013/14	-
Data	Improve the data availability for each asset group i.e. report by material, asset type etc.	2012/13	-

PROCESS / SYSTEMS	IMPROVEMENTS	TIMEFRAME	STATUS
	Document the data/information required to be held against any given asset through the development of a data framework document	2011/12	-
Finance	Include operations and maintenance costs in the financial forecasts to reflect the needs of Council and the impact of growth on expenditure projections.	2011/12	-
Condition	Improve the confidence in the OCI condition rating by calibrating the decision model	2011/12	-
	Document a condition assessment policy detailing which asset groups will be assessed and include justification	2012/13	-
	Document a condition manual detailing the condition criteria used to assess the roads and related infrastructure	2012/13	-

Table 41: AM Improvement Tasks

8.2 MONITORING AND REVIEW PROCEDURES

AM Plan Review

The AM plan is a living document which is relevant and integral to daily AM activity. To ensure the plan remains useful and relevant the following on-going process of AM plan monitoring and review activity will be undertaken:

- Formal adoption of the plan by Council;
- Identify and formally adopt levels of service;
- Revise the AM plan every two years to incorporate outcome of service level review and new knowledge resulting from the AM improvement programme;
- Audits of AM information to ensure the integrity and cost effectiveness of data collected; and
- Peer review: Annual internal audits to be undertaken to assess the effectiveness with which the AM plan meets corporate objectives. Periodic internal audits to be undertaken to assess the adequacy of AM processes, systems and data and external audits to be undertaken to measure AM performance against 'best practice' i.e. gap analysis.

Appendix A – Glossary Of Terms

The following terms and acronyms are used in this AM plan.

TERMS	DEFINITION
Activity	An activity is the work undertaken on an asset or group of assets to achieve a desired outcome.
Advanced Asset Management	Asset management which employs predictive modelling, risk management and optimised renewal decision-making techniques to establish asset lifecycle treatment options and related long term cashflow predictions. (See Basic Asset Management).
Asset	A physical component of a facility which has value, enables services to be provided and has an economic life of greater than 12 months.
Asset Management (AM)	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.
Asset Management Plan (AM Plan)	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost effective manner to provide a specified level of service. A significant component of the plan is a long term cashflow projection for the activities.
Asset Management Policy	Provides an overall policy framework to guide the strategic management of Council's infrastructure assets.
Asset Management System (AMS)	A system (usually computerised) for collecting analysing and reporting data on the utilisation, performance, lifecycle management and funding of existing assets.
Asset Register	A record of asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financial information about each.
Core Asset Management	Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, condition assessment and defined levels of service, in order to establish alternative treatment options and long term cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than risk analysis and optimised renewal decision making).
Capital Expenditure (CAPEX)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential. CAPEX increases the value of an asset.
Cash Flow	The stream of costs and/or benefits over time resulting from a project investment or ownership of an asset.
Components	Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.
Condition Monitoring	Continuous or periodic inspection, assessment, measurement and interpretation of resulting data, to indicate the condition of a specific component so as to determine the need for some preventive or remedial action
Critical Assets	Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.
Current Replacement Cost	The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.
Deferred Maintenance	The shortfall in rehabilitation work required to maintain the service potential of an asset.

TERMS	DEFINITION
Demand Management	The active intervention in the market to influence demand for services and assets with forecast consequences, usually to avoid or defer CAPEX expenditure. Demand management is based on the notion that as needs are satisfied expectations rise automatically and almost every action taken to satisfy demand will stimulate further demand.
Depreciated Replacement Cost (DRC)	The replacement cost of an existing asset after deducting an allowance for wear or consumption to reflect the remaining economic life of the existing asset.
Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence through technological and market changes. It is accounted for by the allocation of the historical cost (or revalued amount) of the asset less its residual value over its useful life.
Design Life	The theoretical life of an asset assumed in its design.
Disposal	Activities necessary to dispose of decommissioned assets.
Economic Life	The period from the acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular level of service. The economic life is at the maximum when equal to the physical life however obsolescence will often ensure that the economic life is less than the physical life.
Facility	A complex comprising many assets (e.g. a park, recreation complex, airport etc.) which represents a single management unit for financial, operational, maintenance or other purposes.
Geographic Information System (GIS)	Software that provides a means of spatially viewing, searching, manipulating, and analysing an electronic database.
Infrastructure Assets	Stationary systems forming a network and serving whole communities, where the system as a whole is intended to be maintained indefinitely at a particular level of service potential by the continued replacement and refurbishment of its components. The network may include normally recognised 'ordinary' assets as components.
Level Of Service (LOS)	The defined service quality for a particular activity or service area (i.e. interior) against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, regulatory & environmental acceptability and cost.
Life	A measure of the anticipated life of an asset or component; such as time, number of cycles, distance intervals etc.
Life Cycle	Life cycle has two meanings: (a) The cycle of activities that an asset (or facility) goes through while it retains an identity as a particular asset, i.e., from planning and design to decommissioning or disposal. (b) The period of time between a selected date and the last year over which the criteria (e.g. costs) relating to a decision or alternative under study will be assessed.
Life Cycle Cost	The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
Maintenance	All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.
Objective	An objective is a general statement of intention relating to a specific output or activity. They are generally longer-term aims and are not necessarily outcomes that managers can control.
Operation	The active process of utilising an asset that will consume resources such as manpower, energy, cleaning products and materials. Operation costs are part of the life cycle costs of an asset.
Optimised Decision Making (ODM)	An optimisation process for considering and prioritising all options to rectify performance failures of assets. The process encompasses net present value analysis and risk assessment.

TERMS	DEFINITION
Performance Measure	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.
Performance Monitoring	Continuous or periodic quantitative and qualitative assessments of the actual performance compared with specific objectives, targets or standards.
Physical Life	The actual life of an asset.
Rehabilitation	Works to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, which may incorporate some modification. Generally involves repairing the asset using available techniques and standards to deliver its original level of service (i.e. re roofing, replacing doors etc.) without resorting to significant upgrading or replacement.
Renewal	Works to upgrade, refurbish, rehabilitate or replace existing facilities with facilities of equivalent capacity or performance capability.
Repair	Action to restore an item to its previous condition after failure or damage.
Replacement	The complete replacement of an asset that has reached the end of its life, so as to provide a similar or agreed alternative, level of service.
Replacement Value	The prevailing market cost of supply and installation of an asset delivering an equivalent service, making no allowance for depreciation of the asset.
Risk Management	The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.
Service Potential	The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset.
Strategic Plan	Strategic planning involves making decisions about the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of the organisation and identify major targets, actions and resource allocations relating to the long term survival, value and growth of the organisation.
Scheduled Maintenance	Work carried out to a predetermined schedule e.g. air cooler service or programmed as a result of identified needs e.g. repairing a cracked wall.
Unscheduled Maintenance	Work carried out in response to reported problems of defects e.g. cleaning up vandalism.
Upgrading	The replacement of an asset or addition/ replacement of an asset component which materially improves the original service potential of the asset.
User Cost	Cost borne by the public when using the Roads.
Valuation	Estimated asset value which may depend on the purpose for which the valuation is required, i.e. replacement value for determining lifecycle costing or insurance valuation.

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Appendix B – Risk Assessment Criteria and Results

The following tables detail the risk criteria used to access the infrastructure risk in regard to road assets:

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RISK CRITERIA

Consequence	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
Health and Safety	First Aid only no lost time	Medical treatment	Extensive injuries	Death	Multiple Deaths
Revenue/Cost/Legal costs	Low financial losses <$500,000	Medium financial losses ($500,000 - $1M)	High financial losses ($1M - $5M)	$5M - $10M	Huge financial losses >$10M
Service Delivery	minor inconvenience	service delivery affected (less than one day)	temporarily unacceptable levels of service	serious impact upon service delivery - service at risk	no service delivery for foreseeable future
Reputation	internal only	temporary loss of reputation	loss of reputation requiring effort to regain	loss of reputation requiring major effort to regain	Administrator appointed
Environment	Spill/leak contained immediately within property boundary with no external assistance - Negligible environmental impact	Spill/leak contained immediately within property boundary with no external assistance - Minor impact on fauna / flora and habitat, but no negative impacts on ecosystem functions - Limited damage to a minimal area of land of no nature reserves, parks or unique habitats or water resources	Spill/leak contained within property boundary with external assistance - Significant change in flora/fauna populations but not resulting in loss or any impact on endangered or beneficial species - Non persistent but possible widespread damage of land/water resource, damage that can be remediated without long term loss; or localised persistent damage	Spill/leak contained outside property boundary with external assistance - Significant change in flora/fauna populations including significant or endangered species - Non persistent but possible widespread damage of land/water resource with medium term effect	Toxic release off-site with detrimental effect: - Widespread and persistent damage to a significant area of land and/or ground water resource

Likelihood	For Example only:	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
5 Almost Certain	Expected to occur in most circumstances (2-3 times per week)	S	S	H	H	H
4 Likely	Will probably occur in most circumstances (once a month)	M	S	S	H	H
3 Possible	May occur at some time (once a year)	L	M	S	H	H
2 Unlikely	Could occur at some time (Once every 5 years)	L	L	M	S	S
1 Rare	Only in exceptional circumstances (Once in 25 years)	L	L	M	S	S

Please review whenever a change takes place in the existing conditions - and annually by March 31

Reporting in Performance Score Card	Key
- Number of UNACCEPTABLE Risks	H – High Risk, mandatory action to be developed if controls are unacceptable
	S – Significant Risk, mandatory action to be developed if controls are unacceptable
	M – Moderate Risk, Department/Units Management Responsibility to Monitor. Action to be developed if controls are unacceptable
	L – Low risk, Standard Operating Procedures to handle. Action to be developed if controls are unacceptable

Risk Accepted?

Acceptable: Risk controls are adequate and no further actions required	Unacceptable: Risk controls are not adequate and further actions required

RISK RESULTS

Infrastructure Risk Register						Risk of Main Event Occuring				
Item	**Asset Class**	**Asset Type**	**Main Event**	**Impact**	**Location (Area Affected)**	**Consequence Rating**	**Likelihood Rating**	**Level of Risk**	**Existing Controls**	**Potential Actions**
1	Railway	Crossings	Collision with Train	Property damage, personal injury, fatality	Geelong Line	Catastrophic	Unlikely	Significant	Signals, signs	Upgrade non-compliant crossings
2	Roads	Pavement	Traffic Accidents	Property damage, personal injury, fatality	Urban fringe uncontrolled intersections	Major	Possible	High	Signage	Roundabout / Traffic Lights
3	Roads	Pavement	Traffic Accidents	Property damage, personal injury, fatality	Transition between unsealed and sealed road	Major	Unlikely	Significant	Signage	Additional signage, upgrading of intersections and sealing of roads
4	Roads	Pavement	Extensive Growth Rate	Increased asset base	Werribee North	Major	Almost Certain	High	Capital program	Develop growth strategy and implement funding program
5	Roads	Pavement	Severe Storm events	temporary loss of service, evacuations	Municipality	Major	Unlikely	Significant	Emergency Response & drainage planning / maintenance, flood strategy, monitoring systems	Understand drainage network and upgrade maintenance programs. Hydraulic analysis, automate monitoring systems
6	Roads	Unsealed	Storm events	loss of service, material	Municipality	Moderate	Possible	Significant	Resheeting programs, maintenance grading, shoulder works, table drain cleaning	Additional shoulder and table drain cleaning, Upgrade construction to sealed roads. Develop design guidelines

Infrastructure Risk Register						Risk of Main Event Occuring				
Item	**Asset Class**	**Asset Type**	**Main Event**	**Impact**	**Location (Area Affected)**	**Consequence Rating**	**Likelihood Rating**	**Level of Risk**	**Existing Controls**	**Potential Actions**
7	Roads	Unsealed	Subdivision Use	Rapid degradation of road, damage to resident vehicles	Urban fringe borders adjacent to new development	Minor	Possible	Moderate	Maintenance and grading.	Contribution to unsealed uptake. Education of residents re: expectations of location. Program of upgrading unsealed roads
8	Roads	Pavement	Resources not available	Loss of service, increased risk	Municipality	Minor	Unlikely	Low	Workload planning, availability of contractors	Formalise process in preparation for event occurring. Upgrade emergency plan
9	Roads	Pavement	Bush fires	Loss of service, diversion of funding, lack of accessibility	Rural areas	Minor	Unlikely	Low	Fire safety officer reviews roads and orders fire cuts	Subject to review
10	Roads	Pavement	Hazardous material spillage	loss of service, potential for evacuation, damage to the environment	Municipality (Freeway, Arterial and Industrial areas and some rat runs)	Moderate	Unlikely	Moderate	Covered by emergency manual	Ongoing review of emergency manual
11	Roads	Pavement	Highly expansive clays	Reduced Asset Life	Municipality	Moderate	Almost Certain	High	Design Standards	Continual review of standards. Review drainage standards to accommodate clays
12	Roads	Pavement	Contractor performance	Reduced Asset Life	Municipality	Moderate	Possible	Significant	Supervision and testing	Review supervision and testing
13	Roads	Pavement	Spillage on road causing hazards	loss of service, potential for evacuation, damage to the environment	Municipality	Moderate	Possible	Significant	Covered by emergency manual	

Infrastructure Risk Register						Risk of Main Event Occuring				
Item	**Asset Class**	**Asset Type**	**Main Event**	**Impact**	**Location (Area Affected)**	**Consequence Rating**	**Likelihood Rating**	**Level of Risk**	**Existing Controls**	**Potential Actions**
14	Roads	Pavement	Contractor and sub-contractors work exposing motorists and public to risk	loss of service, property damage, personal injury	Municipality	Moderate	Unlikely	Moderate	Close supervision of contractors and sub-contractors	Ongoing review of approach
15	Roads	Pavement	Failure or leakage from utilities	loss of service, damage to Council assets, private property damage	Municipality	Minor	Possible	Moderate	Liaison with utilities	
16	Roads	Pavement	Dust storms	Poor visibility	Municipality	Moderate	Rare	Low	Emergency Response	
17	Roads	Pavement	Traffic Congestion	Public perception of Council. Reduced service levels.	Collector and Arterial roads	Moderate	Almost Certain	High	Traffic Management planning, capital programming	
18	Roads	Pavement	Driver behaviour	Loss of life, property damage	Municipality	Major	Possible	High	Traffic Management planning, capital programming	
19	Roads	Pavement	Image impacted through inability to differentiate with VicRoads assets	Poor public perception	Municipality	Moderate	Likely	Significant	Public relations	Educate public on Council assets.

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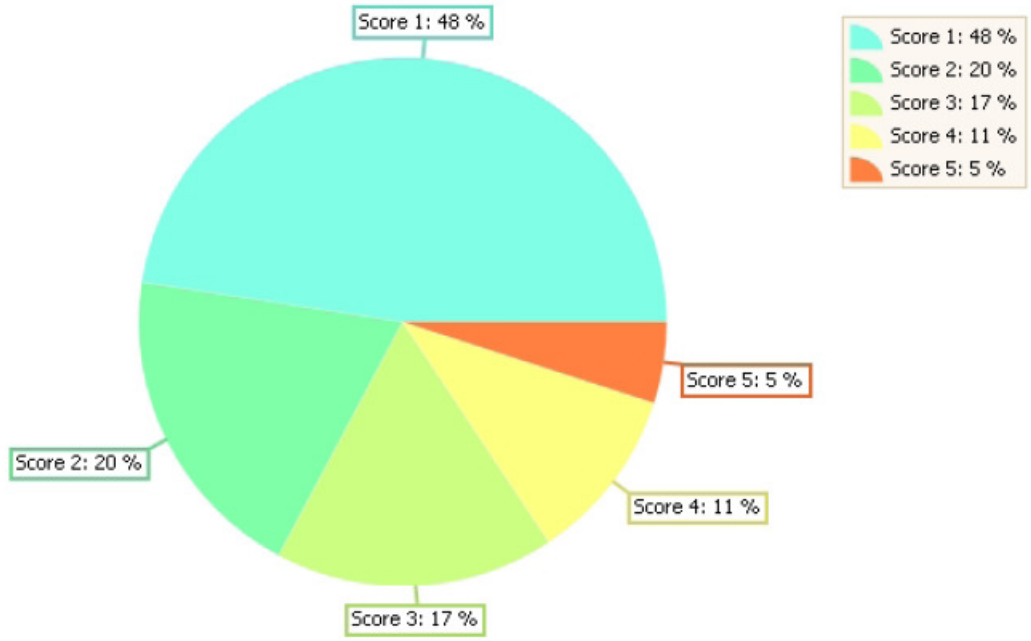
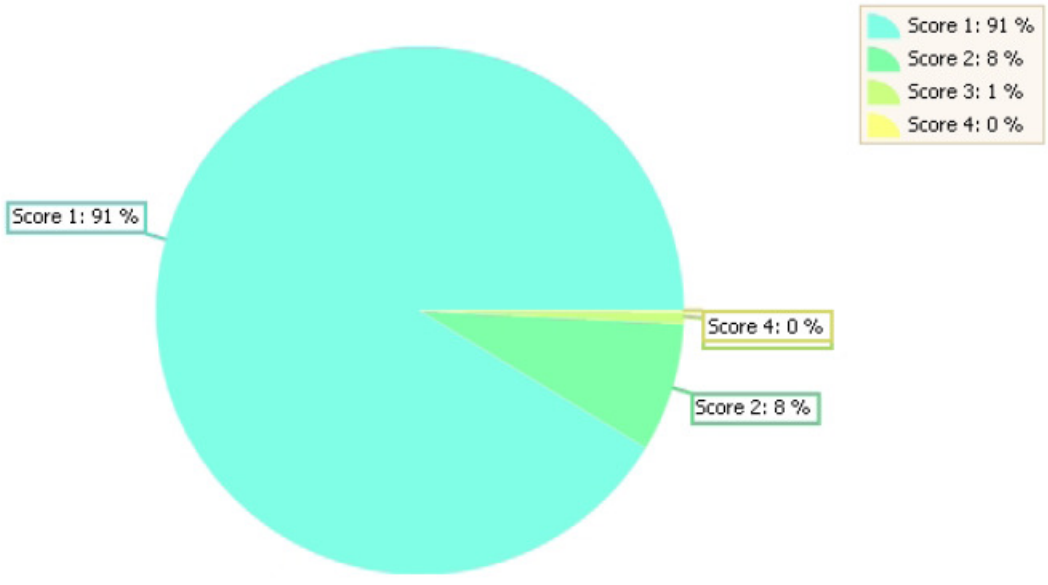
Appendix C – Network Condition Results

Service Definition: Crocodile Cracking



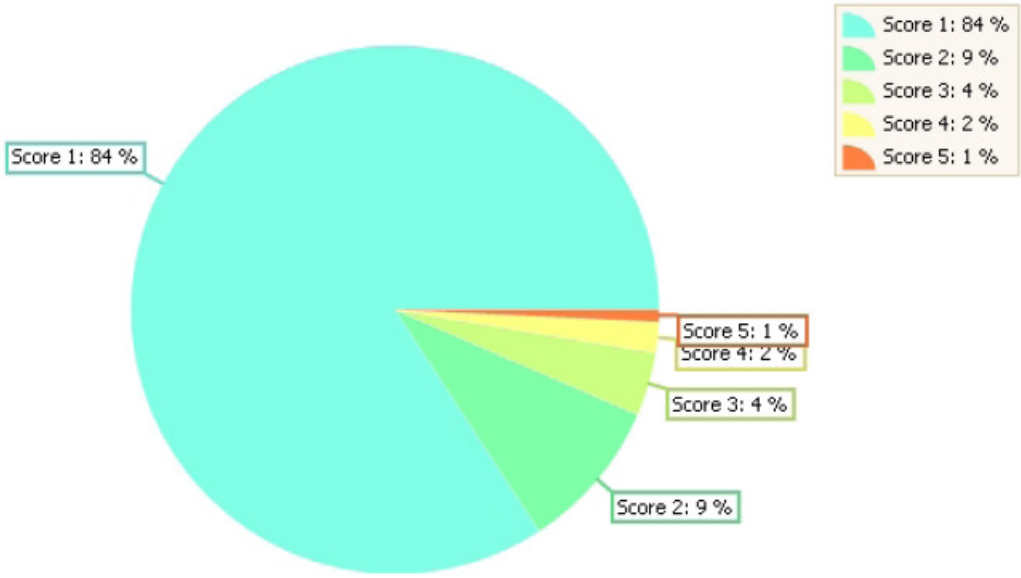
Average Score: 2.06

Service Definition: Linear Cracking



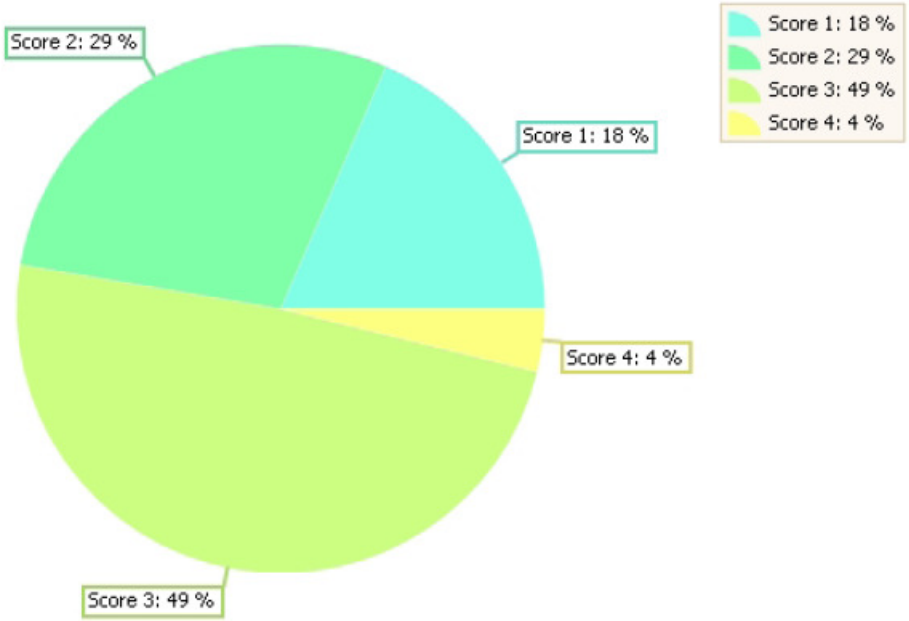
Average Score: 1.10

Service Definition: Pavement Defects



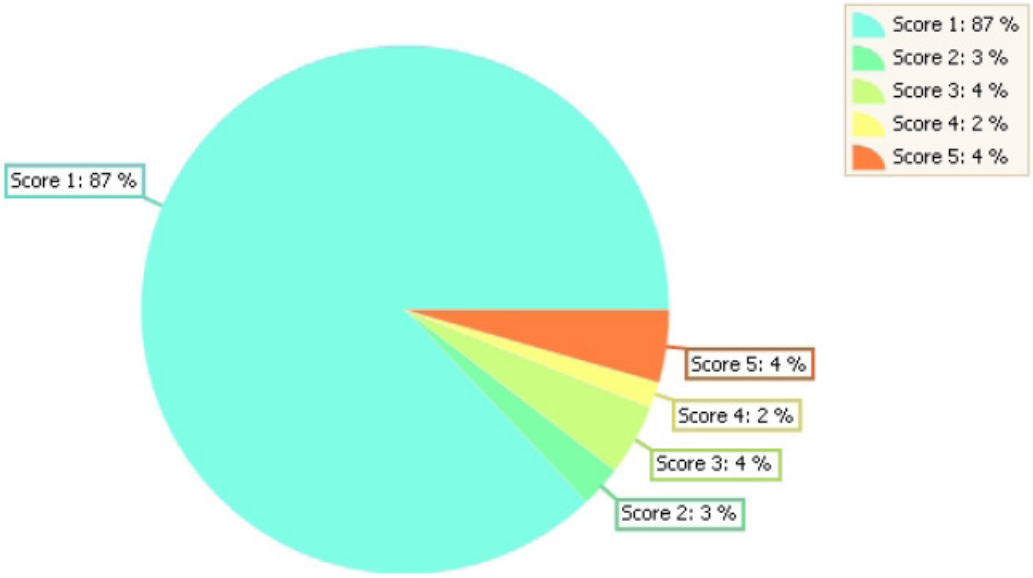
Average Score: 1.26

Service Definition: Ravelling



Average Score: 2.38

Service Definition: Texture



Average Score: 1.34

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Appendix D – RMP Operational and Maintenance Levels of Service

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			Main	Collector	Local Access
Roadways	Compliance inspections are undertaken as part of an inspection regime or in conjunction with routine patrol maintenance to determine compliance with the approved intervention levels and to determine risk.	All road segments.	Inspect at least every 3 months.	Inspect at least every 6 months.	Inspect at least every 12 months.
	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards and to determine risk.	Driving surface defects.	Inspect within 10 working days of notification.	Inspect within 20 working days of notification.	Inspect within 20 working days of notification.
		Damaged or missing regulatory and warning signs.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.
		Damaged all other road related signage including missing guideposts, marker posts, delineators, pavement markings, line marking and damaged or missing street furniture.	Inspect within 15 working days of notification.	Inspect within 15 working days of notification.	Inspect within 15 working days of notification.
		Bridges/Major Culverts.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.
		Where a flood is likely to warrant the closure of a bridge/major culvert	Inspect within 2 hours of notification	Inspect within 2 hours of notification	Inspect within 2 hours of notification
		Missing / collapsed drainage pit lids.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.
		Damaged or missing guard fencing	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
		Emergency surface cleaning/clearing.	Inspect within 4 hours of notification.	Inspect within 6 hours of notification.	Inspect within 8 hours of notification.
	Condition inspections are undertaken by suitably qualified and experienced personnel to determine overall structural condition of assets. The inspections may include risk assessment.	All road segments.	3 year Pavement Management Survey.	3 year Pavement Management Survey.	3 year Pavement Management Survey.
		Bridges/Major Culverts – inspections as per the VicRoads bridge Inspection Manual.	3 year inspection cycle	3 year inspection cycle	3 year inspection cycle
Kerbs & Channels	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards and to determine risk.	Kerb & Channel segment defects.	Inspect within 20 working days of notification.	Inspect within 20 working days of notification.	Inspect within 20 working days of notification.
	Condition inspections are undertaken by suitably qualified and experienced personnel to determine overall structural condition of assets. The inspections may include risk assessment.	All kerb & channel segments.	3 year Pavement Management Survey.	3 year Pavement Management Survey.	3 year Pavement Management Survey.
Street Trees	Compliance inspections are undertaken as part of an inspection regime or in conjunction with routine patrol maintenance to determine compliance with the approved intervention levels and to determine risk.	General compliance – undertaken as part of the inspection regime or in conjunction with routine patrol maintenance to determine compliance with the approved intervention levels.	Inspect trees at least every 4 years.	Inspect trees at least every 4 years.	Inspect trees at least every 4 years.
		Power line compliance - undertaken as part of the inspection regime or in conjunction with routine patrol maintenance to determine compliance with the intervention levels set out in Council's Electric Line Clearance Management Plan.	Inspect trees at least every 1 year.	Inspect trees at least every 2 years.	Inspect trees at least every 2 years.
	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards	Where tree or part of the tree has fallen across a path, road or power line.	For trees and/or branches that have fallen across footpaths, roads or	For trees and/or branches that have fallen across footpaths, roads or	For trees and/or branches that have fallen across footpaths, roads or

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
	and to determine risk.		powerlines, inspect within 2 hours of notification.	powerlines, inspect within 2 hours of notification.	powerlines, inspect within 2 hours of notification.
		All other tree defects including intrusion into pedestrian and/or vehicle clearance zone.	Inspect within 10 working days of notification.	Inspect within 10 working days of notification.	Inspect within 10 working days of notification.

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
Council Managed /Owned Public Lighting	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards and to determine risk.	Street lights not functioning	Refer to Powercor within 5 working days of notification.	Refer to Powercor within 5 working days of notification.	Refer to Powercor within 5 working days of notification.
		Where a street light has fallen across a path or road.	Inspect within 2 hours of notification	Inspect within 2 hours of notification	Inspect within 2 hours of notification

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			High 3	**Medium 2**	**Low 1**
Pathways	Compliance inspections are undertaken as part of an inspection regime or in conjunction with routine patrol maintenance to determine compliance with the approved intervention levels and to determine risk.	All paths.	Inspect at least every 3 months.	Inspect at least every 3 months.	Inspect at least every 12 months.

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			High 3	Medium 2	Low 1
	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards and to determine risk.	Pathway defects	Inspect within 15 working days of notification.	Inspect within 15 working days of notification.	Inspect within 20 working days of notification.
	Condition inspections are undertaken by suitably qualified and experienced personnel to determine overall structural condition of assets. The inspections may include risk assessment.	All paths.	3 year Condition Survey.	3 year Condition Survey.	3 year Condition Survey.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
Roadways	Take remedial and/or protection action and/or undertake temporary repairs.	Asphalt surface defect being: • a pothole exceeding 200mm diameter or 75mm in depth • an edge break exceeding 100mm width or 75mm depth • individual unconnected pavement defects where the depth, measured with a 1.5 m straight edge, is greater than 100 mm and affects an area greater than 2 m^2	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.
		Unsealed shoulder and/or roadway: • corrugation (repetitive 75mm depth) • potholes (300mm diameter or 100mm depth) • rutting (100mm depth wheel-path impression) • loss of crown or crossfall	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
		Replace/repair missing or damaged regulatory and warning signs.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.
		Damaged all other road related signage including missing guideposts, marker posts, delineators, pavement markings, line marking and damaged or missing street furniture.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.
		Missing / collapsed drainage pit lids.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.
		Damaged or missing guard fencing.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
		Regular maintenance of bridge decking, wearing surface, drainage, abutments and side rails including temporary repairs or erecting appropriate barriers, removal of dirt and gravel from kerbs and expansion joints, keeping the waterway area clear and free of weeds and debris.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or if permanent works required place on budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or if permanent works required place on budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or if permanent works required place on budgeted works program.
		Where a flood warrants the closure of a bridge/major culvert	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection.	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection.	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection.
		Emergency surface cleaning/clearing.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 2 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection.
Kerbs & Channels	Take remedial and/or protection action and/or undertake temporary repairs.	K&C defect being: • a trip hazard of > 50mm level differential • a trip hazard of > 30mm crack width	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or if permanent works required place on budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or if permanent works required place on budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or if permanent works required place on budgeted works program.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
Street Trees	Take remedial and/or protection action and/or undertake temporary repairs.	Where a tree and/or part of a tree has fallen across a path, road or power line.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 2 hours of inspection and/or carry out permanent repairs within 10 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 2 hours of inspection and/or carry out permanent repairs within 10 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 2 hours of inspection and/or carry out permanent repairs within 10 working days of inspection.
		Other tree defects: • intrusion into pedestrian and/or vehicle clearance zone • diseased or poisoned tree • dead or dying tree	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 10 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.
		Where a tree is intruding into the power line clearance zone.	Maintenance is carried out in accordance with Council's Electric Line Clearance Management Plan as submitted to and approved by the Chief Electrical Inspector.	Maintenance is carried out in accordance with Council's Electric Line Clearance Management Plan as submitted to and approved by the Chief Electrical Inspector.	Maintenance is carried out in accordance with Council's Electric Line Clearance Management Plan as submitted to and approved by the Chief Electrical Inspector.
Council Managed /Owned Public Lighting	Repairs are carried out by Powercor and timing of repairs are subject to the availability of spare parts and Powercor's works program.	Where a street light is not functioning.	Refer to Powercor within 5 working days of notification.	Refer to Powercor within 5 working days of notification.	Refer to Powercor within 5 working days of notification.
		Where a street light has fallen across a path or road	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection and/or refer to Powercor within 2 working days of inspection.	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection and/or refer to Powercor within 2 working days of inspection.	Take remedial action (erect appropriate barriers, signs) within 2 hours of inspection and/or refer to Powercor within 2 working days of inspection.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			High 3	Medium 2	Low 1
Pathways	Take remedial and/or protection action and/or schedule into priority list for budget consideration.	Council has four escalating defect conditions for prioritising actions. These are detailed below in descending order: • 50mm < level differential and/or 30mm < crack width • 20mm < level differential < 50mm and/or 20mm < crack width < 30mm • 10mm < level differential < 20mm and/or 10mm < crack width < 20mm • level differential < 10mm and/or crack width < 10mm	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or if permanent works required place on prioritised budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or if permanent works required place on prioritised budgeted works program.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 20 working days of inspection and/or if permanent works required place on prioritised budgeted works program.

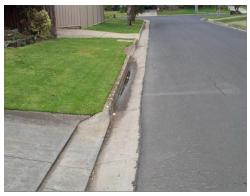
Appendix E – Truganina Employment Precinct Infrastructure Costs

DCP Project No.	Description	Estimated Project Cost			Indicative Provision Trigger	Strategic Justification
		Land	Construction	Total		
1	Boundary Road East of Palmers Road - Upgrade to Urban Road Standard	-	931,013	931,013	Longer term due to other project priorities	Completing road to urban standard in accordance with Council standards
2	Boundary Road East of Palmers Road - Upgrade to Include Off-Road Bike Path	-	210,200	210,200	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
3	East-West Collector Road between Boundary Road and Dohertys Road West of Palmers Road – Dohertys Creek Culvert Crossing	-	455,555	455,555	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
4	East-West Collector Road between Boundary Road and Dohertys Road East of Palmers Road – Laverton Creek Culvert Crossing	-	402,602	402,602	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
5	Dohertys Road West of Palmers Road – Construct Second Carriageway with Off-Road Bike Path	-	4,125,060	4,125,060	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
6	Dohertys Road West of Palmers Road – Culvert Crossing (Second Carriageway)	-	276,800	276,800	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
7	Dohertys Road West of Palmers Road – North Side Land Acquisition (PSP 37)	472,950	-	472,950	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
8	Dohertys Road West of Palmers Road – South Side Land Acquisition	420,400	-	420,400	As land is subdivided	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
9	Dohertys Road West of Palmers Road – Cemetery Site Land Acquisition	315,300	-	315,300	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
10	Dohertys Road – Intersection with Forsyth Road	-	2,102,000	2,102,000	Expected to be constructed when Forsyth Road is constructed	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
11	Dohertys Road West of Palmers Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
12	Dohertys Road – Intersection with Palmers Road	-	2,102,000	2,102,000	Expected to be constructed when either road is duplicated	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
13	Dohertys Road East of Palmers Road - Upgrade to Urban Road Standard	-	931,013	931,013	Longer Term due to other project priorities	Completing road to urban standard in accordance with Council standards
14	Dohertys Road East of Palmers Road - Upgrade to Include Off-Road Bike Path	-	210,200	210,200	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
15	Dohertys Road East of Palmers Road - Construct Second Carriageway with Off-Road Bike Path	-	4,125,060	4,125,060	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
16	Dohertys Road East of Palmers Road – Culvert Crossing	-	243,767	243,767	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
17	Dohertys Road East of Foundation Road – Pipe Crossing for both carriageways	-	189,000	189,000	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
18	Dohertys Road East of Palmers Road – Power Line Relocation	-	400,000	400,000	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
19	Dohertys Road East of Palmers Road – North Side Land Acquisition	1,681,600	-	1,681,600	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
20	Dohertys Road East of Palmers Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
21	Dohertys Road - Intersection with Foundation Road	-	2,102,000	2,102,000	Expected to be constructed when Foundation Road is constructed	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
22	Leakes Road West of Palmers Road - Construct Second Carriageway with Off-Road Bike Path	-	4,125,060	4,125,060	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
23	Leakes Road West of Palmers Road – Culvert Crossing (Second Carriageway)	-	368,400	368,400	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
24	Leakes Road West of Palmers Road – Power Line Relocation North Side	-	650,000	650,000	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
25	Leakes Road West of Palmers Road - North Side Land Acquisition	2,522,400	-	2,522,400	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
26	Leakes Road – Intersection with Forsyth Road	-	829,467	829,467	Expected to be constructed when Forsyth Road is constructed	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
27	Leakes Road West of Palmers Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
28	Leakes Road East of Palmers Road - Upgrade to Urban Road Standard	-	872,825	872,825	Longer Term due to other project priorities	Completing road to urban standard in accordance with Council standards
29	Leakes Road East of Palmers Road - Upgrade to Include Off-Road Bike Path	-	210,200	210,200	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
30	Leakes Road East of Palmers Road - Construct Second Carriageway with Off-Road Bike Path	-	3,867,245	3,867,245	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
31	Leakes Road East of Palmers Road – Power Line Relocation North Side	-	475,000	475,000	Long term, when warranted by traffic volumes (15,000 to 20,000 vehicle movements per day)	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
32	Leakes Road East of Palmers Road - North Side Land Acquisition A	1,182,375	-	1,182,375	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
33	Leakes Road East of Palmers Road - North Side Land Acquisition B	788,250	-	788,250	As land is subdivided property by property	*Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies*

DCP Project No.	Description	Estimated Project Cost			Indicative Provision Trigger	Strategic Justification
		Land	Construction	Total		
34	Leakes Road East of Palmers Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
35	Leakes Road Intersection with Foundation Road	-	829,467	829,467	Expected to be constructed when Foundation Road is constructed	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
36	Forsyth Road between Boundary and Dohertys Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
37	Forsyth Road between Dohertys and Leakes Road – Construct First Carriageway to include Off-Road Bike Path	-	4,202,406	4,202,406	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
38	Forsyth Road between Dohertys and Leakes Road – Culvert Crossing	-	365,650	365,650	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
39	Forsyth Road between Dohertys and Leakes Road – Land Acquisition	840,800	-	840,800	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
40	Forsyth Road between Dohertys and Leakes Road – Land Acquisition	1,744,660	-	1,744,660	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
41	Forsyth Road between Dohertys and Leakes Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
42	Palmers Road Between Boundary and Dohertys Road – Upgrade to Urban Road Standard	-	931,013	931,013	Longer Term due to other project priorities	Completing road to urban standard in accordance with Council standards
43	Palmers Road Between Boundary and Dohertys Road - Upgrade to include Off-Road Bike Path	-	252,240	252,240	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
44	Palmers Road Between Boundary and Dohertys Road – West Side Land Acquisition (PSP 37)	840,800	-	840,800	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
45	Palmers Road Between Boundary and Dohertys Road – Mid Block Intersection	-	460,468	460,468	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
46	Palmers Road Between Dohertys and Leakes Road – Upgrade to Urban Road Standard	-	931,013	931,013	Longer Term due to other project priorities	Completing road to urban standard in accordance with Council standards
47	Palmers Road Between Dohertys and Leakes Road - Upgrade to include Off-Road Bike Path	-	252,240	252,240	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
48	Palmers Road Between Dohertys and Leakes Road – West Side Land Acquisition	2,522,400	-	2,522,400	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
49	Palmers Road Between Dohertys and Leakes Road – Mid Block Intersection	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
50	Palmers Road Between Leakes and Sayers Road – Upgrade to Urban Road Standard	-	698,260	698,260	Longer Term due to other project priorities	Completing road to urban standard in accordance with Council standards
51	Palmers Road Between Leakes and Sayers Road - Upgrade to include Off-Road Bike Path	-	256,970	256,970	Medium term	Project required to ensure an integrated bike network, to implement Council's Bike Strategic principles
52	Palmers Road Between Leakes and Sayers Road – Mid Block Intersection A	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
53	Palmers Road Between Leakes and Sayers Road – Mid Block Intersection B	-	722,384	722,384	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
54	North-South Collector Road between Boundary Road and Dohertys Road East of Palmers Road – Culvert Crossing	-	251,626	251,626	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
55	North-South Collector Road between Dohertys Road and Leakes Road East of Palmers Road – Culvert Crossing	-	251,626	251,626	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
56	Foundation Road for 800m south of Boundary Road – Construction of First and Second Carriageway	-	2,856,784	2,856,784	Complete	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
57	Foundation Road from 800m north of Dohertys Road to Leakes Road – Construction of First and Second Carriageway	-	12,426,745	12,426,745	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
58	Foundation Road for 800m south of Boundary Road – Land Acquisition ($170,489/ha at June07)	501,715	-	501,715	Complete	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
59	Foundation Road from 800m north of Dohertys Road, south to Leakes Road – Land Acquisition	4,432,593	-	4,432,593	As land is subdivided property by property	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
60	Foundation Road Intersection with Boundary Road	-	406,152	406,152	Complete	Project required to ensure an integrated road network
61	Foundation Road between Dohertys and Leakes Road – Culvert Crossing A	-	587,127	587,127	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
62	Foundation Road between Dohertys and Leakes Road – Culvert Crossing B	-	366,955	366,955	As required to facilitate subdivision construction and/or development	To provide for an equitable approach to fund culverts which benefit the area beyond the property
63	Foundation Road Between Boundary and Dohertys Road – Mid Block Intersection	-	367,850	367,850	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
64	Foundation Road Between Dohertys and Leakes Road – Mid Block Intersection	-	367,850	367,850	As required to facilitate subdivision construction and/or development	Project required to ensure an integrated road network, supported by Council's traffic modelling and transport strategies
TOTAL		**18,266,243**	**63,768,365**	**82,034,608**		

Wyndham City Council

July 2011



Stormwater Asset Management Plan

wyndhamcity

Odysseus-imc Pty Ltd
Infrastructure Management Consultants

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Contents

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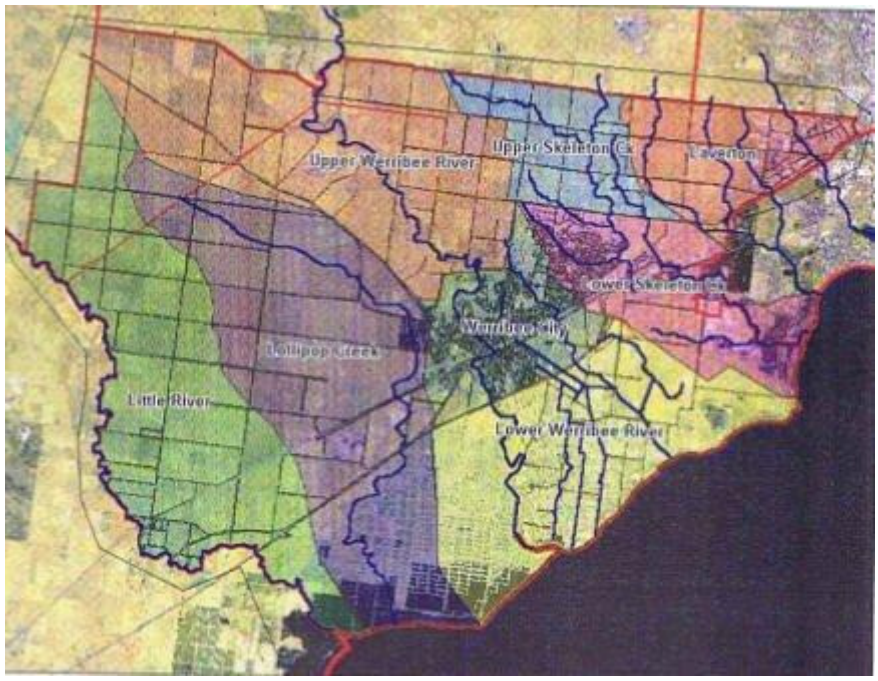
1.0 Introduction

The stormwater network represents a significant investment by Council and its on-going development, management and maintenance is an important commitment. The purpose of this commitment is to protect, maintain and enhance the public health and safety, and to care for the general welfare of the community by safe guarding against damage from storms and flooding.

Council is responsible for approximately 1,160 kilometres of drains, over 40,400 pits, 620 kms of open drains. The Wyndham City Council (WCC) also manages water quality devices, surface drainage and flood prevention. These assets are located within the road reserve, parks and open spaces and easements. House drains and connections to Council's stormwater assets are not included in this Plan.

Council's role is to ensure that its stormwater assets are maintained and rehabilitated to such a standard that the original design capabilities are maintained at all times. This will ensure that the possibility of damage to both public and private assets due to an inadequate stormwater drainage system is minimised.

Wyndham's stormwater system can be divided into stormwater catchments. These urban catchments are shown in the following figure:



(Source: City of Wyndham Stormwater Management Plan 2000)
Figure 1: Stormwater Catchments

1.1 PURPOSE OF THIS PLAN

Council's stormwater infrastructure represents a significant investment by the community and is vital to its health and wellbeing. The overall objective of asset management (AM) is to demonstrate responsible stewardship of infrastructure in delivering Council services.

In addition, Council's objective is to ensure that it has well planned, constructed and maintained infrastructure and establish management strategies and practices, which maximise the life and community benefit of its assets.

The overall objective of this plan is to implement a plan that will provide the current level of service for stormwater and related infrastructure for the optimum cost. In order to meet this objective a number of subordinate objectives need to be addressed:

- Define a hierarchy for stormwater infrastructure and related infrastructure;
- Identify the asset base managed by Council and the value it holds;
- Align the plan to the corporate intent to ensure management practices are consistent with Corporate direction;
- Satisfy the needs of the audience by demonstrating that their requirements are being met;
- Meet the requirements of the Stormwater Management Act;
- Identify the current and target levels of service provided by Council in line with customer expectations;
- Define the impacts of demand on infrastructure;
- Identify infrastructure risks in line with Councils current risk processes;
- Consider asset performance such as condition monitoring techniques and outcomes;
- Detail the current lifecycle management practices and future plans;
- Overview of the short and long term financial requirements of maintaining Councils stormwater infrastructure; and
- Defining actions required to improve asset management practices related to the asset groups.

The outcomes of this plan identify the future funding requirement for service delivery accounting for the following factors:

- Adopted levels of service;
- Future demand for infrastructure;
- Current asset performance;
- Risk;
- Required works; and
- Funding constraints.

This AM Plan covers a period of 10 years commencing 1 July 2010 and was prepared jointly by Odysseus-imc consultants in conjunction with WCC asset management staff. It will be regularly reviewed to ensure its continued relevance. The plan is supported by the asset strategy that looks at the high level needs of Council. Detail for the content of this plan is provided in the strategy.

1.2 THE ASSET MANAGEMENT PLAN

The AM Plan is a tactical plan that translates broad strategic goals and plans into specific goals and objectives relevant to a particular activity for the organisation. It may be regarded as a tactical plan for implementing infrastructure related strategies, which arise from the strategic planning process.

The AM plan is also a tool combining management, financial, engineering and technical practices to ensure the level of service required by customers is provided at the most economical cost to the community. The plan is intended to protect the environmental and cultural values of the assets providing the service.

Tactical planning involves the development of separate sub-plans that allocate resources (natural, physical, financial, etc.) to achieve strategic goals through meeting defined levels of service.

This plan is the medium by which Council articulates its management of infrastructure to achieve the desired outcomes.

1.3 ASSET MANAGEMENT PLAN FORMAT

The plan contains eight sections, each of which are explained below:

- **Introduction:** This provides an introduction to AM, outlines the objectives, scope and format of the plan, identifies the key stakeholders and legislative requirements, and describes the relationship with other plans including the rationale for asset ownership.

- **Asset Portfolio:** This section outlines Councils portfolio of assets including quantity and value.

- **Levels of Service:** This outlines the levels of service required based on customer research and expectations, statutory requirements and strategic and corporate goals. It also contains tables detailing expected and current performance measures.

- **Demand Forecast:** This section details the future growth trends, the impact of these trends on infrastructure and demand management strategies to deal with the projected growth.

- **Risk Management:** This section outlines Council's risk management framework. It also contains tables of risk events, their severity and consequence.

- **Lifecycle Management Plan:** This gives an overview of the whole of life management of each asset type. For each asset type it details (where applicable) the operations and maintenance plan, renewal plan, enhancement/upgrade plan, new works plan and disposal plan.

- **Financial Summary:** This section details the 10-year financial forecast with its associated assumptions and sensitivity analysis. It contains an asset valuation for each asset type and their associated confidence levels. It also outlines the Council's funding strategy.

- **Asset Management Improvement and Monitoring:** This section deals with methods of monitoring performance by detailing improvements to AM processes, systems and data. It outlines a 3-year AM improvement plan. It also details procedures for monitoring and reviewing this AM Plan.

All Asset Management Plans are based on the framework recommended in the Institute of Public Works Engineering Australia's International Infrastructure Management Manual (Australia / New Zealand Edition), Version 3.0 dated October 2006.

1.4 RELATIONSHIP WITH OTHER PLANS

AM plans are a key component of the Council planning process, linking with the following plans and documents:

2010- 2014 City Plan: The strategic plan is a long term plan which sets out the broad strategic direction for the development of WCC over the next 5 years. The plan reflects the common goals of all stakeholders and demonstrates a commitment by council to seek and respond to the wants and needs of the wider community.

Annual Report: The Annual Report 2008/09 supports the City Plan and the details for each financial year:

- Wyndham's achievements and performance in key result areas;
- Service highlights;
- Council's governance structures; and
- Council's financial performance during 2008/09.

The Quality Community Plan 2007: Wyndham City's long term vision is documented in our Quality Community Plan (QCP). This important document outlines our community's vision and aspirations for the future, and guides the City's daily planning and decision making.

WCC Policies: The policies are needed to provide direction for AM tactics. Policies that apply to the management of Stormwater assets include:

- Asset Management Policy; and
- Risk Management Policy.

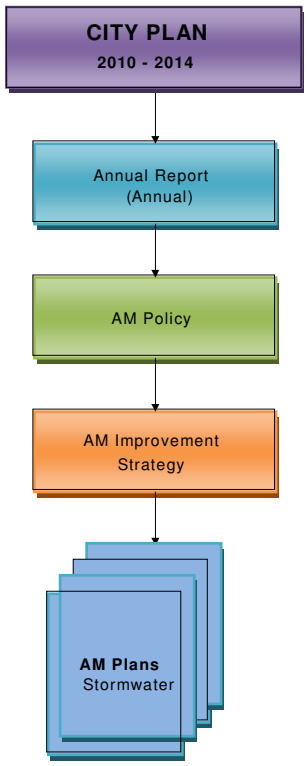


Figure 2: Corporate Links to AM Plans

Risk Management Strategy: The purpose of the Risk Management Strategy is to assist council to manage and/or minimise the adverse effects of pure risks from its strategies and operations and maximise the benefits from opportunities and speculative risks.

The figure above depicts the links and information flows between the Council Plan and the Asset Management Plans (which provide the context and framework for the management of the infrastructure).

1.5 RATIONALE FOR OWNERSHIP

Section 6(1)(c) of the Local Government Act (1989) states that a purpose of Council is:

"To provide equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively"

A purpose of Council is to supply services to meet the needs of the community. In the case of drainage services, the need is met by the creation, operation, maintenance and rehabilitation (collection / discharge, treatment, fieldwork, system planning, customer services and administration) of pipelines, pits, watercourses, and retarding basins. There is also an increasing demand to address stormwater quality issues.

There is a range of infrastructure assets associated with this objective, with most attention going to operation of pipelines and pits. Local Authorities exist principally to supply core services that meet the needs of their communities. What services are provided, and how they are provided, depends on the level of service required by the community.

According to the Local Government Act 1989 the purposes of a Council are to:

- Provide for the peace, order and good government of its municipal district;
- Facilitate and encourage appropriate development of its municipal district in the best interests of the community;
- Provide equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively; and
- Manage, improve and develop the resources of its district efficiently and effectively.

Local government is responsible for drainage areas smaller than 60 hectares and for on-going stormwater management including operations and maintenance. This includes providing a stormwater drainage system connected to the main system and ensuring the legal point of discharge, for each property. Local Government also has a role in setting required building floor heights in relation to flood levels and declaring areas subject to flooding in which special designs are necessary to respond to potential flood conditions.

Adequate drainage within the City protects community property and assets from flooding. As custodians of stormwater drainage it is Council's responsibility to ensure a safe, clean and free flowing stormwater network that is adequate to cater for peak storm water events.

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2.0 Asset Portfolio

This plan focuses on stormwater and related infrastructure and is inclusive of the assets contained in the table below. While replacement values may not have been nominated for some asset types the plan seeks to incorporate the assets even though specific values for these asset types are not presently nominated.

2.1 OUR STORMWATER NETWORK

The Stormwater hierarchy used for the WCC Stormwater assets is shown in the figure below. The definitions for each of the hierarchical levels are:

- **Underground Drainage:** Stormwater drains located underground including ancillary assets such as pits and drainage pipes.
- **Surface Drainage:** Drainage that is located on land being open/table drains.
- **Water Quality Devices:** Assets that have an important role in maintaining the treatment of stormwater and reuse including gross pollutant traps (GPT's), litter baskets, wetlands (including sedimentation ponds), and swales.
- **Flood Mitigation:** Assets including retarding basins and recovery system/tanks.

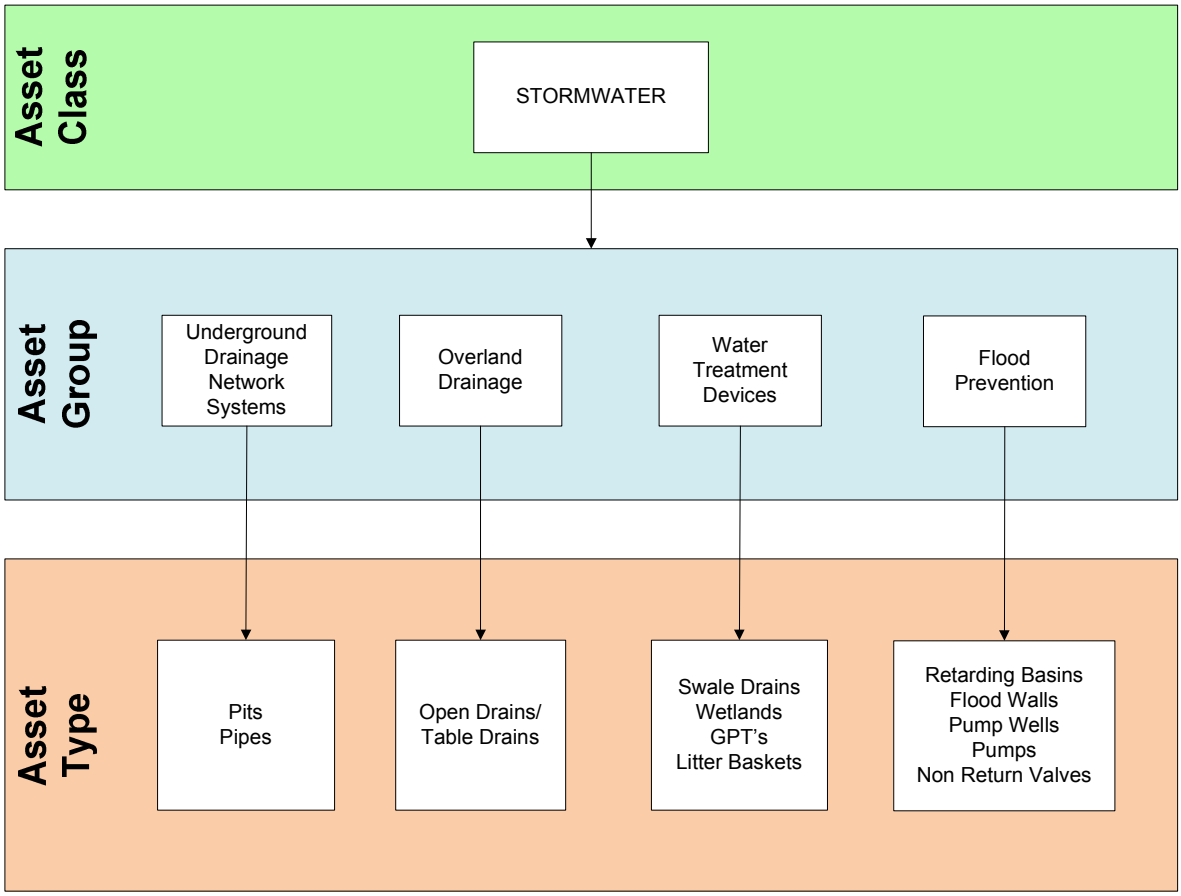

Figure 3: Stormwater Hierarchy

Wyndham's stormwater infrastructure included in this AM Plan is summarised in below:

ASSET GROUP	ASSET TYPE	UNIT	QUANTITY	REPLACEMENT VALUE JUNE 2010	WRITTEN DOWN VALUE JUNE 2010
Underground Drainage	Pits	No.	40,400	$47,407,039	$43,161,494
	Pipes	km	1,160	$221,135,255	$188,997,204
Surface Drainage	Open Drains/Table Drains	km	620	NV	NV
Water Quality Devices	Swale Drains	No.	NV	NV	NV
	Wetlands includes sedimentation ponds	No.	27	NV	NV
	Gross Pollutant Traps	No.	78	$1,747,396	$1,653,405
	Litter Baskets	No.	70	NV	NV
Flood Prevention and Retarding Basins	Retarding Basins	No.	6	NV	NV
	Flood Walls	No.	1	NV	NV
	Pump Wells	No.	5	NV	NV
	Pumps	No.	5	NV	NV
	Non Return Valves	No.	5	NV	NV

NV – Not Valued

Table 1: Summary of Stormwater Portfolio

The apportionment of stormwater assets by replacement value is illustrated in the following chart:

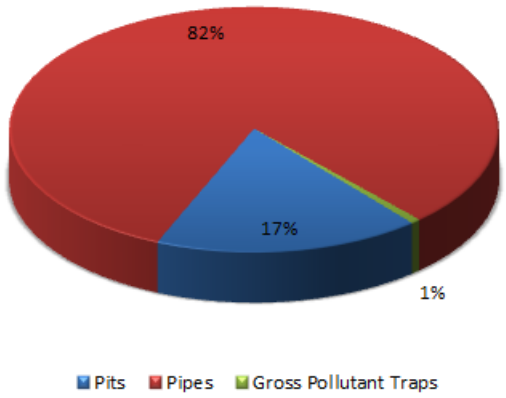

Figure 4: Asset Type by Replacement Value

3.0 Levels of Service

This section defines the service levels that are required and the basis of the decision behind their selection. The service levels support Council's strategic goals and are based on customer expectations and statutory requirements.

3.1 BACKGROUND

The life cycle management section provides information on the extent to which the target service levels are being achieved and the management strategies including planned capital works for addressing any service gaps identified.

A key objective of this AM plan is to match the level of service (LOS) provided by the asset with the expectations of customers. This requires a clear understanding of customers' needs and preferences. The levels of service defined in this section will be used:

- To inform customers of the proposed type and level of service to be offered;
- As a focus for the AM strategies developed to deliver the required level of service;
- As a measure of the effectiveness of this AM plan;
- To identify the costs and benefits of the services offered; and
- To enable customers to assess suitability, affordability and equity of the services offered.

The adopted levels of service are based on staff knowledge and:

- **Community Research and Expectations**
  Information gathered from customers on expected quality and cost of services.
- **Strategic and Corporate Goals**
  Provides guidance for the scope of current and future services offered, the manner of the service delivery and defines the specific levels of service that the Council wishes to achieve.
- **Legislative Requirements**
  Legislation, Regulations, Environmental Standards and Council by-laws that impact on the way assets are managed.
- **Design Standards and Codes of Practice**
  Australian Design Standards also provide the minimum design parameters for infrastructure delivery by the Professional Engineer.

3.2 LEVELS OF SERVICE TABLES

The service levels are divided into two types:

- Community based; and
- Operations (Technical) based.

WCC have embarked on defining their community and technical Levels of Service, and current activities are portrayed in this plan. WCC have the relevant processes, intervention levels, response times and standards in place to support technical aspects of service delivery. Setting key performance indicators allows Council to monitor progress and measure performance.

Community based levels of service relate to the function of the service provided and need to be in line with what our customers expect as part of service delivery. The key performance indicators relating to stormwater assets are included in the table below:

Service Levels
Capacity
Melbourne Water Compliance
Performance
Efficiency

Table 2: Key Performance Indicators

Technical service levels are supported by intervention levels (stormwater pits) as identified in the Road Management Plan and included in Appendix D.

The following table identifies WCC's Levels of Service against key performance indicators, and will be used to monitor progress and report achievement.

Principles	Key Performance Indicator	Service Level Characteristic	Performance Measurement Process	Target Performance	Current Performance	Actions to meet performance target	Resources Required
We have measures in place to mitigate flood damage to property and risk to the community.	***Capacity***	Maintain a duty of care for public safety and property protection in accordance with relevant legislation.	Complete a flood mapping plan.	Complete flood mapping for all catchments.	Maps last completed in the 1980s.	Advocate for Melbourne Water to complete flood mapping plans	
Our stormwater systems are compliant with Melbourne Water guidelines.	***Melbourne Water Compliance***	To ensure stormwater quality complies with relevant Melbourne Water requirements.	All new developments to comply with Melbourne Water requirements.	100% Compliance.	100% Compliance.	Continue to ensure that new developments comply with Melbourne Water requirements.	
		To ensure stormwater systems are managed to meet the guidelines	All maintenance meet Melbourne Water requirements	80% Compliance			
Our stormwater systems collect and convey stormwater safely through our environment, reducing the adverse effects of flooding on people and property.	***Performance***	All critical areas will be free from obstructions prior to a major event.	Inspection programme for drainage assets undertaken to identify obstructions.	100% of pits identified as blocked are cleaned	% of blocked pits have been cleaned	Audit a sample of pits annually to identify whether the work crew are performing.	Auditor
				100% of pipes identified as blocked are cleaned	% of blocked pipes have been cleaned	Audit a sample of pipes annually to identify whether the work crew are performing.	Auditor
				100% of open drains identified as blocked are cleaned	% of blocked open drains have been cleaned	Audit a sample of open drains annually to identify whether the work crew are performing	Auditor

Principles	Key Performance Indicator	Service Level Characteristic	Performance Measurement Process	Target Performance	Current Performance	Actions to meet performance target	Resources Required
				100% of identified overland flow paths are clear from unreasonable obstruction.	Overland flow paths identified as part of flood mapping.	Develop inspection program to identify obstructions within overland flow paths. Implement an action plan to reduce the number of obstructed overland flow paths.	
				100% of identified retarding basins are free from unreasonable hazards.	Retarding basin hazards are yet to be identified.	Develop inspection program to identify hazards within retarding basins. Implement an action plan to mitigate the hazards within retarding basins.	
Our underground stormwater assets must be free from obstructions to maintain optimum water carrying capacity	***Maintain Efficiency of Underground Systems***	The stormwater carrying capacity and structural integrity of the stormwater assets must be maintained.	CCTV inspection undertaken to monitor structural condition and serviceability	Develop a program of regular audits for structural condition and serviceability.		Programmed maintenance works to be funded to identify nature of obstructions and structural defects / undertake drain clearing & reinstatement works.	

Table 3: Levels of Service for Stormwater Infrastructure

4.0 Demand Forecast

This section of the plan analyses factors affecting demand including population growth, demographic changes and the impacts of these changes on WCC's existing infrastructure as well as the demand for new infrastructure.

Impacts identified within this section have been determined using WCC's planning and strategic documentation. Where information was not available assumptions have been made.

4.1 BACKGROUND

Wyndham is located in Melbourne's south-west, located between Melbourne and Geelong. The City is bounded by the City of Brimbank and the Shire of Melton to the north, Moorabool Shire and the City of Greater Geelong to the west and south and Port Phillip Bay and the City of Hobsons Bay to the east.

The City of Wyndham is the fastest growing municipality in Victoria and the fourth fastest in Australia. Wyndham is currently home to 147,508 people, with the population expected to reach over 286,000 by 2026. With the City experiencing unprecedented growth, it is on track to become the largest local government area in Victoria. With the population forecast to increase between 4.6% and 7.1% annually over the next five years this has resulted in increased service inputs (materials, employee costs) to service growth in demand.

This popularity has been achieved as a result of many attractive features, including Wyndham's proximity to Melbourne and Victoria's largest regional centre, Geelong. Wyndham offers available land set among beautiful natural assets including the Werribee River, Port Phillip Bay, Skeleton Creek, wetlands and grasslands. The municipality is also home to a variety of parks, gardens and recreational facilities, including the State Rose Garden at Werribee Mansion, Victoria's Open Range Zoo, State Equestrian Centre, Point Cook Homestead and Point Cook RAAF Museum. Once described as 'the country suburb' Wyndham is a vibrant City with a strong pastoral heritage. Now a thriving locality, Wyndham boasts first-class shopping precincts and quality entertainment outlets while still supporting the development of close-knit communities.

The growth Wyndham is experiencing provides many opportunities for residents and Council. This growth also puts pressure on Wyndham's infrastructure, which requires strong management from Council, in consultation with the community.

Great results have already been achieved through extensive infrastructure planning and investment. The Wyndham community sought the opportunity to be involved in this development and is the driving force behind the success of many projects.

Wyndham is home to a young population eager to see their City continue to prosper. The Wyndham community recognises the benefits associated with high levels of growth, but is also committed to ensuring sustainable development that will serve future communities.

Demand management as related to the provision of services and associated infrastructure is a dynamic process used to cater for the change in population, demographics, and expectations of the community over a long period of time e.g. 20 years.

It is a complex area supported by sound planning that integrates with AM to provide for future services. To achieve an outcome that benefits the community there is a need to coordinate planning activities for the provision of infrastructure through the Planning and Development department.

Over the past years WCC has produced the following planning documents which have been reviewed for the purpose of understanding the impacts of future growth in the community, the need for future infrastructure to support services and impacts on existing infrastructure.

- Growth Boundary Review;
- Planning for Community Infrastructure in Growth Areas, 2008;
- Point Cook Concept Plan;
- Truganina Employment Precinct;
- Werribee South Green Wedge Plan;
- Wyndham North Growth Front; and
- Wyndham Waterways Strategy.

4.2 DEMAND OUTCOMES

Impacts on Existing Infrastructure

The majority of the stormwater infrastructure work proposed is additional to the stormwater network. As the appropriate data is not readily available e.g. condition work to existing infrastructure has not been identified.

Growth Analysis for New Stormwater Infrastructure

Based on an analysis of the future demand it is estimated that the following infrastructure will be created over the next 10 years:

ADDITIONAL INFRASTRUCTURE	QUANTITY	REPLACEMENT VALUE
Pipes	191 km	36.4 million
Pits	6,655 No.	7.8 million

Table 4: New Infrastructure Required CATERING for Increased Demand

Using the population growth over time in conjunction with the increase or decrease in numbers of people per household over time, it is possible to calculate the estimated number of households to be built on an annual basis.

A density factor has been applied as follows:

- The average number of residences per property is 1.05 (5% of properties contain units)

Road infrastructure can be linked to households by the frontage of the house block e.g. each new property built will have a street frontage (in metres) of 15 metres.

Therefore, estimated length of new roads can be calculated as annual number of houses x 15 (road frontage). Road lengths can be adjusted by the number of houses on both sides of the road.

Using the existing WCC quantities the ratios of road length to pipes and pits is used to calculate the new assets to be constructed. In this instance the following assumptions apply:
Multiplying the current unit rates with the cumulative new assets, the value of the new assets can be calculated.

Assumptions made for the modelling of demand based on current quantities were:

- The resident population will rise from 158,200 to 245,012 over ten years;
- The average number of people per household will drop from 2.88 to 2.84 over ten years;
- Each new property built will have a street frontage (in metres) of 1 5metres; and
- Based on existing quantities each km of road built will have 857 m of pipes and 29 pits associated with it.

The impacts of the analysis are summarised in the above table.

For assets other than pipes and pits there is insufficient data to analyse the impacts of demand as many of the assets will be dependent on factors such as geology, terrain, existing capacity, likelihood of flooding and need rather than growth.

It should be noted that while the new assets will be constructed by developers the annual operations and maintenance will be funded by Council. Therefore, an allowance for the additional operations and annual maintenance (approx. 1.6% p.a.) should be budgeted each year.

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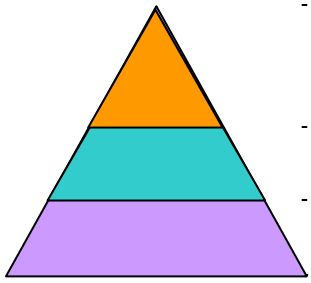
5.0 Risk Management

This section outlines WCC's risk management framework. It will form the basis of decision making for works associated with operations, maintenance and capital expenditures.

The objective of risk management is to identify the business risks associated with the ownership and management of the stormwater infrastructure and identify the direct and indirect costs associated with these risks. Council has commenced this process and the outcomes of the register are included in this section.

5.1 Corporate Risk

Council is subject to risks at corporate, strategic and operational levels as illustrated below.



Nature of Risk	Outputs
High level corporate risk (corporate risk register)	Prioritised organisational actions
Strategic infrastructure risks	Works Program
Operational risks	Procedures (QA, Operating, Safety) Design Standards

Table 5: Risks within Council

WCC is committed to ensuring that all risks inherent in Council's service delivery are effectively managed. Risk Management is an integral part of good management practice. Council has in place the following risk documentation, data and systems:

- Risk Management Policy, 2007;
- Risk Management Strategy, 2007;
- Risk Management System (Sentinel); and
- Emergency Response Manual.

5.2 Risk Management Policy, 2007

Council's risk policy is to manage risks in compliance with, or exceeding the minimum requirements of Australian/New Zealand Standard of Risk Management (AS/NZS 4360). Council will also be guided by the Management of Advisory Board – Management Improvement Advisory Committee (MAB-MIAC) Guidelines for Managing Risk in the Australian Public Service.

WCC is committed to proactively manage all risks inherent in its operations. The purpose of the policy is to define the responsibilities of staff and management in the risk management process, and provide guidance to line management for the effective identification and treatment of operational risk. Council recognises that the effective management of risk will help ensure the on-going delivery of services and amenities enjoyed by all ratepayers, residents and visitors to the City of Wyndham.

The main policy objectives of managing risk are to:

- Maintain the highest possible standards for services provided by Council;
- Safeguard Council's assets – people, financial, property and fleet;

- Create an environment which enables Council to deliver services and meet performance objectives in a timely, efficient and effective manner;
- Ensure resources and operational capabilities are identified and deployed responsibly and effectively;
- Demonstrate transparent and responsible risk management processes which align with accepted best practice; and
- Ensure cost effective outcomes.

5.3 RISK MANAGEMENT STRATEGY, 2007

The Risk Management Strategy outlines the strategic approach for identifying and managing risks for all Directorates within Council. The Strategy aims to bring about a co-ordinated approach to all risk management practices. Wyndham City Council's Risk Management Strategy is endorsed by the Executive Management Team and sets the risk management direction for all Directorates.

When analysing risks the process should identify, evaluate and implement appropriate strategies to achieve Council's objectives and to continue to manage operations. Risk management includes economic well-being, social equity and environmental considerations. A thorough risk management analysis examines both the effects of risk and the ability to develop and improve Council's performance.

The goals for 2006/2008 including their current status are detailed in the table below:

GOAL	STATUS
Review Risk Management Strategy and develop an "embedded" Risk Management System (Sentinel)	Completed
Continue risk management planning process across all of Council	On-going - part of the business plan for all departments
Promote the use of Sentinel Database for the storage, monitoring & reporting of risks	On-going
Improve the CMP Audit score to 80%	Completed – the last audit results were at 86%
Develop a proactive tree inspection program on streets & Council owned reserves	In Progress

Table 6: Risk Management Strategy Status

5.4 EMERGENCY RESPONSE MANUAL

WCC's Emergency Response Manual identifies several areas prone to flooding within the municipality. The detailed list is included in Appendix C.

The Manual also includes an action plan for the flooding of Werribee River. The plan covers the following:

- Strategy
- Pump Storage
- Warning System
- Operation
- Detailed operation of plumping units.

5.5 INFRASTRUCTURE RISKS

Council has recently identified the stormwater related risks. All high risks identified for stormwater pavement are included below. The detailed infrastructure risk register for stormwater infrastructure is included in Appendix B.

Main Event	Impact	Location (Area Affected)	Consequence Rating	Likelihood Rating	Level of Risk	Existing Controls	Potential Actions
Water ponding on road due to no underground drainage system	Road & property damage, personal injury	Roads in undeveloped areas	Major	Possible	High		

Table 7: High Infrastructure Risks

5.6 OPERATIONAL RISK

All construction and maintenance work on local stormwater infrastructure and pathways are undertaken in accordance with the relevant occupational, health and safety legislation, Code of Practice for Worksite Safety – Traffic Management and Council's adopted Safety Procedures.

Supervisory staff ensure stormwater maintenance staff are aware and fully trained to ensure all rectification works comply with the above.

Operational risks associated with the management of stormwater infrastructure have been identified as:

- OH&S;
- Public safety; and
- Traffic management.

5.7 ASSET CRITICALITY

Criticality takes into consideration low to medium risk assets that may have a high consequence should they fail. It recognises that while risk is low, assets can still fail and in doing so impact significantly on council. In this instance contingency plans are implemented should a failure occur or maintenance activities implemented to prevent failure.

The application of criticality provides a level of certainty and confidence that the preventive maintenance program is appropriate and that the level of attention needed for the assets with respect to future planning is also appropriate. The prioritisation of future works can be based on criticality in conjunction with its counterpart, ***"Risk".***

To provide focus for planning and maintenance WCC should develop a criticality framework and commence the identification of critical stormwater assets;

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6.0 Lifecycle Management Plans

This section presents asset condition and performance information and considers the risk management described in Section 5 to develop the broad strategies and specific work programmes required to achieve the goals and standards outlined in Section 3 and 4.

As Wyndham's asset base continues to grow at a rapid rate, Council needs to allocate a greater proportion of its overall budget funding to maintain these assets. As the asset base increases through the building of roads, stormwater infrastructure, community centres and public open space, staff levels will also increase to allow these facilities to be properly serviced and maintained.

As future budgets increase, ratepayers are likely to see a significant increase in the overall cost of services. Federal and State Government cost shifting can also have an impact on Council's future service budgets. Cost shifting is a practice that Federal and State Governments have employed by various means in the past, but is generally where other tiers of government impose additional legislative or service obligations on local government without an adequate financial allowance (i.e. government grants) for these additional burdens. The result is the imposition of higher costs imposed on Council budgets.

Council has also strongly advocated in the past that State and Federal grant monies have not kept up with Wyndham's rapid population growth. This has a significant impact on future budgets as service costs in Wyndham are increasing due to inflationary factors and demand factors. If funding levels do not reflect Wyndham's rapid population growth, the end result is a higher net cost to Council and higher rate increases.

6.1 OVERVIEW

Council must ensure that it manages all assets on a life cycle basis, with full knowledge of the social, environmental and financial costs, benefits and risks associated with the asset. The life cycle model must give proper consideration to each phase of an asset's life from inception through to disposal. This life cycle model is illustrated in the figure below:

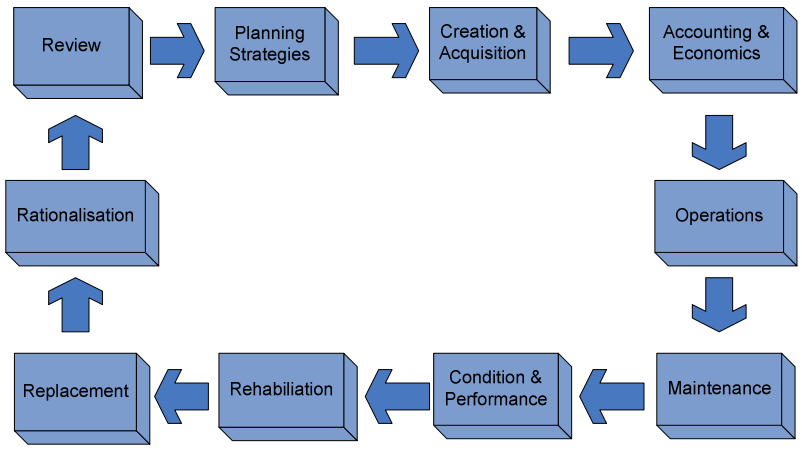

Figure 5: Lifecycle for Asset Management

This lifecycle management plan has been developed to cover the following asset groups:

- Underground Drainage;
- Surface Drainage;
- Flood Prevention; and
- Water Quality Devices.

Lifecycle Activities

Council is responsible for the management of the infrastructure over its lifecycle. Definitions for the primary activities are defined below.

Operations - An activity that has no direct effect on asset condition, consumes resources and is necessary to keep the asset functioning. The operations expenditure is not readily distinguished from maintenance expenditure in the Council's financial systems. A typical operational activity is undertaking CCTV condition surveys.

Maintenance – An activity that will retain / maintain the asset's current condition or performance level. Routine maintenance is the day to day work required to keep assets operating at required service levels, and falls into two broad categories:

- Planned (proactive) Maintenance: Proactive inspection and maintenance works planned to prevent asset failure; and
- Unplanned (reactive) Maintenance: Reactive action to correct asset malfunctions and failures on an as required basis (i.e. emergency repairs).

Maintenance is defined in each section of the lifecycle plan, and includes all repairs and maintenance that are not classified as renewals (refer Renewal / Replacement below). A key element of AM planning is determining the most cost-effective blend of planned and unplanned maintenance.

Renewal / Replacement – An activity that replaces an asset with one that meets contemporary functional requirements. These works are defined as being the:

- Renewal and rehabilitation of existing assets to their original size and capacity, or,
- Replacement of the entire component of the asset with the equivalent size or capacity.

Examples of renewals expenditure include:

- Open drains and culvert reconstruction;
- Retarding basin, levy banks, wetlands, silt trap and swale drain rejuvenation;
- Gross pollutant trap replacement;
- Pump replacement;
- Pipe replacement in total between pits; and
- Pipe Rehabilitation (such as relining).

Upgrades – Upgrade work is related to the extension or augmentation of an asset in response to growth or an increase in the defined levels of service. Upgrades are defined as assets either being:

- Works which improves an asset beyond its original size or capacity; or
- Works which increase the capacity of an asset; or
- Works designed to produce an improvement in the standard and operation of the asset beyond its original capacity.

Upgrade activities for stormwater assets may include:

- Open drains enlargement;
- Increased capacity of retarding basin, levy banks, wetlands, silt trap and swale drains;
- Increased capacity of gross pollutant traps;
- Increased pump impeller size;
- Replacing an existing pipe with a larger capacity pipe; and
- Augmenting through duplication of the pipe.

New Works – acquisition, purchase or inheritance of an asset.

New assets required for growth are distinguished from those required for improvements to levels of service, because of differences in how these assets can be funded. Growth related works can also be separated into those that are Council funded (including those funded by developer contributions), and those that are vested in the Council as a condition of development.

New assets can be inherited through development, constructed in the case of pipe networks, retarding basins and silt traps or installed as per pumps in pump stations.

Disposal – Sale, removal or decommissioning of an asset.
Stormwater assets such as wetlands, basins etc are rarely disposed. Generally, they are left to waste. Pipe networks are rarely disposed as they form part of an ongoing pipe network and would require extensive works to remove the pipes.

Coordination with Other Organisations

All infrastructure including manholes, valves, or other fixtures required to deliver utility services such as gas, water, telecommunications, electricity, and street lighting is the responsibility of the relevant company, agency or authority to maintain.

The principal organisations which own utility infrastructure in Wyndham include:

- Gas: TRU Networks; GPU Australia;
- Water/Sewerage: City West Water; Melbourne Water;
- Electricity/street lighting: Powercor; Powernet;
- Telecommunications: Telstra; Optus; Hutchison; and
- Major Drains: Melbourne Water.

Contractors

Contractors are currently used to provide a support role to Council staff where required. Activities undertaken by contractors include:

- Drainage repairs and cleaning (jet blasting);
- Mowing open drains, around culverts and table drains;
- Weed spraying; and
- Garbage removal.

Melbourne Water Responsibility

Melbourne Water is responsible for the care and management of the overland flow for the major drainage network (catchment >60ha) throughout the Municipality. The two zonings covering the overland flow can be either Land Subject to Inundation Overlay (due to overtopping of rivers or creeks) or Special Building Overlay (land subject to overland flow due to the capacity of the drainage network being exceeded during the 1 in 100 year storm).

Melbourne Water will continue to monitor the operation of these overland flow paths and will carry out any work required to overcome any problem that may arise.

Council Responsibility

Council is responsible for the care and management of drainage infrastructure located in a catchment area of <60ha. This includes reticulation assets such as underground drainage, flood prevention, water quality and surface drainage.

Lifecycle Management Structure

The management structure established by Council for managing the lifecycle of its stormwater infrastructure is identified in the following figure:

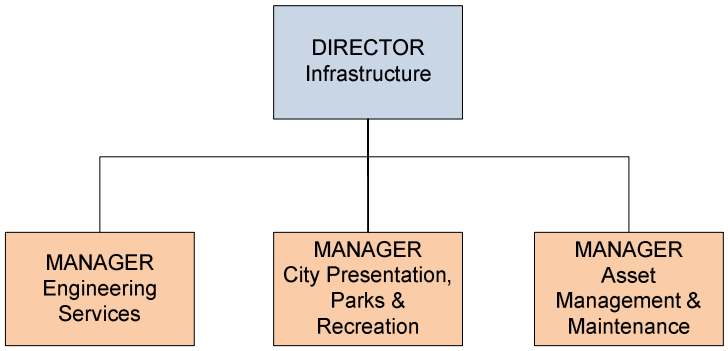

Figure 6: Management Structure

6.2 STORMWATER INFRASTRUCTURE

Key Issues

The key issues related to the management of WCC stormwater assets are:

Climate Change Impacts	• Experiencing increased number of high intensity rain fall events • Ground movement impacting on assets • Loss of surface material due to high rain fall on unsealed roads causing the need for surface re-sheeting and additional drainage maintenance • Potential changes to design standards
Urban Growth	• Significant infrastructure growth • Developer objectives vs. Council sustainability • Increased runoff from development which is flowing into the stormwater system • Asset capacity demands through new sub divisions have increased due to high intensity rainfalls • Customer Expectations with respect to flooding
Ground Movement	• Expansive clays are causing pipe movement including heaving and sinking issues with subsidence, dirt entry and root intrusion • Subsidence at bridges and culverts caused by dry to wet weather conditions producing varying soil moistures – e.g. Kirksbridge Rd Bridge and Sneydes Rd Bridge • Box culvert lids moving over time from impacts such as weather conditions and causing subsidence in road surfaces e.g. Little River Rd and Boundary Rd
Water Quality	• Stormwater water quality is impacted by runoff from construction and construction traffic. This impacts on the sediment levels as the low lying topography allows sediment in pipes to gather and increases potential for blockage. This issue also causes surcharging, restricting water movement • Increased stormwater threats
Maintenance	• Table drains and high shoulders need to be maintained/removed on unsealed and sealed roads as water pools in these areas (on-going issue) • Werribee South table drains have a weed control issue. • Cleaning out the sediment ponds at wetlands are going to become a big issue as Council hasn't undertaken this type of activity before. The effort involved and the budget are unknown. • Achieving the GPT maintenance schedule is adversely affected by unseasonal wet weather conditions. • Maintenance of swale drains is a big issue especially in Wyndham Waters.
Poor Performing Assets	• Converting existing sediment pits to GPTs as the sediment pits are found to be inefficient • Melbourne Water discharge points unable to accept stormwater efficiently from Council stormwater network • Under capacity pipes
Lack of Asset Data	• Lack of quantitative data on the stormwater assets • Insufficient flood mapping data • Tacit knowledge of flood zones and potential 'hot spots'

It should be noted that the issues identified above are not independent of each other. Responses to these issues have been identified in the stormwater asset management strategy.

Asset Description

Council is responsible for approximately 1,160 kilometres of pipes, 40,400 pits and 620 kilometres of surface drains. These assets are located within the road reserve, parks, open spaces and easements.

House drains and connections to Council's stormwater drainage assets are not included in this plan.

A summary of stormwater infrastructure by asset type is shown in the following table:

ASSET GROUP	ASSET TYPE	UNIT	QUANTITY
Underground Drainage	Pits	No.	40,400
	Pipes	km	1,160
Surface Drainage	Open Drains/Table Drains	km	620
Water Quality Devices	Swale Drains	No.	Unknown
	Wetlands includes sedimentation ponds	No.	27
	Gross Pollutant Traps	No.	78
	Litter Baskets	No.	70
Flood Prevention and Retarding Basins	Retarding Basins	No.	6
	Flood Walls	No.	1
	Pump Wells	No.	5
	Pumps	No.	5
	Non Return Valves	No.	5

Table 8: Stormwater Assets Covered in the Lifecycle Management Plan

Asset Performance

Asset performance may be measured by:

- Age;
- Condition;
- Pipe Capacity; and
- Asset Maintenance Histories/Customer Requests.

Age of Stormwater Assets

The majority of the drainage network was constructed between 1960 and 2011. However due to incomplete data (approx. 40%) for the year constructed the relative spread of pit and pipe segments across the 50 years cannot be easily examined. However due to the growth over the past five years and ongoing growth the increase in the extent of the drainage network has been significant.

	2005	2008	2011	% Growth
Pipes	24,000 segments[1]	31,049 segments[2]	unknown	30% (3 years)
	698 kms	unknown	1,160 kms	66% (6 years)

Table 9: Drainage Network Growth

The asset lives adopted for pits and pipes is 100 years. This implies that the entire Wyndham drainage network is at best 50 percent through its life and that the age of pits and pipes should not a major driver for works programming.

[1] Drainage Asset Management Plan, 2005
[2] Drainage Assessment Report, Workforce Solutions, 2008

Stormwater Condition

The condition of stormwater drains is assessed on an adhoc basis when required due to known issues e.g. pipe blockages. A formal CCTV inspection and analysis will be undertaken on a planned basis in the future.

Pipe Capacity

Council at this point does not do any hydraulic modelling of its stormwater network. Instead it relies on the developer's consultants to complete the analysis during the initial design phase of the sub-division, which is then checked by Council. While this is okay at the micro level (subdivision) an analysis of Council's major mains is required to ensure the major mains achieve the desired pipe capacity.

As a consequence of this practice it is difficult for Council to identify pipes that are under capacity as the city expands. At this time where there is flooding hotspots Council could assess the pipe capacity downstream of its hotspots to identify any pipes that are under capacity.

In addition, Council should implement hydraulic modelling for Council's major drains. This modelling should also include the impacts of climate change to investigate the effect climate change will have on the required pipe capacity. This may identify potential drains requiring upgrade.

Asset Maintenance Histories/Customer Requests

The following table identifies the number of requests made in relation to stormwater drainage infrastructure over the period starting 1/01/2010 till 25/5/2011.

PROCLAIM CATEGORY	REQUEST TYPE	NO. OF REQUESTS
Drainage	Building Damage	2
	Construction Issues	3
	Damaged/Missing Pit Lid	72
	Down pipe not Council	16
	Drain Pit Cleaning	149
	Drain Pit Failure	125
	Excessive water run-off	3
	Existing Main	59
	Required upgrade/improvement	13
	Storm water Discharge	2
	Stormwater Construction /Damage	4
	Stormwater Design advice	18
	Stormwater Pit	5
	Subsidence Failure	48
Drain Storm	Damaged Pit Lid	149
	Drain Pit Cleaning	125
	Drain Pit Failure	115
	Water on Road	23

Table 10: Stormwater Drainage Customer Requests

As can be seen above there are two categories used in the customer request system. Ideally only one category is required for drainage requests. As this is the case the chart below represents the combination of the two categories above:

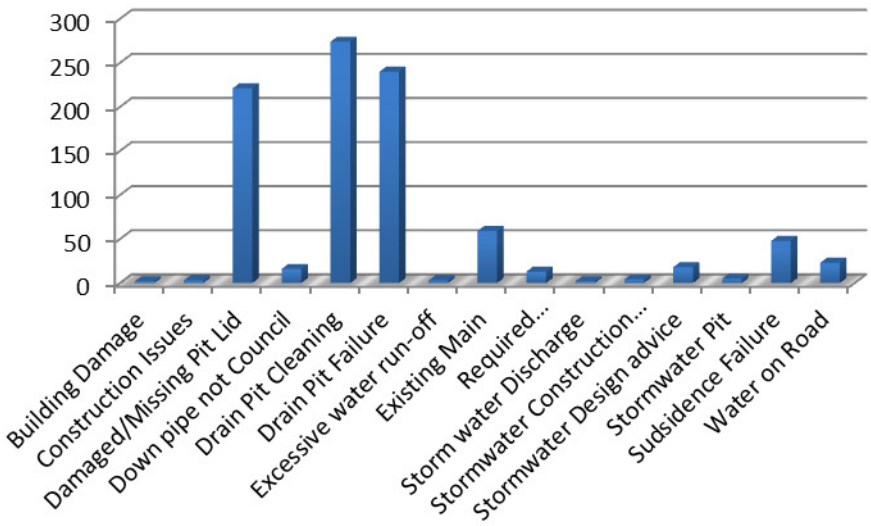

Figure 7: Stormwater Drainage Requests Chart

Without appropriate performance data it is difficult to assess the performance of the asset base. Despite this some performance issues have been identified. They include:

- Drainage pits have failed structurally;
- Sediment pits are being converted to GPTs as the sediment pits have been found to be inefficient;
- Melbourne Water discharge points are unable to accept stormwater efficiently from Council's stormwater network; and
- Some pipes may be under capacity.

There have been 274 requests for drain pit cleaning in less than 18 months. However, to put this in perspective it represents only 0.7% of the total number of pits in the municipality. Data was not available to analyse the requests further and identify whether there were multiple requests for the one pit. As such the results obtained here would be assumed to be the worst case scenario.

Historical Expenditure

Historical expenditure for stormwater assets is detailed below. Maintenance expenditure is not currently available. The split of renewal and upgrade is also not available and for this reason some of the upgrade expenditure may include renewal expenditure.

	2006/07 $(000)	2007/08 $(000)	2008/09 $(000)	2009/10 $(000)	2010/11 (Budget) $(000)	TOTAL $(000)
Operations	$281,653	$369,354	$465,477	$388,224	$499,445	**$2,004,153**
Maintenance	Not available	Not available	Not available	Not available	Not Available	**Not Available**
Renewal	Not available	Not available	Not available	Not available	Not available	**Not available**
Upgrade[3]	$809,970	$844,831	$484,645	$944,214	Not Available	**$3,083,660**
New Works	$15,590,974	$4,707,599	$13,567,228	$37,757,662	Not Available	**$71,623,463**
Total	**$16,682,597**	**$5,921,784**	**$14,517,350**	**$39,090,100**	**$499,445**	

Table 11: Stormwater Infrastructure Value

[3] May include renewal expenditure

Asset Value

The table below identifies the current financial valuation of the stormwater network:

ASSET GROUP	ASSET TYPE	REPLACEMENT VALUE $(000)	WRITTEN DOWN VALUE $(000)
Underground Drainage	Pits	$47,407,039	$43,161,494
	Pipes	$221,135,255	$188,997,204
Surface Drainage	Open Drains/Table Drains	NV	NV
Water Quality Devices	Swale Drains	NV	NV
	Wetlands includes sedimentation ponds	NV	NV
	Gross Pollutant Traps	$1,747,396	$1,653,405
	Litter Baskets	NV	NV
Flood Prevention and Retarding Basins	Retarding Basins	NV	NV
	Flood Walls	NV	NV
	Pump Wells	NV	NV
	Pumps	NV	NV
	Non Return Valves	NV	NV
	TOTAL	**$270,289,690**	**$233,812,103**

NV – Not Valued

Table 12: Stormwater Infrastructure Value

Works Identification and Prioritisation

Works related to stormwater assets are identified as follows, either through:

- Customer Requests; or
- Internal or Stakeholder notification; or
- Proactive inspections undertaken by the works crew.

Maintenance works identified are prioritised based on safety.

Inspections

As part of road segment compliance inspections, WCC inspects pit lids for damage or missing lids. The drainage inspection crew are not yet formalised, however a crew is planned to be effective from the 1st of June 2011. The crew will consist of a 2 man team to do inspections of stormwater pits and fire hydrants.

Council will respond to the following defects within the allocated time frame:

DEFECT	RECTIFICATION	RESPONSE TIMES
Missing / collapsed drainage pit lids.	Erect appropriate barriers, signs including temporary repairs	3 working days of inspection
	Carry out permanent repairs	20 working days of inspection.

Table 13: Drainage Defects, Rectification Actions and Response Times

The following is a list of inspections supporting the asset portfolio:

- Open drains/table drains are inspected on a reactive basis.
- Wetlands are inspected once per month. The inspection involves comparing the state of the wetland to the wetland specifications including:
  - Terms of litter removal;
  - Weed control;
  - Pruning and trimming of trees, shrubs & ground layer plants, defining edges;
  - Replacement planting; and
  - Edge mowing.
- The inspection of GPT's is undertaken as part of the GPT cleaning program.
- The inspection of litter baskets is undertaken as part of the litter basket cleaning program.
- Retarding Basins are frequently mowed; however the frequency of mowing depends on grass growth and Councils mowing specification
- The inspection of sediment pits is undertaken as part of the sediment pits cleaning program.
- Pump wells, pumps and non-return valves (NRV's) are inspected every 3-4 months.

Operations and Maintenance Plan

Council currently adopts a number of stormwater pollution reduction practices. These practices include:

- Street Sweeping;
- Kerb Side Stencilling;
- Swale drains;
- Gross Pollutant Traps at various locations;
- Stormwater Inlet Grates (use on new subdivisions);
- Waste Collection; and
- Litter Collection.

New residential developments also incorporate water features and stormwater management devices as part of their developments. They include:

- Artificial Wetlands;
- Gross Pollutant Traps (GPT);
- Stormwater Infiltration Measures; and
- Waterway Rehabilitation and Revegetation.

Typical maintenance issues relate to the collection and transportation of stormwater along the network. These activities include:

- Removal of high road shoulders to prevent ponding (on-going issue);
- Pit cleaning;
- Root clearing;
- Removal of pipe blockages; and
- Weed spraying e.g. In Werribee South the area is often too wet and flat allowing weeds to grow in the table drains (on-going issue).

The introduction of water sensitive urban design practices has created its own set of maintenance issues. They include:

- Cleaning out the sediment ponds at wetlands are going to become a big issue as Council hasn't undertaken this type of activity before. The effort involved and the budget are

unknown. It is also unknown whether the pond will achieve its design life or whether it will fill quicker than predicted;

- Achieving the GPT maintenance schedule is adversely affected by unseasonal wet weather conditions. The schedule frequency is 3 to 6 months depending on the different type of trap or location; and
- Maintenance of swale drains is a big issue especially in Wyndham Waters. The swale drains on the nature strips are deep and accessing them is an OHS issue. The drains collect rubbish and it is difficult to park a car next to them. They cannot be easily mowed as they are very steep. Swale drains work well in car parks but are not ideal for residential areas.

Inspections of drainage infrastructure are undertaken for pits on a scheduled basis and pipes on a reactive basis. If a drainage complaint has been issued for example a blocked pipe, WCC will inspect the pipe and use CCTV to investigate the cause of failure.

Planned to be effective June 1st, a proactive pit and pipe cleaning program using the recently purchased eductor truck will commence. The 3 year rolling program for pits and pipes will have the ability to clean within a range of up to 120m of the pits.

Cleaning of table drains is undertaken as part of an annual program targeting hot spot areas.

Swale drains are maintained by mowing. Council is responsible for maintaining swale drains on Council land however swale drains on residential nature strips are the responsibility of the landowners. The frequency of mowing depends on growth as per Councils mowing specification.

Wetlands maintenance will be undertaken by City Presentation if and when the current state of the wetland is outside the intervention specified in the wetland specification document.

GPT's, litter baskets and sediment pits are cleaned every 3-6 months.

Maintenance on flood walls is reactive and only undertaken in response to requests or internal notification.

Maintenance on pump wells, pumps and NRV's is undertaken in response to the proactive inspections.

Regular ongoing cleaning and inspection programs are required commencing with the most critical infrastructure.

Renewal Plan

No renewal program for stormwater drainage assets has been developed. All renewal works are reactive and undertaken when required.

Enhancement/Upgrade Plan

No upgrade program for stormwater drainage assets has been developed. All upgrade works are reactive or undertaken as part of development.

There is a need to undertake condition assessments and hydraulic modelling to monitor the performance of the assets and identify assets needing renewal, upgrade or replacement. In addition when roadworks are being planned Council should examine the opportunity to either:

- Construct new assets if they do not exist; or
- Renew and/or upgrade pipeworks for the future.

New Works Plan

No new works program for stormwater drainage assets has been developed. All new works are reactive or undertaken as part of development.

Disposal Plan

Council currently does not have a disposal plan for its stormwater infrastructure however; Council should through its planning identify any assets to be disposed and develop a "disposal/decommissioning" plan for the assets.

7.0 Financial Summary

This section outlines the long-term operations, maintenance and capital financial requirements for the operation, maintenance, renewal and development of stormwater assets based on long-term strategies outlined earlier in the plan. Funding issues are discussed and key assumptions made in preparing financial forecasts are noted.

7.1 10 Year Financial Forecast

The table below summarises the 10 year financial forecast for WCC's stormwater infrastructure (from 2011/12 to 2020/21). The reasons for the expenditure, specific projects are identified for each asset group in the ten year financial forecast below. Projections are shown in dollar values current as at 1 July 2011 under the headings of:

- Operations (day to day activities);
- Maintenance (planned and unplanned);
- Renewals (rehabilitation and replacement works); and
- Upgrade/New Works (upgrade and creation of assets).

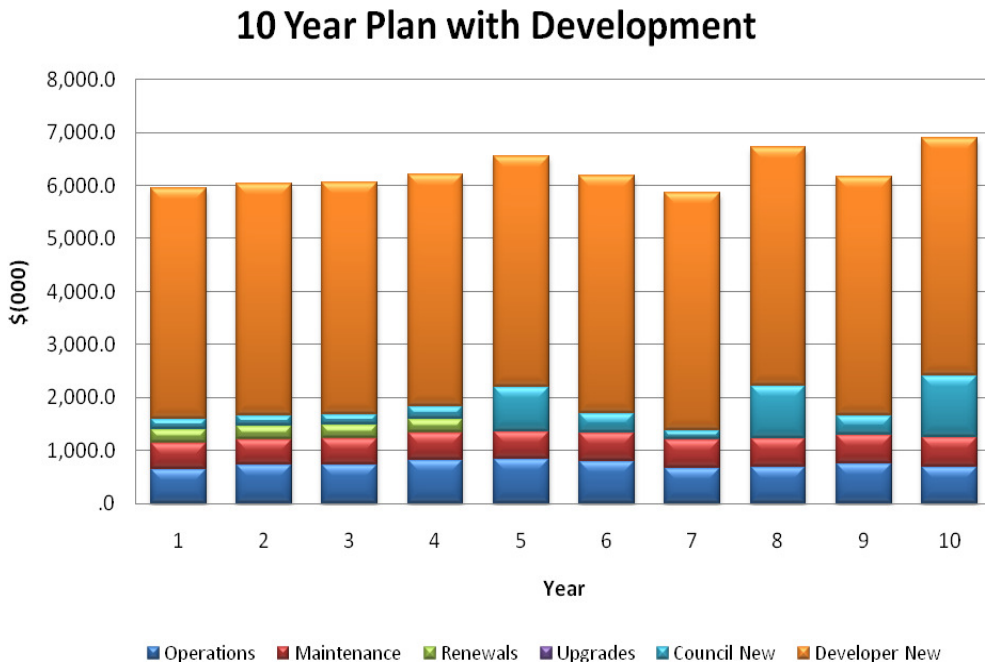

Figure 18: 10 Year Financial Projections

Expenditure identified within the financial forecasts was obtained from the WCC Final Draft 10 year financial program. It should be noted that operations and maintenance budgets have been adjusted to cater for growth and extrapolated across the 10 years. The new assets are both Council and developer funded with 90 percent of the assets being developer funded.

The amended financial forecast is provided based on the following outcomes:

- Required Asset Management improvements;
- Improved operations and maintenance activities;
- Projects identified in the 2000 Stormwater Management Plan;
- Impacts of growth over the next 10 years; and
- Impacts of growth on the operations and maintenance activities.

The timing of activities is an estimate only. While WCC has time before many of the issues become apparent such as pipe age, the available time represents an opportunity to make appropriate decisions on activities and their future implementation.

The difference between the current funding and projected funding over the ten year period is identified in the following table.

FUNDING CATEGORIES	EXISTING 10 YEAR EXPENDITURE	ESTIMATED 10 YEAR EXPENDITURE
OPERATIONS	$4,995,000	$7,411,000[4]
MAINTENANCE	$ 848,000[5]	$5,218,000
RENEWAL	$1,000,000	$1,000,000
UPGRADE	$ -	$ -
NEW (Developer Funded)	$ -	$44,240,000
NEW (Council Funded)	$1,800,000	$4,748,000
TOTAL	**$8,643,000**	**$62,617,000**

Table 14: Funding Gap

Ignoring developer funded expenditure the gap is approximately $9,734,000 over ten years. This funding will provide WCC with support to improve asset management capability and undertake new initiatives such as CCTV, upgrade flood mapping as well as support future proactive maintenance activities while accommodating growth.

It is apparent that the current level of expenditure is insufficient to maintain the service levels expected of the stormwater network.

If the funding is delayed or not provided within the period then there will be minimal changes to current practices with the threat of ageing assets coupled with having to respond to increasing pressures on the drainage network. In effect the window of opportunity to respond to existing and future issues e.g. climate change will disappear.

[4] Includes AM improvements and additional activities e.g. CCTV
[5] Bundled in with 52.554 (Variations account assumed 20% attributed to drainage)

Stormwater - 10 Year Financial Forecast

		Expenditure ($'000)	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	TOTAL
COUNCIL FUNDED OPERATIONS & MAINTENANCE	OPERATIONS													
		Stormwater cleaning based on demand analysis	500	508	516	524	533	541	550	559	568	577	587	**5,463**
		Flood mapping		100	100	100	100	100						**500**
		Develop Criticality Framework		25										**25**
		Implement Criticality Framework			80									**80**
		Develop Data Framework		25										**25**
		CCTV spot inspections					80	80	80					**240**
		Condition Manual for all assets			30									**30**
		Condition Assessments for assets other than pits/pipes							60			60		**120**
		Water Quality data collection - Werribee Township	Note 1			58	58	58	58	58	58	58	58	**464**
		Water Quality data collection - Werribee South Township	Note 2			58	58	58	58	58	58	58	58	**464**
		Total Operations	500	658	726	740	829	837	806	675	684	753	703	**7,411**
	MAINTENANCE													
		Pit and pipe clearing based on demand analysis	Note 3	200	203	207	210	213	217	220	224	227	231	**2,153**
		Maintenance of assets other than pits/pipes based on demand analysis	Note 4	200	203	207	210	213	217	220	224	227	231	**2,153**
		Bundled in with 52.554 (Variations account) in addition to the above operations budget (assumed 20% attributed to drainage)	Note 5	85	86	88	89	90	92	93	95	96	98	**913**
		Total Maintenance		485	493	501	509	517	525	534	543	551	560	**5,218**

Stormwater - 10 Year Financial Forecast

		Expenditure ($'000)	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	TOTAL
COUNCIL FUNDED CAPITAL	RENEWALS													
	10.37	Wyndham Waters Drainage Works		250	250	250	250							1,000
		Total Renewals		250	250	250	250							1,000
	UPGRADES													
		No projects identified												
		Total Upgrade Works												
	NEW WORKS													
	8.02	Wyndham Stormwater Management - GPT	Note 6	200	200	200	200	200						1,000
	107	Wyndham Vale Wetlands Master Plan including Lollipop Creek					50	500	250					800
		In-line Gross Pollutant Trap on Brooklyn Drain, upstream of Pipe Road	Note 7						65					65
		Major Gross Pollutant Trap upstream of Pipe Road								173				173
		Major GPT adjacent to K-Mart Distribution Centre and upstream from underground system						144						144
		Screening devices (e.g. Net Tech) at Tesron Court drainage outlet (900mm)							22					22
		Screening devices (e.g. Net Tech) at Concord Crescent drainage outlet (1500mm)							32					32
		Artificial wetland on D1 Drain at Heathdale Outlet 8ha									1,000			1,000
		Artificial wetland at lower end of Galvin Park – 1ha										360		360
		Artificial wetland on Angela Drive											1,152	1,152
		Total New Works		200	200	200	250	844	369	173	1,000	360	1,152	4,748

Stormwater - 10 Year Financial Forecast

		Expenditure ($'000)	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	TOTAL
DEVELOPER FUNDED CAPITAL	UPGRADES													
		No projects identified												
		Total Upgrade Works												
	NEW WORKS													
		Construction of new Pipes (Demand based)		3,590	3,590	3,590	3,590	3,590	3,696	3,696	3,696	3,696	3,696	**36,430**
		Construction of new Pits (Demand based)		770	770	770	770	770	792	792	792	792	792	**7,810**
		Total New Works		4,360	4,360	4,360	4,360	4,360	4,488	4,488	4,488	4,488	4,488	**44,240**
SUMMARY														
		Total Council Capital Expenditure		450	450	450	500	844	369	173	1,000	360	1,152	**5,748**
		Total Developer Capital Expenditure		4,360	4,360	4,360	4,360	4,360	4,488	4,488	4,488	4,488	4,488	**44,240**
	TOTAL EXPENDITURE		**500**	**5,952**	**6,029**	**6,051**	**6,198**	**6,558**	**6,189**	**5,870**	**6,715**	**6,153**	**6,903**	**62,617**

Table 15: Total 10-Year Expenditure Forecast

Notes:

1. Assumed start year. Value indexed from year 2000 Stormwater Management Plan
2. Assumed start year. Value indexed from year 2000 Stormwater Management Plan
3. Assumed annual cost of crew
4. Assumed annual cost of crew
5. Assumed does not already form part of existing maintenance
6. Skeleton Creek / Werribee River GPTs
7. Projects obtained from Stormwater Management Plan based on risk. Timing of works are indicative only

7.2 Financial Forecast Assumptions and Discussion

The following general assumptions have been made in preparing the 10-year expenditure forecasts:

1. All expenditure is stated in dollar values as at 01/07/2010 with no allowance made for inflation over the 10-year planning period;
2. The projected growth of Wyndham is reflective of times to come; and
3. The renewal of the existing asset base is appropriate.

7.3 Asset Valuation

In valuing the stormwater infrastructure assets the following methodology and approach was adopted in accordance with the Australian Accounting Standards for Financial reporting purposes:

All assets are rated at the appropriate life for the material and assessed in terms of their quantity applying the 'Fair Value' principle:

- Asset values have been based on asset data currently held in the finance database;
- Replacement values have been determined from current contract rates on the basis of the cost of replacing the asset with modern materials that provide the equivalent service in terms of capacity to the user;
- Where the useful life of the asset is extended or reduced, the resultant impact will be on future depreciation rates and charges and will not be retrospective in accordance with appropriate accounting standards; and
- All valuations and asset counts have been fully documented to provide a clear audit trail that is evident through to the accounting entries in the general Ledger.

A summary of the valuation totals are shown in the table below:

STORMWATER ASSET GROUP	TOTAL REPLACEMENT VALUE	TOTAL WRITTEN DOWN VALUE
Underground Drainage	$268,542,294	$232,158,698
Surface Drainage	NV	NV
Water Quality Devices	$1,747,396	$1,653,405
Flood Prevention and Retarding Basins	NV	NV
Total	**$270,289,690**	**$233,812,103**

Table 16: Valuation Figures

Summary of the asset lives adopted as detailed in the asset accounting policy are as follows:

STORMWATER ASSET TYPE	DEFINITION	ASSET LIFE (YRS)
Pipes	Each Pit to Pit Length, includes minor culverts	100
Pits	Whole unit, including pit lid, frame, pit walls	100
Gross Pollutant Traps	Whole Unit	75

Table 17: Asset Lives

All other stormwater asset categories are not included in the asset accounting policy.

7.4 FUNDING SOURCES

A major issue concerning stormwater management is the question of who pays for needed works:

- The community through special rates;
- The developer through development contributions, or
- The consumer through recurrent charges.

To overcome this problem there should be available a range of funding options including:

- General municipal rates; and
- Flood damage/relief funding.

Developers should be required to make a direct contribution to alleviate stormwater problems resulting from their particular development.

Funding capacity covers two quite different aspects, and information has to be developed to respond to both.

- Council has to have the capacity to fund the required works – often this is well outside its capacity, however the information on needs has to be provided to assist with the development of the Corporate Funding Strategy; and
- In the event that the necessary funding is forthcoming, there has to be an awareness of the ability for the actual work to be carried out. This may involve Council's own workforce in undertaking some or all of the work, and also the use of contractors/sub-contractors. In either case we need to ask; "Is there adequate capacity to carry out the work in addition to all other normal work tasks?"

7.5 CONFIDENCE LEVELS

Using the matrix in the table below the data availability has been given a rating of 3 which is described as "Primary data located across WCC in electronic format available to a few staff" and the data completeness a rating of 2 which is described as "Primary data for limited number of assets". This results in the data confidence being classified at 24%. This means that there is a Fair level of confidence in the plan outputs.

Data Completeness			Data Availability				
			1	2	3	4	5
			Primary data located across WCC in hardcopy format available to a few staff	Primary data located across WCC in hardcopy and electronic format available to a few staff	Primary data located across WCC in electronic format available to a few staff	Primary data recorded in electronic format throughout WCC available to most staff	Primary data recorded in a computer system available to all relevant staff
	1	Primary data for limited number of assets	POOR (4)	POOR (8)	POOR (12)	POOR (16)	POOR (20)
	2	Primary data for limited number of major and minor assets	POOR (8)	POOR (16)	FAIR (24)	FAIR (32)	FAIR (40)
	3	Primary data for some assets	POOR (12)	FAIR (24)	FAIR (36)	GOOD (48)	GOOD (60)
	4	Primary data for most assets	POOR (16)	FAIR (32)	GOOD (48)	VERY GOOD (64)	VERY GOOD (80)
	5	Complete data sets for all assets	POOR (20)	FAIR (40)	GOOD (60)	VERY GOOD (80)	EXCELLENT (100)

Table 18: Data Confidence

Improvement projects have been outlined in Section 9 that are intended to result in greater confidence in the 10 year forecasts and appropriateness of target levels of service.

To assist in improving the quality of data, improvements are identified in section 8.0.

It should be noted that the availability of data score may improve when the Asset Management System is fully implemented.

In summary limited data exists for each asset type with a significant amount of tacit data stored in the heads of WCC personnel. The following table identifies the state of the data for the remaining drainage assets:

ASSET TYPES	COMMENTS
Open drains and culverts	A list of culverts that WCC is responsible for is available.
Retarding Basins	The number of retarding basins has dramatically increased with the increase in urban development. The details and locations are known but not in a single data set.
Wetlands	An asset register does not exist for the wetlands that WCC is responsible.
Swale drains	The location and condition of the swale drains that WCC is responsible for is unknown.
Gross Pollutant Traps	The details and location of the Gross Pollutant Traps that WCC is known but is not in a single complete dataset.
Silt Traps	There is no known information on any silt traps that the WCC is responsible.
Levy Banks	The levy banks within the municipality are not recorded.

ASSET TYPES	COMMENTS
Pumps	The information on the pumps is not recorded in an asset register.

Table 19: State of Drainage Asset Data

The following table identifies the state of the asset management data for the drainage assets:

ASSET MGT DATA	COMMENTS
Asset Attributes	Attribute data is provided through D-Spec for new assets.
Condition	The condition of the assets is not recorded.
Maintenance	Maintenance histories against the assets have not been recorded. Maintenance costs are not recorded separately against the assets.
Performance	The only performance data collected relates to customer requests. Supporting feedback data is not available.
Lifecycle	Lifecycle data is not recorded against the assets.
Risk / Criticality	An initial infrastructure risk register has been compiled. The critical assets have not been formally identified or criticality assigned.

Table 20: State of Asset Management Data

8.0 Plan Improvement and Monitoring

This section provides AM improvement tasks that will be carried out over the next 3 years intended to improve the level of confidence in this AM plan. Also included is a programme for revising this AM plan.

8.1 Asset Management Improvement Program

The AM tasks identified in the summary programme below are considered to be the most important to enable WCC to meet its legislative and business requirements over the period to 30 June 2014. The programme reflects the overall aim of improving asset management practices, which is to deliver the right level of service at lowest long-term cost to WCC's customers.

Improvements have also been identified at a higher level in the asset management strategy.

The following table identifies the primary improvements identified for asset management processes, systems and data:

PROCESS / SYSTEMS	IMPROVEMENTS	TIMEFRAME	STATUS
AM Planning	Use MyPredictor to determine a 20 year renewal and maintenance program for stormwater assets	2013/14	-
	Prepare a 10 year maintenance plan to support the Long Term Financial Plan	2012/13	-
Asset Performance	Undertake an 'asset lives' review to revise the asset lives for individual or like assets based on impacting parameters such as soil type, material etc.	2011/12	-
	Analyse the customer request information within the CRM and use it to improve current practices	2011/12	-
	Capture age related data for stormwater assets.	2012/13	-
	Collect sample condition data for critical pits and pipes.	2012/13	-
	Analyse asset condition data on critical assets to identify and develop plans to address areas in poor condition	2013/14	-
Asset Knowledge	Record maintenance/defect histories for trending/planning purposes	2011/12	-
Asset Management Systems	Complete the implementation of the asset management system	2011/12	-
Levels of Service	Complete, adopt and monitor levels of service as defined in the LOS tables	2012/13	-
Risk Management	Complete the infrastructure risk register including actions, costs and timing over the next 10 years	2012/13	-
	Implement the infrastructure risk register	2012/13	-
	Identify all critical stormwater assets	2012/13	-
Data	Improve the data availability for each asset group i.e. report by material, asset type etc.	2012/13	-
	Document the data/information required to be held against any given asset through the development of a data framework document	2011/12	-

PROCESS / SYSTEMS	IMPROVEMENTS	TIMEFRAME	STATUS
Finance	Include operations and maintenance costs in the financial forecasts to reflect the needs of Council and the impact of growth on expenditure projections.	2012/13	-
	Identify historical maintenance and renewal expenditure for stormwater assets	2011/12	-
	Include all stormwater assets as part of valuations.	2012/13	-
Condition	Document a condition assessment policy detailing which asset groups will be assessed and include justification	2012/13	-
	Obtain condition information for stormwater asset groups as identified in the condition assessment policy document	2013/14	-
	Document a condition manual detailing the condition criteria used to assess the stormwater assets	2012/13	-

Table 21: AM Improvement Tasks

8.2 MONITORING AND REVIEW PROCEDURES

AM Plan Review

The AM plan is a living document which is relevant and integral to daily AM activity. To ensure the plan remains useful and relevant the following on-going process of AM plan monitoring and review activity will be undertaken:

- Formal adoption of the plan by Council;
- Identify and formally adopt levels of service;
- Revise the AM plan every two years to incorporate outcome of service level review and new knowledge resulting from the AM improvement programme;
- Audits of AM information to ensure the integrity and cost effectiveness of data collected; and
- Peer review: Annual internal audits to be undertaken to assess the effectiveness with which the AM plan meets corporate objectives. Periodic internal audits to be undertaken to assess the adequacy of AM processes, systems and data and external audits to be undertaken to measure AM performance against 'best practice' i.e. gap analysis.

Appendix A – Glossary Of Terms

The following terms and acronyms are used in this AM plan.

TERMS	DEFINITION
Activity	An activity is the work undertaken on an asset or group of assets to achieve a desired outcome.
Advanced Asset Management	Asset management which employs predictive modelling, risk management and optimised renewal decision-making techniques to establish asset lifecycle treatment options and related long term cash flow predictions. (See Basic Asset Management).
Asset	A physical component of a facility which has value, enables services to be provided and has an economic life of greater than 12 months.
Asset Management (AM)	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.
Asset Management Plan (AM Plan)	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost effective manner to provide a specified level of service. A significant component of the plan is a long term cash flow projection for the activities.
Asset Management Policy	Provides an overall policy framework to guide the strategic management of Council's infrastructure assets.
Asset Management System (AMS)	A system (usually computerised) for collecting analysing and reporting data on the utilisation, performance, lifecycle management and funding of existing assets.
Asset Register	A record of asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financial information about each.
Core Asset Management	Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, condition assessment and defined levels of service, in order to establish alternative treatment options and long term cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than risk analysis and optimised renewal decision making).
Capital Expenditure (CAPEX)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential. CAPEX increases the value of an asset.
Cash Flow	The stream of costs and/or benefits over time resulting from a project investment or ownership of an asset.
Components	Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.
Condition Monitoring	Continuous or periodic inspection, assessment, measurement and interpretation of resulting data, to indicate the condition of a specific component so as to determine the need for some preventive or remedial action
Critical Assets	Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.
Current Replacement Cost	The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.

TERMS	DEFINITION
Deferred Maintenance	The shortfall in rehabilitation work required to maintain the service potential of an asset.
Demand Management	The active intervention in the market to influence demand for services and assets with forecast consequences, usually to avoid or defer CAPEX expenditure. Demand management is based on the notion that as needs are satisfied expectations rise automatically and almost every action taken to satisfy demand will stimulate further demand.
Depreciated Replacement Cost (DRC)	The replacement cost of an existing asset after deducting an allowance for wear or consumption to reflect the remaining economic life of the existing asset.
Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence through technological and market changes. It is accounted for by the allocation of the historical cost (or revalued amount) of the asset less its residual value over its useful life.
Design Life	The theoretical life of an asset assumed in its design.
Disposal	Activities necessary to dispose of decommissioned assets.
Economic Life	The period from the acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular level of service. The economic life is at the maximum when equal to the physical life however obsolescence will often ensure that the economic life is less than the physical life.
Facility	A complex comprising many assets (e.g. a park, recreation complex, airport etc.) which represents a single management unit for financial, operational, maintenance or other purposes.
Geographic Information System (GIS)	Software that provides a means of spatially viewing, searching, manipulating, and analysing an electronic database.
Infrastructure Assets	Stationary systems forming a network and serving whole communities, where the system as a whole is intended to be maintained indefinitely at a particular level of service potential by the continued replacement and refurbishment of its components. The network may include normally recognised 'ordinary' assets as components.
Level Of Service (LOS)	The defined service quality for a particular activity or service area (i.e. interior) against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, regulatory & environmental acceptability and cost.
Life	A measure of the anticipated life of an asset or component; such as time, number of cycles, distance intervals etc.
Life Cycle	Life cycle has two meanings: (a) The cycle of activities that an asset (or facility) goes through while it retains an identity as a particular asset, i.e., from planning and design to decommissioning or disposal. (b) The period of time between a selected date and the last year over which the criteria (e.g. costs) relating to a decision or alternative under study will be assessed.
Life Cycle Cost	The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
Maintenance	All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.
Objective	An objective is a general statement of intention relating to a specific output or activity. They are generally longer-term aims and are not necessarily outcomes that managers can control.
Operation	The active process of utilising an asset that will consume resources such as manpower, energy, cleaning products and materials. Operation costs are part of the life cycle costs of an asset.

TERMS	DEFINITION
Optimised Renewal Decision Making (ORDM)	An optimisation process for considering and prioritising all options to rectify performance failures of assets. The process encompasses net present value analysis and risk assessment.
Performance Measure	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.
Performance Monitoring	Continuous or periodic quantitative and qualitative assessments of the actual performance compared with specific objectives, targets or standards.
Physical Life	The actual life of an asset.
Rehabilitation	Works to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, which may incorporate some modification. Generally involves repairing the asset using available techniques and standards to deliver its original level of service (i.e. re roofing, replacing doors etc.) without resorting to significant upgrading or replacement.
Renewal	Works to upgrade, refurbish, rehabilitate or replace existing facilities with facilities of equivalent capacity or performance capability.
Repair	Action to restore an item to its previous condition after failure or damage.
Replacement	The complete replacement of an asset that has reached the end of its life, so as to provide a similar or agreed alternative, level of service.
Replacement Value	The prevailing market cost of supply and installation of an asset delivering an equivalent service, making no allowance for depreciation of the asset.
Risk Management	The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.
Service Potential	The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset.
Strategic Plan	Strategic planning involves making decisions about the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of the organisation and identify major targets, actions and resource allocations relating to the long term survival, value and growth of the organisation.
Scheduled Maintenance	Work carried out to a predetermined schedule e.g. air cooler service or programmed as a result of identified needs e.g. repairing a cracked wall.
Unscheduled Maintenance	Work carried out in response to reported problems of defects e.g. cleaning up vandalism.
Upgrading	The replacement of an asset or addition/ replacement of an asset component which materially improves the original service potential of the asset.
User Cost	Cost borne by the public when using the Stormwater infrastructure.
Valuation	Estimated asset value which may depend on the purpose for which the valuation is required, i.e. replacement value for determining lifecycle costing or insurance valuation.

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Appendix B – Risk Assessment Criteria and Results

The following tables detail the risk criteria used to access the infrastructure risk in regard to stormwater assets:

RISK CRITERIA

Consequence	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
Health and Safety	First Aid only no lost time	Medical treatment	Extensive injuries	Death	Multiple Deaths
Revenue/Cost/Legal costs	Low financial losses <$500,000	Medium financial losses ($500,000 - $1M)	High financial losses ($1M - $5M)	$5M - $10M	Huge financial losses >$10M
Service Delivery	minor inconvenience	service delivery affected (less than one day)	temporarily unacceptable levels of service	serious impact upon service delivery - service at risk	no service delivery for foreseeable future
Reputation	internal only	temporary loss of reputation	loss of reputation requiring effort to regain	loss of reputation requiring major effort to regain	Administrator appointed
Environment	Spill/leak contained immediately within property boundary with no external assistance - Negligible environmental impact	Spill/leak contained immediately within property boundary with no external assistance - Minor impact on fauna / flora and habitat, but no negative impacts on ecosystem functions - Limited damage to a minimal area of land of no nature reserves, parks or unique habitats or water resources	Spill/leak contained within property boundary with external assistance - Significant change in flora/fauna populations but not resulting in loss or any impact on endangered or beneficial species - Non persistent but possible widespread damage of land/water resource, damage that can be remediated without long term loss; or localised persistent damage	Spill/leak contained outside property boundary with external assistance - Significant change in flora/fauna populations including significant or endangered species - Non persistent but possible widespread damage of land/water resource with medium term effect	Toxic release off-site with detrimental effect: - Widespread and persistent damage to a significant area of land and/or ground water resource

Likelihood	For Example only:	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
5 Almost Certain	Expected to occur in most circumstances (2-3 times per week)	S	S	H	H	H
4 Likely	Will probably occur in most circumstances (once a month)	M	S	S	H	H
3 Possible	May occur at some time (once a year)	L	M	S	H	H
2 Unlikely	Could occur at some time (Once every 5 years)	L	L	M	S	S
1 Rare	Only in exceptional circumstances (Once in 25 years)	L	L	M	S	S

Please review whenever a change takes place in the existing conditions - and annually by March 31

Reporting in Performance Score Card	Key
- Number of UNACCEPTABLE Risks	H – High Risk, mandatory action to be developed if controls are unacceptable
	S – Significant Risk, mandatory action to be developed if controls are unacceptable
	M – Moderate Risk, Department/Units Management Responsibility to Monitor. Action to be developed if controls are unacceptable
	L – Low risk, Standard Operating Procedures to handle. Action to be developed if controls are unacceptable

Risk Accepted?

Acceptable: Risk controls are adequate and no further actions required	Unacceptable: Risk controls are not adequate and further actions required

RISK RESULTS - STORMWATER

				Risk of Main Event Occuring							
Item	**Asset Type**	**Main Event**	**Impact**	**Location (Area Affected)**	**Consequence Rating**	**Likelihood Rating**	**Level of Risk**	**Existing Controls**	**Potential Actions**	**Responsible Officer**	**Target Fin. Year**
1	Pipe/Pit	Insufficient capacity during minor storm event (5 years ARI)	Driveway and Road Flooded Disruption to residents and traffic	Any street	Insignificant	Possible	Low				
2	Pipe/Pit	Insufficient capacity during minor storm event (100 years ARI & above)	Property and Road Flooded Disruption to residents and traffic	Any street	Moderate	Rare	Moderate				
3	Channels	Water over road at creeks & drainage channels crossing	Road damage, personal injury, fatality	Road crossings creeks & drainage channels in rural areas	Catastrophic	Unlikely	Significant				
4	Table Drains	Water ponding on road due to no underground drainage system	Road & property damage, personal injury	Roads in undeveloped areas	Major	Possible	High				
5	Pipe/Pit	Sediments entering underground drainage system from capital works & subdivisions works.	Blocked pit and pipe. Impact on ecological system in creeks & rivers.	Construction work sites	Moderate	Likely	Significant				
6	GPT	Pollutants entering water bodies during major storm events due to bypass in GPT	Impact on ecological system and unsightly	Major creeks and rivers	Moderate	Likely	Significant	Cleaning and Maintenance	Electronic scheduling and recording of proactive maintenance programs	Peter Gordon	2012
7	Overland Flow Path	Damage to road surfaces and loss of material	Loss of material and possible hazardous driving condition	Any unsealed roads	Moderate	Possible	Significant	Maintenance grading	Improved shoulder drainage in locations affected or construct sealed roads	Peter Gordon & Maurice Stabb	On-going as identified and budget allowance

				Risk of Main Event Occuring							
Item	**Asset Type**	**Main Event**	**Impact**	**Location (Area Affected)**	**Consequence Rating**	**Likelihood Rating**	**Level of Risk**	**Existing Controls**	**Potential Actions**	**Responsible Officer**	**Target Fin. Year**
8	Ford	Water passing over the road	Road closure and traffic diversion. Damage to ford structure	Cottrell Street Ford	Moderate	Possible	Significant	Monitoring river levels and advice from Southern Rural Waters	Improved monitoring systems of water levels	Peter Gordon / Southern Rural Water	2011
9	Pipe/Pit	River getting to 50000 mega lts of water below Melton weir	Storm water backing up in to the residential areas within the levee bank	Area within the levee bank between Shaws Road and Cottrell Street	Moderate	Rare	Moderate	5 Mobile pumps at set locations	Review of the flood strategy and the outcomes	Peter Gordon	2011
10	Railway Line Underpass	Underground pumping station failing and flooding	Road closure and traffic diversion	Derrimutt Road underpass near Princes Highway	Moderate	Rare	Moderate	Electronic Monitoring by Vicroads	Vic roads to determine	Vic Roads	n/a
11	Creek	Water running into residential areas from creeks	Road closure and traffic diversion and flooding of property	Lollypop Creek, Skeleton Creek, Davis Creek and Werribee west floodway, D1 Drain	Moderate	Rare	Moderate	None	Emergency response	Mero/ Standby Officers	On-going
12	Pipe/Pit	Pressure on Catchments due to changes in land use	More frequent flood events and changing of the areas that get flooded	Wyndham Catchment	Major	Rare	Significant	None	Design accordingly (controlled overland flow and retarding basins)		
13	Overland Flow Path	Run off from nature strip /reserve enters private property	Property flooded Disruption to residents	Adjacent wide nature strip and parks	Minor	Possible	Moderate				

Appendix C – Emergency Response Manual – Areas Subject to Flooding

FLOODING

FLOOD SIGNING SCHEDULE — PROBABLE EVENT

LEGEND: -
A: ROAD CLOSED
B: WATER OVER ROAD - KMS
C: WATER OVER ROAD

LOCATION	TYPE	NUMBER
CENTRAL AREA		
Cottrell Street Ford (See separate guidelines)	A	2
SOUTH WEST AREA		
Bulban Road – at Edgas and McGraths Road **(Road Closure possible)**	B	2
	C	8
Edgas Road – at Bulban and Narraburra Road	B	2
	C	8
Browns Road – both ends	A	2
Alfred Road – At Highway	C	1
K Road – at equestrian Centre	C	2
Diggers Road – at Whites and Beach Road	C	2
Diggers Road – bend North and Aviation Road intersection	C	2
NORTH AREA		
Tarneit Road – between heaths and Hogans Road	C	2
Tarneit Road – between Dohertys and Boundary Road **(Road closure possible)**	C	2
Derrimut Road – between Sayers and Boundary Road	B	2
Palmers Road – between Dohertys and Boundary Road	C	2
Sayers Road – at Old Geelong Road	B	1
Dohertys Road – at Derrimut and Palmers Road (**Road closure possible)**	B	2
Dohertys Road – at Derrimut and Tarneit Road	A	2
Kenning Road – at Davis and Tarneit Road	C	2
Dohertys Road – at Tarneit and Dukeslow Road	C	4
Hogans Road – at Tarneit Road (**Road closure possible)**	C	1
Boundary Road – Between Davis and Tarneit Road	C	2
EAST AREA		
Point Cook Road – at RAAF Base and Central Avenue	B	2
Sneydes Road – at Hoppers Lane and Point Cook Road	C	2
Sayers Road – at Palmers Road and Waackett street **(Road closure possible)**	B	2
Fitzgerald Road – South of Dohertys Road	C	2

OTHER AREAS SUBJECT TO FLOODING

DERRIMUT ROAD (VARIOUS PLACES)
DOHERTYS ROAD DIPS
TARNEIT ROAD (VARIOUS AREAS)
SAYERS/PALMERS ROAD INTERSECTION
FORSYTH ROAD
BALLAN ROAD NORTH OF BOLTON TO BOUNDARY
ROWES ROAD AT D1 DRAIN
McGRATHS ROAD AT CREEK
BLACK FOREST ROAD D1 DRAIN
CAMBRIDGE CRESCENT
BROWNS ROAD
ALFREDS ROAD
BULBAN ROAD AT BALLS ROAD
NARRABURRA ROAD
DAVIS ROAD
KENNING ROAD
DIGGERS ROAD BENDS
DEVINES ROAD
EDGARS ROAD
PALMERS AT BOUNDARY ROAD

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Appendix D – RMP Operational and Maintenance Levels of Service

ASSET	INSPECTION	ASSET SEGMENT	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
Roadways	Compliance inspections are undertaken as part of an inspection regime or in conjunction with routine patrol maintenance to determine compliance with the approved intervention levels and to determine risk.	All road segments.	Inspect at least every 3 months.	Inspect at least every 6 months.	Inspect at least every 12 months.
	Response inspections are adhoc inspections of assets consequent to notifications from parties, to verify compliance with maintenance standards and to determine risk.	Driving surface defects.	Inspect within 10 working days of notification.	Inspect within 20 working days of notification.	Inspect within 20 working days of notification.
		Damaged or missing regulatory and warning signs.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.
		Damaged all other road related signage including missing guideposts, marker posts, delineators, pavement markings, line marking and damaged or missing street furniture.	Inspect within 15 working days of notification.	Inspect within 15 working days of notification.	Inspect within 15 working days of notification.
		Bridges/Major Culverts.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.	Inspect within 5 working days of notification.
		Where a flood is likely to warrant the closure of a bridge/major culvert	Inspect within 2 hours of notification	Inspect within 2 hours of notification	Inspect within 2 hours of notification
		Missing / collapsed drainage pit lids.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.
		Damaged or missing guard fencing	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.	Inspect within 3 working days of notification.

ASSET	MAINTENANCE ACTION	INTERVENTION LEVELS	FREQUENCY/RESPONSE TIME		
			Main	**Collector**	**Local Access**
		Replace/repair missing or damaged regulatory and warning signs.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 5 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.
		Damaged all other road related signage including missing guideposts, marker posts, delineators, pavement markings, line marking and damaged or missing street furniture.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 15 working days of inspection and/or carry out permanent repairs within 30 working days of inspection.
		Missing / collapsed drainage pit lids.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 20 working days of inspection.
		Damaged or missing guard fencing.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.	Take remedial action (erect appropriate barriers, signs) and/or undertake temporary repairs within 3 working days of inspection and/or carry out permanent repairs within 40 working days of inspection.

Procurement Policy

May 2015

Policy Reference	45/001/050
Date of Adoption	May 2015
Date of last Review	December 2012
Date of next Review	March 2016
Responsible Officer	Manager Financial Services

RESPONSIBILITIES

Directors
For the supervision and proper application of this Policy across Divisional employees.

Manager Financial Services
For the co-ordination, interpretation and strategic management of this Policy.

Manager of Risk and Compliance
For the reporting of non-compliance with this Policy.

Employees
For observance of their responsibilities under this Policy.

RELATED COUNCIL POLICIES AND LEGISLATION

This policy should be read and carried out in conjunction with Council Policies, related material and legislation.

Council Policies and Related Material
Corporate Code of Conduct Policy
Gifts, Benefits and Hospitality Policy
Health and Safety Policy
Credit Card Policy
Conflict of Interest Policy
Conferences and Seminars Procedure
Complaint Handling Procedure
Contracts Procedure Manual
The Instrument of Delegation Register
Victorian Local Government Best Practice Procurement Guidelines 2013

Legislation
The Local Government Act, (1989)
Best Value Legislation
Victorian Occupational Health and Safety Act 2004
National Competition Policy (NCP)
Trade Practices Act 1974
Victorian Equal Opportunity Act 1985
Victorian Charter of Human Rights and Responsibilities Act 2006

ACKNOWLEDGEMENT

The base document to this Policy was prepared by the MAV with the assistance of Landell Consulting Pty Ltd for use by Council members to assist them in meeting the requirement of S186A of the Local Government Act (1989). Minor changes were made and additions inserted to the document to reflect Wyndham City Council's processes and procedures.

The MAV is the statutory peak body for local government in Victoria, representing all 79 municipalities within the state.

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PROCUREMENT POLICY STATEMENT

Wyndham City Council is committed to providing Best Value in the services it provides to the community. An important element in achieving this is the responsible procurement of goods, services or works.

When evaluating goods, services or works Council intends to purchase or undertake, Council will choose the supplier that provides the "Best Value" to Council.

Other factors that will be considered include compliance with Council Policies, related material and legislative requirements. It is recognised that some of these factors may be difficult to measure and may compete with each other in importance. At times, our best endeavour to evaluate our procurement decisions will contain subjective elements and Council will rely upon value judgements being made using the best information available at the time.

Council is committed to being ethical and transparent in the procurement decisions. Council makes and will continually strive to identify and implement objective approaches to making procurement decisions.

Procurement processes will be continually reviewed and improved towards "best practice". Future revisions of the Procurement Policy will incorporate these improved processes.

1. Introduction

1.1 Background

Wyndham City Council recognises that:

- Developing a procurement strategy and adopting appropriate contracting and procurement principles, policies, processes and procedures for all goods, services and works by Council, will enhance achievement of Council objectives such as sustainable and socially responsible procurement; bottom-line cost savings; innovation; better services for communities; and best value outcomes.
- The elements of best practice applicable to local government procurement incorporate:
    - Broad principles covering ethics, value for money, responsibilities and accountabilities;
    - Guidelines giving effect to those principles;
    - A system of delegations (i.e. the authorisation of officers to approve and undertake a range of functions in the procurement process);
    - Procurement processes, with appropriate procedures covering minor, simple procurement to high value, more complex procurement;
    - Continuous improvement practices for identifying and implementing initiatives to reduce cost and complexity, improved productivity and buyer amenity; and
    - A professional approach to all procurement related activities.

Wyndham City Council requires that Council's contracting, purchasing and contract management activities:

- Support the Council's corporate strategies, aims and objectives including, but not limited to those related to sustainability, protection of the environment, and corporate social responsibility;
- Span the whole life cycle of an acquisition from initial concept to the end of the useful life of an asset, including its disposal, or the end of a service contract;
- Achieve value for money and quality in the acquisition of goods, services and works by the Council;
- Can demonstrate that public money has been well spent;
- Are conducted in a fair, honest and open manner, demonstrating the highest levels of integrity consistent with the public interest.
- Seek continual improvement including the embrace of innovative and technological initiatives such as electronic tendering processes to reduce activity cost, through the application of leading practice; and
- Ensure staff are adequately trained in procurement processes and procedures as it relates to tendering and contracts, Trade Practices Act and National Competition Policy.

1.2 Scope

This Procurement Policy is made under Section 186A of the *Local Government Act 1989.*

This section of the Act requires the Council to prepare, approve and comply with a Procurement policy encompassing the principles, processes and procedures applied to all purchases of goods, services and works by the Council.

This policy applies to all contracting and procurement activities at Council and is binding upon Councillors, Council officers and temporary employees, contractors and consultants while engaged by the Council.

1.3 Purpose

The purpose of this Policy is to:

- Provide policy and guidance to the Council to allow consistency and control over procurement activities;
- Demonstrate accountability to rate payers;
- Provide guidance on ethical behavior in public sector purchasing;
- Demonstrate the application of best practice principles in purchasing; and
- Increase the probability of obtaining the best value outcomes when purchasing goods and services.

1.4 Best Value

The State Government's "Best Value" principles are applied to the procurement of all goods, services and works. Services to the community satisfy the following best value principles:

- Quality and cost standards;
- Responsive to the needs of the community;
- Accessible to those for whom they are intended; and
- Demonstrate continuous improvement in social, economic and environmental value.

Council officers will give consideration to Best Value principles and outcomes in all procurement related activities.

1.5 National Competition Policy

Council will ensure that when evaluating and analysing bids submitted by corporatised government entities, or other significant government businesses, that tenders must conform to the requirements of the State Government policy on competitive neutrality. In brief, competitive neutrality stipulates that government businesses should not enjoy any net competitive advantage simply by virtue of their public sector ownership.

1.6 Treatment of GST

All monetary values stated in this policy include GST except where specifically stated otherwise.

1.7 Occupational Health & Safety

The requirements of the Victorian Occupational Health and Safety Act 2004 and Council's Health and Safety Policy are applied to the procurement of goods, services and works. Wyndham City Council is obliged to ensure that its employees and Suppliers/Contractors/Consultants and their employees carry out their activities:

- In a safe working environment;
- Using proper and safe plant and substances; and
- Employing systems of work that are safe and which there has been adequate instruction, training and supervision.

This obligation applies to each and every aspect of the activity to be carried out.

Outsourcing work to contractors or consultants contributes to the quality of outcomes for an activity but does not remove Wyndham City Council's obligation and accountability to ensure that those who actually perform the activity are protected from risks to their health and safety.

1.8 Definitions and Abbreviations

Term	Definition
Act	Local Government Act 1989.
Council Staff	Includes full-time and part-time Council officers, and temporary employees, contractors and consultants while engaged by the Council.
Goods	Equipment, materials, plant or product supplied with or without installation or further work.
Probity[1]	The dictionary definition of probity refers to uprightness, honesty, proper and ethical conduct and propriety in dealings. Within government, the word "probity" is often used in a general sense to mean "good process." A procurement process that conforms to the expected standards of probity is one in which clear procedures are consistent with Council's policies and legislative requirements are established, understood and followed throughout the procurement process. These procedures need to consider the legitimate interests of suppliers and ensure that all potential suppliers are treated equitably.
Procurement	Procurement is the whole process of acquisition of external goods, services and works. This process spans the whole life cycle from initial concept through to the end of the useful life of an asset (including disposal) or the end of a service contract.
Standing Offer Arrangements (SOA)	A contract that sets out rates for goods and services which are available for the term of the agreement. However, no commitment is made under the agreement to purchase a specified value or quantity of goods or services.
Sustainability[2]	Activities that meet the needs of the present without compromising the ability of future generations to meet their needs.
Temporary Staff	A non-permanent employee hired to provide short term cover for an existing employee, for example whilst on leave, or to provide additional support during peak work periods or to undertake a project for a

[1] Landell Consulting definition
[2] Adapted from the definition attributed to the World Commission on Environment and Development

	specified or maximum period of time.
Tender Process	The process of inviting parties to submit an offer or quotation as a result of a public advertisement, or by invitation as a result of an expression of interest. The process is then followed by evaluation of submissions received and selection of a successful bidder or tenderer.
Value for Money	Value for Money in procurement is about selecting the supply of goods, services and works taking into account both cost and non-cost factors including: ▪ contribution to the advancement of the Council's priorities; ▪ non-cost factors such as fitness for purpose, quality, service and support; and ▪ cost-related factors including whole-of-life costs and transaction costs associated with acquiring, using, holding, maintaining and disposing of the goods, services or works.
Services	Any work, materials or information required by the consumer and provided by a contractor.
Works	Construction or maintenance related projects including but not limited to road works, drainage construction, building construction, etc.

2. Effective Legislative and Policy Compliance and Control

Compliance with Council's Procurement Policy, including associated guidelines, procedures and legislative requirements is mandatory. Any instances of noncompliance must be brought to the attention of appropriate executive staff for remedial action. Officers aware of any instances of noncompliance must immediately advise their manager.

2.1 Ethics and Probity

2.1.1 Requirement

The Council's procurement activities shall be performed with integrity.

2.1.2 Conduct of Councillors and Council Staff

General

Councillors and Council staff shall at all times conduct themselves in ways that are ethical and of the highest integrity and will:

- Treat potential and existing suppliers equally and fairly;
- Not seek or receive personal gain;
- Present the highest standards of professionalism and probity;
- Deal with suppliers in an honest and impartial manner that does not allow conflicts of interest;
- Provide all suppliers and tenderers with the same information and equal opportunity;
- Avoid and disclose any actual or perceived conflict of interest real or implied; and
- Comply with all legislative obligations including those required by trade practices, safety and consumer affairs legislation.

Council staff who are responsible for managing or supervising contracts are prohibited from performing any works under the contract they are supervising.

2.1.3 Members of Professional Bodies

Council staff belonging to professional organisations shall, in addition to the obligations detailed in this policy, ensure that they adhere to any code of ethics or professional standards required by that body.

2.1.4 Tender Processes

All tender processes shall be conducted in accordance with the requirements of this policy and the Act.

Council will work within established principles and will conduct tender processes that are fair to all parties, and use its best endeavors to demonstrate that fairness to Tenderers and potential Tenderers. More specifically, it will:

- Produce tender documents that clearly specify the required outcomes so that tenderers can bid for and price work accurately;
- Package work put out to tender in a manner which encourages competition and the best outcome for residents and ratepayers;
- Not participate in improper tendering practices such as collusion, misrepresentation, and disclosure of confidential information;
- Include in the tender documents, the evaluation criteria to be used to comparatively assess tenders; and
- Require any conflict of interest to be disclosed immediately.

Council staff and independent representatives taking part on a tender evaluation panel must complete a Conflict of Interest form prior to the tender being advertised. The staff member must excuse themselves from the tender evaluation panel if a conflict of interest exists.

2.1.5 Conflict of Interest

Councillors, Council staff and independent representatives shall at all times avoid situations in which private interest conflict, or might reasonably be thought to conflict, or have the potential to conflict, with their Council duties.

Councillors and Council staff shall not participate in any action or matter associated with the arrangement of a contract or any purchasing related activity (i.e., evaluation, negotiation, recommendation, or approval), where that person or any member of their immediate family has a significant interest, or holds a position of influence or power in a business undertaking tendering for the work.

Councillors and Council staff involved in the procurement process, in particular preparing tender documentation, including writing tender specifications, tender opening, and tender evaluation panels, must:

- **Avoid** conflicts, whether actual, potential or perceived, arising between their official duties and their private interests. Private interests include the financial and other interests of Councillors and Council Staff, plus their relatives and close associates.
- **Declare** that there is no conflict of interest. Where future conflicts or relevant private interest arise Council Staff must make their manager or the chairperson of the relevant tender assessment panel or board aware and allow them to decide whether the officer should continue to be involved in the specific procurement exercise.
- **Observe** prevailing Council and Victorian Government Purchasing Guidelines on how to prevent or deal with conflict of interest situations; and not take advantage of any tender related information whether or not for personal gain.

Conflict of Interest Training is a mandatory requirement for all Council Officers.

2.1.6 **Fair and Honest Dealing**

All prospective contractors and suppliers must be afforded an equal opportunity to tender or quote.

Impartiality must be maintained throughout the procurement process so it can withstand public scrutiny.

The commercial interests of existing and potential suppliers must be protected. Confidentiality of information provided by existing and prospective suppliers must be maintained at all times, particularly commercially sensitive material such as, rates discounts, rebates, profit, manufacturing and product information.

2.1.7 **Accountability and Transparency**

The processes by which all procurement activities are conducted will be in accordance with Council's procurement policies, associated guidelines and procedures, the Local Government Act 1989 and all relevant legislative requirements as set out in this policy.

2.1.8 **Gifts and Hospitality**

No Councillor or member of Council staff shall, either directly or indirectly solicit or accept gifts or presents from any member of the public involved with any matter that is connected with the duties of the Councillor or officer, or in which the Council is interested.

Councillors and staff must observe the Gifts, Benefits and Hospitality Policy. Councillors and Council staff should also avoid the ambiguous situation created by visiting the premises of a contractor, organisation, firm or individual uninvited and/or not on official business.

Offers of bribes, commissions or other irregular approaches from organisations or individuals (no matter how flimsy the evidence available), must be promptly brought to the attention of the Chief Executive Officer (CEO).

2.1.9 **Reward and Loyalty program participation**

Council employees cannot accumulate reward or loyalty program credits on purchases made on behalf of Council or accept any discounts through the use of Council purchasing or fuel cards.

As per the Conferences and Seminars Procedure, travelling employees may retain frequent-flyer program benefits. Membership fees and expenses related to frequent flyer programs are not reimbursable. Participation in these programs should not influence flight selection.

2.1.10 **Disclosure of Information**

Confidentiality of information must be provided to existing and prospective suppliers. Tender documents will advise suppliers of the tender evaluation criteria and that the results of the evaluation could be included in a report to Council that is publically available

and that total price of the successful tender will be communicated to all the suppliers that submitted a tender.

Councillors and Council staff are to avoid references to current or proposed contracts in discussion with acquaintances or outside interests.

Discussion with potential suppliers during tender evaluations should not go beyond the extent necessary to resolve doubt on what is being offered by that supplier.

At no stage should any discussion be entered with the shortlisted tenderers or the preferred tenderer which could have potential contractual implications prior to the contract award process being finalised other than pre-contract negotiations authorized by the project manager.

2.2 Governance

2.2.1 Structure

The Instrument of Delegation establishes a procurement structure with delegated authority limits ensuring accountability.

2.2.2 Standards

The Council's procurement activities shall be carried out in compliance with:

- The Act;
- The Council's policies;
- The Instrument of Delegation;
- The Council's Codes of Conduct for Councillors and Council staff;
- Local Government Best Practice Guidelines; and
- Other relevant legislative requirements such as but not limited to the Trade Practices Act, Goods Act, the Environmental Protection Act, the Charter of Human Rights and Responsibilities Act.

2.2.3 Methods

The Council's standard methods for purchasing goods, services and works are as follows;

- **Petty cash**: The petty cash system operates to reimburse legitimate, urgent and operational business expenses incurred by Council officers in the conduct of Council activities. The maximum claim for petty cash reimbursement is $80.00 including GST.
- **Purchasing Card**: Purchasing cards are used in accordance with Council's Credit Card Usage Policy. The Director of Corporate Services and the Financial Services Manager have delegated authority for the issuing of a Council Credit Card to approved officers.
- **Purchase Order:** Following a competitive quotation process from suppliers for goods, services or works that represent best value for money under directed quotation thresholds.

- **Blanket Orders**
  - **Quotations or Tenders**

    A blanket order also known as a Standing Order follows a competitive quotation or tender process from suppliers for goods, services or works that represent best value for money. The duration of the order is for no more than a 3 month period unless approved by a Manager and reflected against a single purchase order. A new order must be raised for the following 3 month period and reflect the allocated budget amount.

  - **Low Value Purchases**

    A blanket order may also be entered into for supply of goods or services required on a regular basis for recurring low dollar purchases > $1000 including GST. The duration of a blanket order is for no more than a 3 month period after which a review shall take place to ensure best value for money is achieved. Recurring budgeted spend should also form part of the review to ensure threshold requirements of the policy are adhered too. A new order must be raised for the following 3 month period and reflect the allocated budget amount.

- **Public Tender:** Following a public tender process as per the provisions of S186 of the Local Government Act 1989 for goods or services exceeding $150,000 including GST or building and construction works with a value exceeding $200,000 including GST.
- **Expression of Interest:** A multi-stage tender process followed by an invitation to tender involving the organisations selected as a consequence of the expression of interest as per the provisions of S186 of the Local Government Act 1989.
- **Aggregated Purchasing:** Arrangements with other Councils, MAV Procurement, Procurement Australia, State Government, or other bodies**.**

All other arrangements must be authorized by the Council or the CEO on an 'as needs basis' as required by abnormal circumstances such as emergencies.

2.2.4 Exemptions to Procurement Levels and Procedures

- The procurement levels and procedures detailed in **Methods 2.2.3** are not applied in the following circumstances: in matters of emergency including public health, security or safety as a consequence of an unforseen event or occurrence for example;
  - The occurrence of a natural disaster such as flooding, bushfire or epidemic;
  - The unforeseen cessation of trading of a core service provider due to bankruptcy or significant business disruption and there is a need to appoint a replacement service provider on the grounds of public safety; and
  - Any other situation which is liable to constitute a risk to life or property
- For additional delivery of goods and services that are intended either as replacement parts, extensions or continuing services for existing equipment, software, services or installations where a change in supplier would necessitate the procurement of goods and services that do not meet the requirements for interoperability or interchangeability;
- An absence of competition for technical reasons.

Authorisations of exemptions are in accordance with S186 of the Local Government Act 1989 and Council's Instrument of Delegation – CEO to Staff.

2.3 Responsible Financial Management

The principle of responsible financial management shall be applied to all procurement activities.

Accordingly, to give effect to this principle, the availability of existing funds within an approved budget, or source of funds, shall be established prior to the commencement of any procurement action for the supply of goods, services or works.

Council staff must not authorise the expenditure of funds in excess of their financial delegations.

Council funds must be used efficiently and effectively to procure goods, services and works and every attempt must be made to contain the costs of the procurement process without compromising any of the procurement principles set out in this Policy.

2.4 Procurement Thresholds and Competition

2.4.1 Requirement

The Council will from time to time decide and publish clear guidelines for minimum spend competition thresholds. These will be decided by the Council analyzing the historical size and complexity of the procurement activity and proposed procurement activities.

The total value of the goods, services or works required will be reflected with a single purchase order to the successful vendor.

No officers will authorize or raise multiple purchase orders to avoid the Procurement and Approval Levels specified in this Policy or the requirements of S186 of The Local Act 1989.

A Purchase Order must be raised and approved prior to receiving the goods, services or works.

2.4.2 Minimum Spend Competition Thresholds

2.4.2.1 Quotations

Purchase of goods, or services having a total value of $150,000 including GST or less and works having a total valuation of $200,000 including GST or less may be undertaken using the procurement by quotation method as described below.

All written quotations received must be retained and attached to the Purchase Order within Technology One or attached to the Quotation/Tender File within Councils electronic document management system Objective, prior to goods being received.

$0 to $5000 including GST **– Verbal Quotation**

For goods, services and works with a total value up to $5000 including GST, the number of quotations to be obtained is not specified, however some proof of effort is required to show that a good financial outcome and quality outcome has been achieved. Evidence of

the verbal quotation received must be recorded within Technology One capturing the date the quote was requested, the quotation amount and contact details of the vendor.

$5000 to $20,000 including GST **– Written Quotation**

Council will seek a minimum of one written quotation.

The quotation must be confirmed by the supplier on company letterhead and the order placed with that firm after a purchase order has been approved by a Council Officer with the delegated authority. The quotation received must be retained and attached to the Purchase Order within Technology One together prior to goods being received.

$20,000 to $50,000 including GST **– Written Quotations**

Council will seek a minimum of two written quotations.

The quotations must be evaluated to determine the supplier providing best value to Council. The order can only be placed once a purchase order has been approved by a Council Officer with the delegated authority. The quotations received must be retained and attached to the Purchase Order within Technology One prior to goods being received.

$50,000 to $150,000 / $200,000 including GST **– Written Quotations**

Council will seek a minimum of three quotations through a request for quotation process. Quotations must be submitted through Tenderlink by the nominated closing date and time. A recommendation must be made in favour of the supplier offering the best value to Council. A purchase order must be approved by a Council Officer with the delegated authority. The quotations received must be retained and recorded against the quotation file within Councils electronic document management system (Objective).

Aggregated Spend

Council will monitor and manage aggregated spend in order to achieve efficiencies and best value outcomes.

- Where the total combined expenditure across Council exceeds the thresholds over a 3 year period with the *same* supplier, Council will undertake a formal tender process.
- Where the total combined expenditure across Council exceeds the thresholds over a 3 year period with *similar* suppliers, Council will undertake a formal tender process.
- Where the total combined expenditure across Council exceeds the thresholds over a 3 year period within the *same category* of goods or services rendered, Council will undertake a formal tender process.

Request for Public Advertising

Quotations may be advertised at the Council staff member's discretion in addition to the methods above. This may occur when a field of potential tenderers hasn't been established, or an innovative approach is required, or the project has broad appeal that may attract keen prices, etc.

Insufficient Quotations

The situation may arise where insufficient quotations are received to satisfy the above requirements. This may occasionally occur where:

- quotation requirements have been complied with but insufficient quotations are received;
- there are few suppliers for the goods services or works being sought; or
- the work is highly specialized.

In each case, details of the contacted suppliers must be recorded and kept on file.

2.4.2.2 Expression of Interest

The Council may at its discretion and based on the complexity and cost of the project, conduct one stage or multi-stage tenders.

A multi-stage tender process will commence with an expression of interest stage, followed by a tender process involving the organisations selected as a consequence of the expression/registration of interest stage.

Expressions of Interest (EOI) may be appropriate where:

- the requirement is complex, difficult to define, unknown or unclear;
- the requirement is capable of several technical solutions;
- the Council wishes to assess the capacity of the respondents prior to a formal tender process and whether those tendering possess the necessary technical, managerial and financial resources to successfully complete the project;
- tendering costs are likely to be high and Council seeks to ensure that companies incapable of supplying the requirement don't incur unnecessary expense;
- it is necessary to pre-qualify suppliers and goods to meet defined standards; and
- the requirement is generally known but there is still considerable analysis, evaluation and clarification required (both of the objective and the solution).

2.4.2.3 Tenders

Above $150,000 including GST **for Goods and Services – Public Tender**

Purchase of all goods and services for which the estimated expenditure exceeds $150,000 including GST must be undertaken by public tender as per the provisions contained in the Local Government Act.

One stage or multi-stage tenders may be conducted.

Above $200,000 including GST **for Works (building and construction) – Public Tender**

Purchase of all building and construction works for which the estimated expenditure exceeds $200,000 including GST must be undertaken by public tender as per the provisions contained in the Local Government Act.

One stage or multi-stage tenders may be conducted.

Schedule of Rates Contracts – Public Tender

A schedule of rates contract should be established in cases where goods or services are ordered from the same supplier on a regular basis.

For the procurement of goods, services and works based on a Schedule of Rates a formal contract is established. Tenders are publicly advertised for the contract in accordance with Section 186 of the Local Government Act, regardless of the total value of the goods, services and works.

One-stage or multi-stage tenders may be conducted.

Where quotations are invited based on a Schedule of Rates contract, the total value of the goods and services must not exceed $150,000, including GST and the total value of the works must not exceed $200,000, including GST.

The purchase of goods or services where the estimated expenditure exceeds $150,000 including GST and building and construction works where the estimated expenditure exceeds $200,000 including GST will be undertaken by public tender as per the provisions contained in the Local Government Act 1989.

Should the CEO consider that the nature of the requirement and the characteristics of the market are such that the public tender process would lead to a better result for the Council, public tenders may be called for purchase of goods, services and works for which the estimated expenditure is below these provisions**.**

The tendering requirements in the Contracts Procedure Manual are adhered to whenever a contract is tendered.

2.4.2.4 Consultancy Engagement

Quotations to engage consultants are in line with the methods outlined in section 2.4.2.1. Authorisation of the engagement is in line with the following delegations;

- Council will seek a minimum of one quotation for services up to the value of $20,000 including GST. The quotation must be approved by a Director; and
- Council will seek a minimum of 2 quotations for services up to the value of $50,000 including GST. The quotation must be approved by the CEO.

2.4.2.5 Exemptions for Purchase Orders

Purchase orders are not raised for:

- the procurement of goods, services and works using petty cash (maximum $80.00 per receipt, including GST);
- utility charges for Council facilities;
- Corporate credit card and purchasing card transactions.

2.5 Delegation of Authority

2.5.1 Requirement

Delegations define the limitations within which Council staff is permitted to work. Delegation of procurement authority allows specified Council staff to approve certain purchases, quotations, tenders and contractual processes without prior referral to the Council. This enables the Council to conduct procurement activities in an efficient and timely manner whilst maintaining transparency and integrity.

Procurement delegations ensure accountability and provide confidence to Council and the public that purchasing activities are dealt with at the appropriate level.

As such, the Council has delegated responsibilities as detailed below relating to the expenditure of funds for the purchase of goods, services and works, the acceptance of quotes and tenders and for Contract Management activities.

2.5.2 Delegations

2.5.2.1 Council Staff

The Council shall maintain a register of all Instruments of Delegation containing procurement delegations, identifying the Council staff authorised to make such procurement commitments in respect of goods, services and works on behalf of the Council and their respective delegations contained in appropriate sections of the Instrument of Delegations.

2.5.2.2 Additional Approvals

The following additional approvals are to be obtained:

- Director/Organisational Development Manager approval for the engagement of temporary staff for a period exceeding 12 months where the placement is additional to the current staff compliment (i.e. an additional EFT);
- Database/I.T. Helpdesk Coordinator approval for the procurement of personal computers, printers, scanners, digital cameras, personal digital assistants, smart-phones and any other electronic peripherals, software and equipment that will be connected to Council's computer network;
- Chief Executive Officer approval for staff to attend international conferences or seminars;
- Chief Executive Officer/Director approval for interstate conferences or seminars;
- Director/Senior Manager approval for intrastate conferences or seminars; and
- Director Corporate Service's approval for minor leases and maintenance agreements up to the total value of $150,000 including GST.

2.5.2.3 Expenditure beyond Delegations

Tender recommendations and Contract approval for all expenditure above delegated levels must be approved by Council.

2.6 Internal Controls

The Council will install and maintain a framework of internal controls over procurement processes that will ensure:

- More than one person is involved in and responsible for a transaction end to end;
- Authorisations are obtained in line with the Instrument of Delegation CEO - Staff and
- Systems are in place for appropriate monitoring and performance measurement.

2.7 Commercial Information

Procurement activities will be carried out in a way that supports Council staff in meeting their obligations - to ensure information of a commercially sensitive or confidential nature is obtained, stored, processed, published (where applicable) in an appropriate manner in accordance with the relevant Council guidelines.

3. RISK MANAGEMENT

3.1 General

Risk Management is to be appropriately applied at all stages of procurement activities associated with tenders and quotations which will protect and enhance Council's capability to prevent, withstand and recover from interruption to the supply of goods, services and works.

3.2 Supply by Contract

The provision of goods, services and works by contract potentially exposes the Council to risk.

The Council will minimise its risk exposure by measures such as:

- standardising contracts to include current and relevant clauses;
- requiring security deposits, bank guarantees or retain a percentage of the contract amount where appropriate;
- referring specifications to relevant experts;
- requiring contractual agreement before allowing the commencement of work;
- using of or referring to relevant Australian Standards (or equivalent);
- effectively managing the contract including monitoring and enforcing performance; and
- undertaking a risk assessment analysis on high value purchases and projects of a lesser value but of a complex nature.

3.3 Tender Documentation

Council will ensure that tender documentation is clear and concise, and that it clearly defines the Scope of Works, Performance Requirements, Insurance/Indemnity obligations and Evaluation Criteria. The Contract Procedures Manual details Council's requirements for tender documentation.

3.4 Evaluation Requirements for Tenders

The aim of the evaluation process is to select a tender that offers the "Best Value" to Council while ensuring that all respondents are treated in a fair, equitable and impartial manner.

Council will ensure that the evaluation of tenders is undertaken on a systematic basis using selection criteria identified in the tender documentation. The evaluation criterion is determined prior to issuing the tender documents and includes the weighting, or priority given to each criterion.

Compliance with Occupational Health and Safety, *Equal Opportunity requirements* and the tenderers' financial capacity are evaluated as a 'Met' or a 'Not Met' result.

Insurance and indemnity must be satisfied prior to the recommendation of a Contractor.

3.5 Tender Evaluation Panel

The tender evaluation panel consists of a minimum of 3 persons including;

- the Contract Manager/Project manager;
- another Council Officer; and
- an independent representative (internal/external).

If the contract is considered to be politically sensitive or contentious, or the risk and complexity with the procurement process is considered high, the tender evaluation panel may also include an independent external representative (probity practitioner) and a representative from the Procurement Team.

There may also be circumstances where it is advantageous to form small panels to evaluate quotations. The number of persons on the panel is dependent on the value or the risk of the quotation being assessed.

Any decision to use consultants for tender evaluation must be first endorsed by the relevant Director or Manager.

3.6 Contract Terms

All contractual relationships must be documented in writing based on standard terms and conditions.

Where this is not possible, approval must be obtained from the appropriate member of Council staff listed in the Council Delegations. A request for such an approval should be supported with procurement and legal advice as relevant.

To protect the best interests of the Council, terms and conditions must be settled in advance of any commitment being made with a supplier. Any exceptions to doing this may expose the Council to risk and therefore must be authorised by the appropriate member of Council staff listed in the Council Delegations.

3.7 Insurances

Successful tenderers must take out and maintain insurance cover for the term of the contract and any additional period specified within the contract. Evidence of insurance coverage must be provided prior to receipt of goods or services and prior to commencing works under the contract. The insurance policies do not contain policy exclusions that are relevant to the contract.

The type and minimum amount of insurance cover required varies depending on the type of contract, as follows:

Contracts for Goods

- WorkCover Insurance;
- Public Liability Insurance for $10M; and
- Product Liability Insurance

Contracts for Physical Services

- WorkCover Insurance;

- Pubic Liability Insurance for a minimum of $20M; and
- Plant and Equipment Insurance.

Contracts for Works (Building / Civil Construction Projects)

- WorkCover Insurance;
- Public Liability Insurance for a minimum of $20M;
- Plant and Equipment Insurance; and
- Insurance of the works for building projects (*including an allowance for demolition and consultants' fees).*

Contracts for Consultants

- WorkCover Insurance;
- Public Liability Insurance for a minimum of $5M; and
- Professional Indemnity Insurance for a minimum of $5M for consultancy services associated with building works and $2M for other types of consultancy services.

Variations to the above criteria require the written approval of the responsible Director provided the approval is obtained prior to the tender being closed.

3.8 Endorsement

Council staff must not endorse any products or services. Individual requests received for endorsement must be referred to Director level or above.

3.9 Dispute Resolution

Disputes between Council and contractors are to be resolved as efficiently as possible to minimise the chance of disputes getting out of hand and leading to legal action. In the event of a dispute, Council will invoke the dispute resolution process as outlined in the contract conditions. At the discretion of Council, the services of the Small Business Commissioner's Office can be employed in the dispute resolution process.

3.10 Complaint Management

All complaints received relating to procurement will be managed by an independent Council Officer under Council's Complaint Handling Procedure.

4. Demonstrate Sustained Value

4.1 Integration with Council Strategy

The Council procurement strategy shall support its corporate vision, mission and values, including but not limited to creating a healthy, safe, vibrant, proud and harmonious community, while respecting our environment.

4.2 Achieving Value for Money

4.2.1 Requirement

The Council's procurement activities will be carried out on the basis of obtaining value for money.

This means minimising the total cost of ownership over the lifetime of the requirement consistent with acceptable quality, reliability and delivery considerations. Lowest price is not the sole determinate of value for money.

In accordance with Section 186(6) of the Local Government Act, Council gives preference to goods, equipment, material or machinery manufactured in Australia and New Zealand where practical.

4.2.2 Approach

This will be facilitated by:

- developing, implementing and managing procurement strategies that support the co-ordination and streamlining of activities throughout the lifecycle;
- effective use of competition;
- using aggregated contracts where appropriate;
- identifying and rectifying inefficiencies in procurement processes;
- developing cost efficient tender processes including appropriate use of e-solutions;
- Council staff responsible for providing procurement services or assistance within the Council providing competent advice in terms of available products and agreements; and
- working with suppliers to create relationships that are professional and productive, and are appropriate to the value and importance of the goods, services and works being acquired.

In order to ensure Value for Money is achieved, periodic testing of the above principles for regular expenditure with suppliers where quotations are not feasible shall be documented and retained.

4.3 Role of Specifications

Specifications used in quotations, tenders and contracts are to support and contribute to the Council's value for money objectives through being written in a manner that:

- ensures impartiality and objectivity;

- encourages the use of standard products;
- encourages sustainability; and
- eliminates unnecessarily stringent requirements.

4.4 Audit and Performance Measure

The Manager of Risk and Compliance will report regularly to Executive and the Audit and Risk Management Committee performance and compliance with procurement policies, procedures and controls and legislative compliance. The Director of Corporate Services will be advised where a breach of policy has occurred and corrective action is required.

4.5 Sustainability

The Council is committed to achieving environmentally sustainable outcomes and ensuring Council's operations and procurement activities have a measurable positive impact or contribution to the environment and City in which we live.

The Wyndham City Environment and Sustainability Strategy 2011-2015 forms the basis of Council's sustainability framework. The Strategy addresses the key issues for Wyndham City with the focus on achieving a more sustainable future.

Council also has a Sustainable Procurement Action Plan 2013-2015 which outlines how Council will drive sustainable procurement outcomes through increased training, sustainable procurement guidelines, tracking and reporting.

In conjunction with the Strategy and the Action Plan, the sustainable procurement guidelines will be used to assist Council Officers in their general understanding of green procurement and sustainable products and services on offer.

In accordance with the adopted Strategy and wherever possible, Council officers will use the procurement guidelines and the following principles when purchasing goods, services or materials:

- Minimise unnecessary purchasing
- Minimise waste using the waste hierarchy (avoid, reduce, reuse, recycle, disposal)
- Maximise sustainably certified products or those from environmental databases
- Maximise energy efficiency, water efficiency and renewable energy
- Minimise greenhouse gas emissions by selecting energy efficient goods and appliances
- Maximise social and community benefit by supporting local procurement, social enterprises and/or ethically sourced goods
- Maximise water efficiency by purchasing goods or services that conserve water

Capital Works Program

Wyndham's sustainability focus is reflected in all business cases for Capital Works Projects where detailed responses to an environmental questionnaire are required to assist with council's environmental targets outlined within the Environment & Sustainability Strategy.

Projects designated with a level of impact on the environment that need to be minimised to ensure sustainable procurement practices or where a range of products are available that would reduce these issues, will have sustainability specifications and appropriate evaluation criteria (10% minimum) included as part of the project.

Wyndham tracks and reports on its green purchases annually. Tracking is achieved through a number of methods and all relevant staff and contractors are expected to contribute at reporting time.

5. Apply A Consistent And Standard Approach

The Council will provide effective and efficient commercial arrangements for the acquisition of goods and services or the undertaking of works.

5.1 Standard Processes

The Council will provide effective commercial arrangements covering standard products and provision of standard services across the Council to enable employees to source requirements in an efficient manner.

This will be achieved via establishing the following:

- pricing where relevant;
- processes, procedures and techniques;
- tools and business systems (e.g. implementing appropriate e-tendering, e-evaluation; e-catalogue or e-sourcing arrangements);
- reporting requirements; and
- application of standard contract terms and conditions.

5.2 Management Information

Council will improve its performance by capturing and analysing procurement management information in a variety of areas.

6. Build and Maintain Supply Relationships

Council recognises that in order to achieve sustainable value, a strategic assessment of the appropriate 'channel to market' should be undertaken – whether to go to market on its own, participate in regional or sector aggregated projects or panels, access State Government panel agreements or other means. Council or its duly delegated officers will consider supply arrangements that deliver the best value for money outcomes in terms of time, expertise, cost, value and outcome.

6.1 Supply Market Development

A wide range of suppliers should be encouraged to compete for Council work. The focus for new work need not always be with the larger more familiar businesses. Other types of organisations offering business diversity include:

- local businesses;
- green suppliers;
- small to medium sized enterprises (SMEs);
- social enterprises;
- ethnic and minority business; and
- voluntary and community organisations.

6.2 Support of Local Business

Council is committed to buying from local businesses (within Wyndham and neighboring municipalities) where purchases may be justified on Value for Money grounds. The procurement process must be transparent and undertaken without favoritism or bias. The degree of available competition will vary and may be dependent upon such things as the type of goods or services and the number of potential suppliers.

With all factors being equal Council may give preference to local economic benefit when sourcing products or service. These benefits must be identifiable and reasonable and may take the form of:

- increased local employment;
- increased activity and spend in the local economy with identifiable benefits; and
- the level of local content in the goods, services or works.

Council will seek at least one quote from a local supplier if available for any purchase less than $5,000 including GST and at least one quote from a local supplier where available for purchases over $5,000 including GST but less than the tender threshold.

The application of local content shall have regard to the Best Value Principles of the Local Government Act 1989 and National Competition Policy (Competition and Consumer Act 2010).

6.3 Relationship Management

The Council is committed to developing constructive long-term relationships with suppliers. It is important that the Council identifies its key suppliers so that its efforts are focused to best effect. Such areas may include:

- size of spend across the Council;
- criticality of goods/services, to the delivery of the Council's services;
- availability of substitutes; and
- market share and strategic share of suppliers.

7. Continual Improvement

The Council is committed to continuous improvement and will review the procurement policy on an annual basis to move towards best practice and to ensure that it continues to meet its wider strategic objectives.

8. STAFF TRAINING

Regular training sessions will be provided to employees who have responsibility for procurement.

Council Officers who have budgetary, purchasing and contract management responsibilities are trained and provided with relevant and up to date information.

In order to ensure statutory requirements and Council procurement policy requirements are adhered too, Council will:

- Conduct one to one training for delegated and other new officers commencing at Council;
- Provide a copy of this policy and guidelines to new officers;
- Conduct refresher training for all delegated and responsible officers throughout each financial year; and
- Communicate as required by email and Councils intranet all new and updated forms, templates, standards and documentation.

Response to Essential Services Commission

Anticipated service impacts of not proceeding with W3058 Road Reconstructions (Various) and W3539 Road Surface Renewal Program from our Capital Works Program.

Value of Road Network

Wyndham City estimates that the total asset value of our road network will be $2,260 million in 10 years. It is noted that exact year on year service impacts are difficult to state with complete certainty, however the following assumptions have been made:

- 50 kilometres of roads added to the asset base every year for the next 10 years, thus 500 kilometres additions to Wyndham's road network in total
- Increase in unit costs is considered at 5% per year following increases observed over the last 5 years, and
- No changes in standards are expected in the next 10 years.

Anticipated Impacts on Service & Standards

There are two major 'practical implications' and anticipated service impacts of reducing our road reconstruction and renewal budgets by around $500,000 per year including:

- Over time more roads would fall into a lower standard. Therefore if in the future, Council would have to improve the overall condition/standard of the road network, then it would require more funds (see calculations below), and
- Accidents and damage to vehicles.

In relation to the impact on our road standards of a consistent reduction over 10 years of around $500,000 in our road reconstruction and renewal budgets each year, the percentage of our road network in good condition will reduce from 98.14% currently to 94.23% over the same period, a difference of 3.91%. This would equate to a loss in value of our road network of around $88 million over 10 years.

Anticipated Financial Impacts

Of equal concern would be the additional funds required to bring these roads back up to good condition. Our conservative assumption is that this would require Council to find nearly $27 million in additional funding over 10 years or an average of $2.7 million each year. These financial impacts are based on the following inputs and calculations:

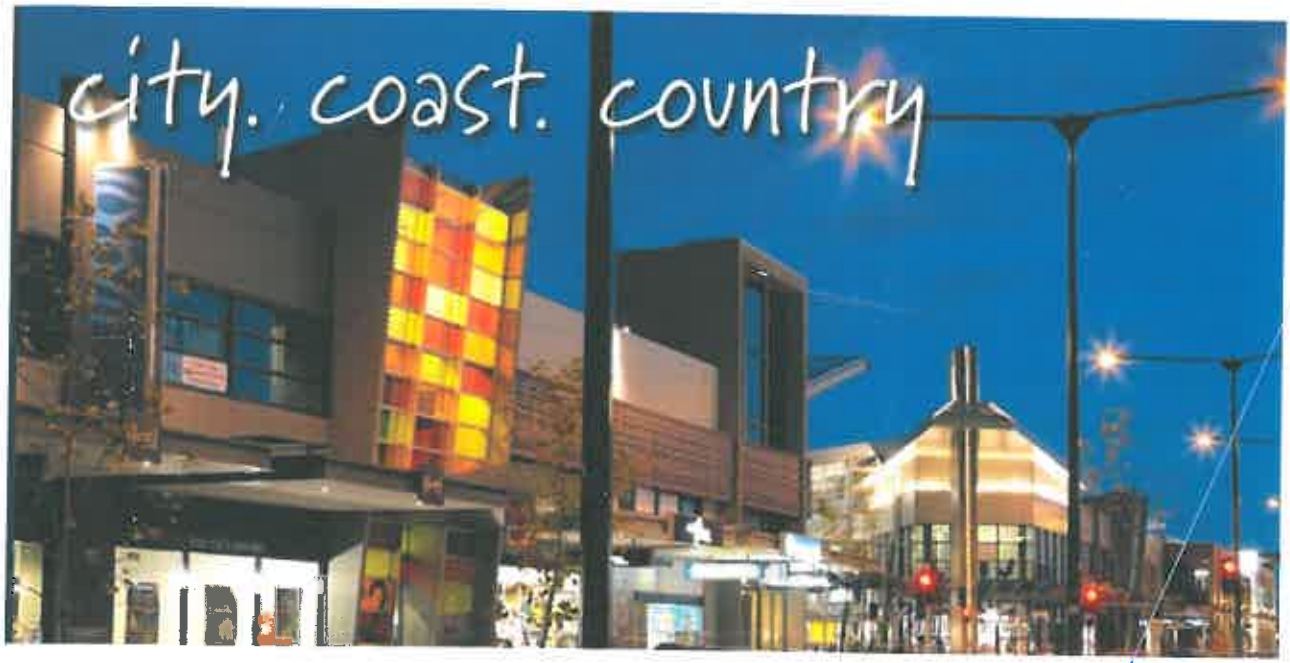
Inputs:

1. The current cost for re-sheeting is $35 per square metre, and
2. The current cost for re-construction is $230 per square metre.
3. 294 kilometres of roads requiring work (49 kilometres in length by 6 kilometres in width) equates to 294,000 square metres of area

4. Based on our total 2015/16 Road Renewal Program area of 140,000 square metres, 40,000 square metres was for reconstruction works (29% of the total area) and 100,000 square metres was for re-sheeting works (71% of the total area).

Calculation:
Therefore using the same analysis as the 2015/16 program the amount of money required to bring back 3.91% of Wyndham's road network to good condition is as follows:

Activity	**Areas and Unit Costs**	**Total Costs**
Road reconstruction	(29% of 294,000 = 85,260 square metres) x ($230 per square metre)	$19.6 million
Road re-sheeting	(71% of 294,000 = 208,740 square metres) x ($35 per square metre)	$ 7.3 million
	Total	**$26.9 million**



Long Term Financial Plan Report

2013/14 – 2022/23

The Long Term Financial Plan is the key ten year financial planning document that is linked with Council's objectives, goals and desired outcomes in financial terms.

S.Ivelja
1/31/2013
Version 2.0

Table of Contents

FOREWORD

The information contained in this document is in part based on the financial strategies adopted by Council as part of 2012/13 budget. The information has been provided for the purpose of stimulating discussion in relation to long term financial planning strategies and does not necessarily represent financial outcomes that Council will adopt as part of the 2013/14 Long Term Financial Plan and Strategy process.

This document will be refined subject to discussions held at Executive and Council level.

VERSION CONTROL

Version	Date endorsed	Author/s	Purpose
1.0		Financial Services Department	Executive Committee endorsement
		Financial Services Department	Special Council Meeting on
		Financial Services Department	Special Council Meeting on

SECTION ONE: EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Long Term Financial Plan (LTFP) is the key ten year financial planning document of Council that is linked with Council's objectives, goals and desired outcomes in financial terms. It establishes the financial framework upon which sound financial decisions are made.

Section 136 of the Local Government Act 1989 requires councils to comply with the four principles of sound financial management. These are:

- Manage financial risk prudently, having regard to economic circumstances;
- Pursue spending and rating policies that are consistent with a reasonable degree of stability in the level of the rate burden;
- Ensure that decisions and actions have regard to financial effects on future generations; and
- Ensure full, accurate and timely disclosure of financial information relating to the council.

The financial risks that must be managed prudently include:

- The level of council debt;
- Commercial or entrepreneurial activities;
- Management and maintenance of assets;
- Management of current and future liabilities; and
- Changes in the structure of rates and charges.

The development of a long term financial framework is vital to assist the Council:

- Plan for long term financial sustainability in order to achieve the strategic objectives;
- Assess the resources required to accomplish objectives and strategies included in the City Plan; and
- Compliance with sound financial management principles.

The LTFP is updated as part of the Council's annual strategic planning and budgeting process.

1.2 LONG TERM FINANCIAL PLAN OBJECTIVES

The purpose of a LTFP is to guide future direction to ensure that Council continues to operate in a sustainable manner.

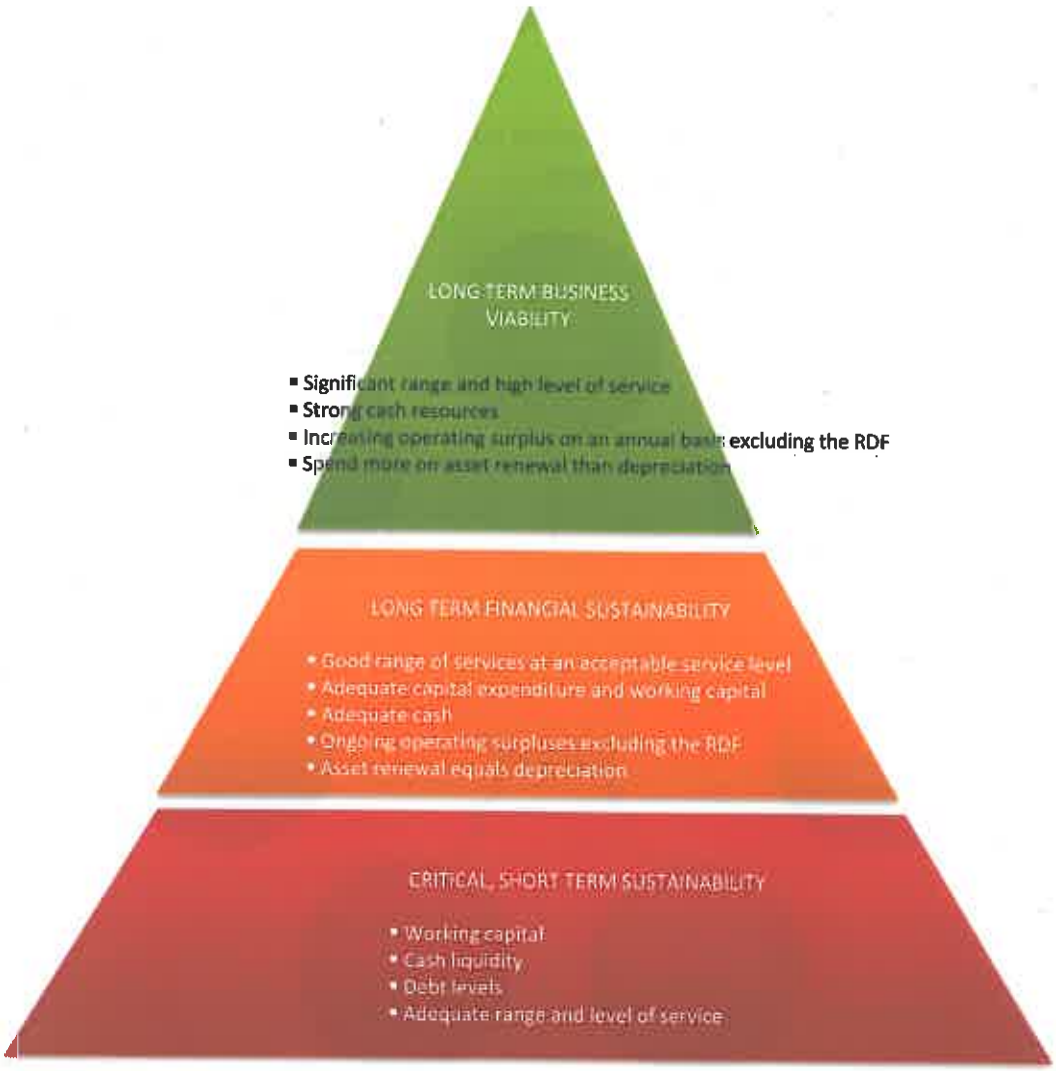
The key objectives which underpin the 2013/14 – 2022/23 LTFP are:

- Increase service levels in line with population growth and community expectations;
- Achieve annual operating results which provide for long term business viability;
- Maintain debt levels within prudential guidelines;
- Maintain a capital expenditure program in the 10 year financial plan;

- Maintain a strong cash position to ensure long term financial sustainability;
- Provide rate and fee increases that are both manageable, sustainable and comparable to other similar councils; and
- Continue to pursue grant funding for strategic capital funds from the State and Federal Government.

In preparing the LTFP, the Council has been mindful of the need to comply with the principles of sound financial management of the Local Government Act 1989.

Wyndham City's financial sustainability is explained in the below diagram:



Wyndham City is currently in the medium range of long term financial sustainability. Council's current financial position is currently underlined by strong cash levels and ongoing operating surpluses. Wyndham City is unique in that it operates a commercial landfill that generates significant annual operating surpluses. Based on an assessment of Council's audited results and forward estimates, Wyndham's expenditure on asset renewal is less than the level of depreciation in its financial statements. The implementation of the Asset Management Information System (AMIS) will assist Council towards understanding its infrastructure gaps, which will in turn form part of the financial strategies which underpin the ten year plan.

1.3 The Strategic Resource Plan

Council is required under Section 126 of the Local Government Act 1989 to prepare a Strategic Resource Plan (SRP). The SRP outlines the resources required to achieve Council's strategic objectives expressed in the City Plan. The SRP must include:

(a) details of financial resources (standard statements); and
(b) details of non-financial resources, including human resources.

Compliance with the legislation can be achieved with the development of long term (four year) financial statements; however the ten year approach adopted by Wyndham City is more comprehensive. The SRP therefore is the four year view of the ten year Long Term Financial Plan.

The diagram below details the key strategic areas covered by the LTFP/SRP and the integration required between Council's financial strategies.

Currently, Council is in the process of implementing an Asset Management Information System (AMIS). The outcome of AMIS will be the development of a Strategic Asset Management Plan which will guide and influence the financial strategies in the 10 year financial plan. It is currently identified as an area of risk.

Section	Outcome	Policy	Strategy
Section 4: Long Term Borrowing Strategies	That Wyndham City resolves to consider loan borrowings as a potential source of funding for future budgets according to an agreed set of principles	Council will consider loan borrowings for new assets that provide intergenerational equity, where the asset life and benefit to the community is greater than one generation Council will consider loan borrowings for the acquisition of land, where the acquisition will have a long term benefit to the community Council will consider loan borrowings for the acquisition of land or other assets, where the potential for commercial or other economic benefits, such as capital appreciation will flow to the community Prior to undertaking loan borrowings, Council will consider options to reduce overall reliance on borrowings Subject to Council approval, any material favourable budget variations realised in a given financial year be quarantined and allocated to - Re-instating monies into Councils Long Service Leave Liability account to replenish funds which were previously used to settle Councils unfunded superannuation liability shortfall from the 2011/12 fiscal year - Reducing the level of loan borrowings proposed in the current financial year; or - Reducing the level of loan borrowings proposed in the following financial year; or - Repayment of existing loan borrowings where this is financially beneficial to Council, or - Funding the replacement of existing infrastructure (asset renewal) or held as a contingency to finance projects deemed as unavoidable	Council will ensure that it complies with its loan borrowings policy and the State Government Prudential Guidelines to ensure that loan borrowings are retained at manageable levels
Section 5: Statutory and Discretionary Reserves	That Wyndham City resolves to consider its Statutory and Discretionary Reserves and how it will impact in the Long Term Financial Plan	Council will continue to cash up its Statutory and Discretionary Reserves and will resolve that these funds are to be used for the purpose for which they are intended Council will transfer interest earned on its cashed up Statutory Reserves back into these reserves as a means of attempting preserving the purchasing power of its reserve balances	That Wyndham City target to achieve an underlying surplus in the Income Statement (Profit and Loss Statement) excluding the impact of developer contributions and non-recurrent grants (capital grants) to ensure that these funds are available to be transferred into reserves

1.4 Strategic Financial Direction

Council should, as part of reviewing its LTFP, review its borrowing strategy, discretionary and statutory reserves, capital works program, the range and level of services provided and the revenue raising strategy.

A number of strategic challenges remain ahead including renewing existing assets, continuing to provide an appropriate range and level of services to a growing and changing community, maintaining a sound financial position and addressing the need for capital expansion. The other key related issue is the risk and liability that Council and the community face if Council does not invest in renewal at an adequate rate.

The LTFP establishes the strategic financial direction for Council to meet the funding and investment challenges that lie ahead in the next ten years. The LTFP is prepared in conjunction with the City Plan to ensure the affordability of activities included in the City Plan.

1.5 Key Strategic Outcomes

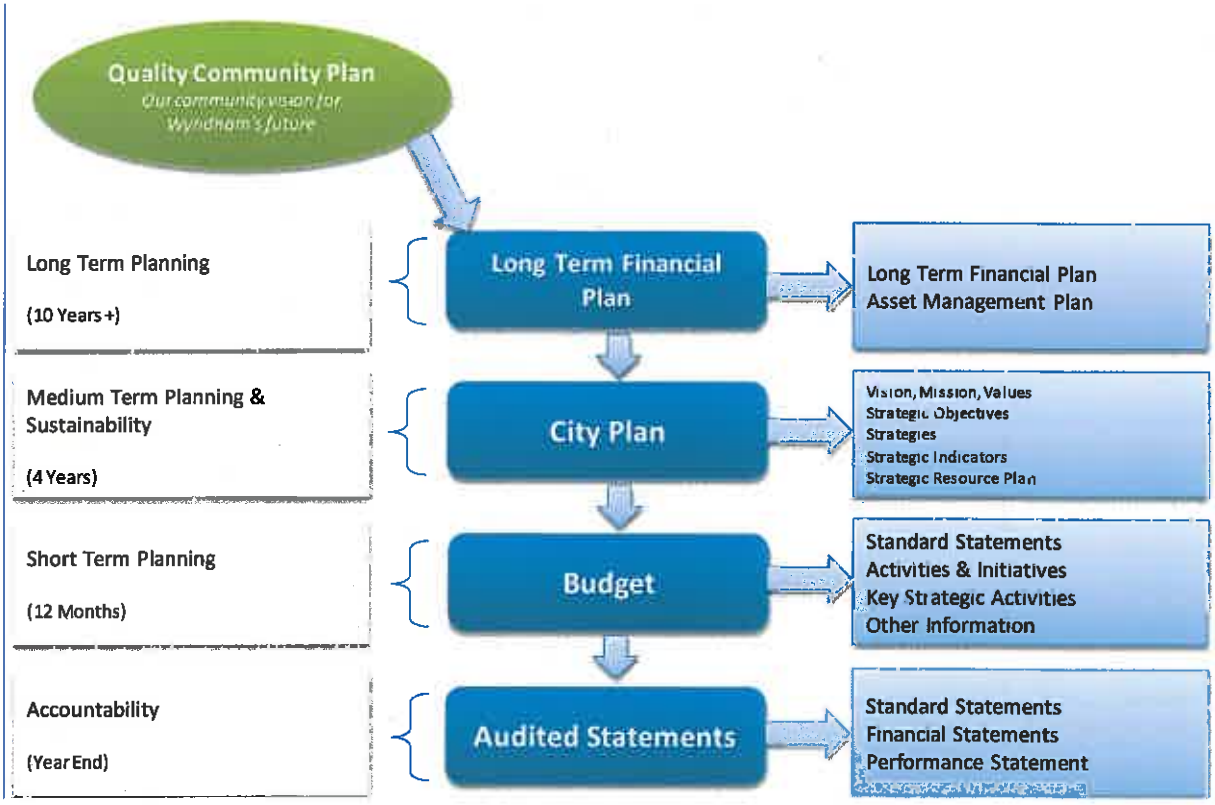
The following table highlights a summary of the policies and strategies proposed for the 2013/14 Long Term Financial Plan and Strategy. The key strategies provide direction for the preparation of the annual plan and budget process, but can be changed by Council as part of the development of the current or future budgets.

Section	Outcome	Policy	Strategy
Section 3: Financial Sustainability	That Wyndham City has enough cash to fund daily cash requirements and to enable flexibility to respond to opportunities as they arise.	That Wyndham City adopts a formal policy position that the annual operating surplus from the Refuse Disposal Facility be allocated toward the provision of Capital Works. In years where Council is liable for unfunded superannuation shortfalls it will be excluded from this requirement and the surplus from the RDF can be used to fund any calculated shortfalls. That Wyndham City ensure that developer cash contributions and non-recurrent grants (capital grants) be set aside for the purposes intended and not used to fund the ordinary operations of Council.	That Wyndham City target to achieve an underlying surplus in the Income Statement (Profit and Loss Statement) excluding the impact of developer contributions, non-recurrent grants and the RDF. The requirement to generate surpluses excluding the RDF will not be required in those years when Council is liable for unfunded superannuation shortfalls. That the Liquidity ratio of Wyndham City in the Long Term Financial Plan be maintained at a rate of 1:1.5 as per the VAGO recommendation.

Section	Outcome	Policy	Strategy
Section 6: Rating and other Revenue Strategies	To provide a reasonable degree of consistency and stability in the level of rates burden	Wyndham City resolves to use the CIV (Capital Improved Value) method of valuation. Council will strategically employ the use of rating differentials to ensure the most equitable spread of the rate burden across the municipality taking into account financial, social and environmental factors. Council resolves to benchmark its rating differentials to ensure comparability to its benchmark partners. Wyndham City resolves to apply a Municipal Charge to all rateable properties to cover the non-avoidable governance costs of Council. Wyndham City resolves to apply a Municipal Garbage Charge to all developed land properties. Wyndham City resolves to implement a Fees and Charges pricing policy and facilitate a move towards a principle based approach to fee setting. As per the Fees & Charges pricing policy, Wyndham City will consider opportunities for adopting a 'user pays' philosophy in the setting of fees and charges to reduce the reliance on rates, where this is in the public interest. Wyndham City aims to provide a reasonable degree of consistency in the level of the rates burden.	That Council consider the most appropriate rating and revenue strategy to provide adequate funds to: - Achieve an underlying surplus in the Income Statement (Profit and Loss Statement) over the term of the Financial Plan excluding the impact of developer contributions, non-recurrent grants and the RDF; - Achieve an adequate cash flow; and - Fund the 10 year Capital Works forecast.
Section 7: Capital Works Program	That Wyndham City resolves to consider its 10 year Capital Works program in light of the challenges of asset renewal and new infrastructure.	That Council consider the 10 year Capital Works program and ensure that adequate provision is made for the creation of new assets and the renewal of existing assets. That where the relative life cycle of Wyndham's assets justify a lower expenditure on asset renewal in the 10 year plan as assessed by the asset renewal gap, Council give consideration to a provisional financial allowance for future asset renewal in the 10 year plan.	As per the Capital Replacement ratio, Council aim for an annual capital works program 1.5 times the value of depreciation as a means of ensuring that adequate financial capacity exists to fund capital works.
Section 8: Service Provision and Planning	That Wyndham City generates sufficient surpluses from operations to continue to provide the existing level of services to our community as well as repaying debt and assisting in funding the Capital Works Program.	Wyndham City will resolve to undertake periodic service reviews for all Council Services to ensure service levels meet the needs of the community. Council will annually provide adequate resources to maintain its assets and provide its services to appropriate standards. Council will annually provide resource increases commensurate with growth in the municipality to the agreed service standards. Council will annually review benchmarks to ensure its resources are consistent with industry service and maintenance standards.	Council will commit to maintaining its intervention levels in all maintenance areas to ensure that the presentation standards in the municipality are consistent with industry standards and community expectations. Council will commit to increasing staffing levels through a business case process whereby staffing requests will be assessed relative to the priorities of the community. Council will commit to funding new initiatives through a business case process whereby these initiatives will be assessed relative to the priorities of the community.

SECTION TWO: LINKAGE TO CITY PLAN / SRP

The Strategic Resource Plan, included in the City Plan summarises the financial and non-financial impacts of the objectives and strategies and determines the sustainability of these objectives and strategies. The Annual Budget is then framed within the Strategic Resource Plan, taking into account the activities and initiatives included in the Annual Budget which contribute to achieving the strategic objectives specified in the City Plan.



The diagram above describes the links between the LTFP and the Council's planning framework. The City Plan / SRP set out the key strategic objectives in line with the policy which derives from the Quality Community Plan. These strategic directions will guide the Council to develop and implement plans, actions and strategies to achieve strategic outcomes.

SECTION THREE: COUNCIL FINANCIAL SUSTAINABILITY

3.1 INTRODUCTION

The roles of local government have evolved over many years with added responsibilities in areas such as health, aged care, social services, community safety, accessible transport and environmental management. Unfortunately the expanding services provided by local government have not always been matched by increasing revenues or improvement in operational efficiencies. This is the cause for ongoing concern of financial sustainability in local government.

There are several reasons for the increase in local government diversification of functions. These include:

- Transfer of responsibilities from Federal or State Governments;
- Other tiers of government increase the complexity or standard of a local government service;
- The withdrawal of Federal/ State funding support to local government to provide a service previously provided by another level of government; and
- Councils voluntarily expand service provision to meet community expectations.

The limitations of local government's revenue base (rate and municipal charges, grants / subsidies and user charges) mean that councils have the need to be proactive in their operation in order to minimise costs and obtain maximum efficiencies.

This should include a strong ten year plan, consistent annual budgets and detailed quarterly financial position reviews. The management quality and financial discipline needs support via effective governance from a Council who can clearly establish what outcomes the community expects and then monitor the Chief Executive Officer's delivery of those outcomes on behalf of Council.

Developing financial strategies for councils is often a difficult process. Key questions to consider are:

- Is council achieving a sufficient amount of revenue to provide services to the community and what alternative revenue streams are there?
- What should the target be in respect to resourcing expenditure on new assets (capital expenditure)?
- What is council's targeted renewal investment and is this maintaining an acceptable level of service for the community?
- What is an acceptable and appropriate rate and charge increase?
- What is an acceptable level of debt?

Some of the answers to these questions come from the use of financial indicators. These indicators assess the comparative financial position of each council in Victoria and provide a valuable source of information in establishing financial strategies. The indicators are used to identify trends in financial sustainability.

This section considers:

- Measuring and benchmarking financial sustainability
- Victorian Auditor-General's Office (VAGO) assessment of financial sustainability
- Operating surplus and other financial sustainability indicators

3.2 Benchmarking

Achieving operating surpluses is crucial for Council to maintain and expand service levels whilst simultaneously providing for new infrastructure and replacement of existing infrastructure.

The State Government establishes a number of key performance indicators (KPIs) to measure a council's performance. The KPI used for benchmarking in this LTFP is derived from other council's annual reports. This benchmarking ensures data is comparable under the current regulations.

Victorian councils are categorised as follows:

Category	Number of Councils
Inner Metro	18
Outer Metro	13
Regional Cities	11
Large Shires	16
Small Shires	21
Total	79

Within the benchmarking exercise, the following information is shown:

- Wyndham's financial sustainability indicators for the last 5 years;
- The average for Victorian Councils categorised as outer metropolitan councils; and
- The state average.

To assist Council to benchmark its position to other councils, the KPIs are detailed within the relevant sections of the LTFP. In some instances, Council may have set a different benchmark or target to measure its ongoing financial sustainability. An example of this is its underlying operating surplus, where Council measures its sustainability by a set of more stringent benchmarks.

3.3 Financial Sustainability

Financial Sustainability is defined by Australian Local Government Association (ALGA) as:

"A Council's long-term financial performance and position is sustainable where planned long-term services and infrastructure levels and standards are met without unplanned increases in rates or disruptive cuts to services."

It is against this definition that the sustainability of Wyndham City can be assessed. The Victorian Auditor-General's Office (VAGO) has assessed Wyndham as being at a low risk of financial sustainability concerns – there are no high risk indicators.

In addition to benchmarking with other councils, VAGO's sustainability indicators are also used to monitor and measure Council's performance.

3.4 Victorian Auditor-General's Office

VAGO uses the following indicators to measure local government financial performances:

INDICATOR	TARGET	FORMULA	EXPLANATION
Underlying result (%)	More than zero	Adjusted net surplus / Total underlying revenue	A positive result indicates a surplus, and the larger the percentage, the stronger the result. A negative result indicates a deficit. Operating deficits cannot be sustained in the long-term. Underlying revenue does not take into account non -cash developer contributions and other one-off (non-recurring) adjustments.
Liquidity	More than 1.5	Current assets / Current liabilities	This measures the ability to pay existing (current) liabilities in the next 12 months. A ratio one or more means there is more cash and liquid assets than short-term liabilities.
Self-financing (%)	20% or more	Net operating cash flows / Underlying revenue	Measures the ability to replace assets using cash generated by their operations. The higher the percentage, the more effectively this can be done.
Indebtedness (%)	40% or less	Non-current liabilities / Own-sourced revenue	Comparison of non-current liabilities (mainly comprised of borrowings) to own-sourced revenue. The higher the percentage, the less able to cover non-current liabilities from the revenues they generate themselves. Own-sourced revenue is used (rather than total revenue) because it does not include capital grants, which are usually tied to specific projects.
Capital replacement	More than 1.5	Capital spend / Depreciation	Comparison of the rate of spending on infrastructure with its depreciation. Ratios higher than 1:1 indicate that spending is faster than the depreciating rate. This is a long-term indicator, as capital expenditure can be deferred in the short-term if there are insufficient funds available from operations, and borrowing is not an option.
Renewal gap	Greater than 1	Renewal and upgrade expenditure / Depreciation	Comparison of the rate of spending on existing assets through renewing, restoring, and replacing existing assets with depreciation. Ratios higher than 1:1 indicate that spending on existing assets is greater than the depreciation rate. Similar to capital replacement, this is a long-term indicator, as capital renewal expenditure can be deferred in the short term if there are insufficient funds available from the operations, and borrowing is not an option.

The VAGO indicators are a guide only to assist Councils in measuring financial performance. In some cases, Council has set its own standards.

Following are 2011/12 audit results of Outer Metro Councils as provided by VAGO:

Outer Metropolitan Councils	Underlying result (%)	Liquidity	Indebtedness (%)	Self-financing (%)	Capital replacement	Renewal gap	VAGO sustainability assessment
Brimbank City Council	5.52	1.67	28.19	22.59	1.55	0.93	
Cardinia Shire Council	4.72	2.65	72.12	37.68	1.90	0.75	
Casey City Council	7.43	3.22	45.38	31.33	2.13	0.82	
Frankston City Council	2.89	1.35	1.16	29.81	1.29	0.87	
Greater Dandenong City Council	8.31	1.98	38.36	28.97	1.33	0.79	
Hume City Council	12.30	1.47	17.43	27.27	1.91	0.83	
Knox City Council	3.50	1.93	26.46	17.67	1.70	1.11	
Manningham City Council	10.08	1.42	9.99	33.29	1.90	1.11	
Melton Shire Council	4.78	1.57	32.92	26.09	1.46	0.38	
Mornington Peninsula Shire Council	2.49	1.69	31.45	18.55	1.20	1.04	
Nillumbik Shire Council	4.94	1.58	37.23	21.74	1.99	1.60	
Whittlesea City Council	3.37	3.07	28.67	28.66	1.35	0.71	
Wyndham	13.31	2.61	5.55	42.17	1.72	0.73	
Yarra Ranges Shire Council	2.78	2.23	15.50	19.74	1.35	1.26	

According to VAGO's assessment, there is no concern for Wyndham City's financial viability.

	2008	2009	2010	2011	2012	Mean	Actual Trend
Underlying Result (%)	8.49	21.86	13.91	13.75	8.56	13.31	
Liquidity	2.98	5.20	5.23	4.45	2.61	4.07	
Indebtedness (%)	7.71	7.03	8.30	6.52	5.55	7.02	
Self-financing (%)	32.89	44.57	49.84	44.70	42.17	42.83	
Capital replacement	1.50	1.15	1.59	2.21	2.14	1.72	
Renewal gap	1.2	0.63	0.38	0.75	0.69	0.73	

Source: Victorian Auditor-General's Report: Results of the 2011-12 Audits

Although not all categories are trending in a positive direction year on year, hence the red and amber indicators, nonetheless the results continue to be above VAGO's set targets, with the exception of the Renewal gap.

For 2 out of the 6 measures, Wyndham City ranks 1st out of all other outer metro Councils and ranks in the top 5 for 2 others. The only potential area of 'perceived' concern relates to the renewal gap ratio. With regards to the renewal gap, Council recognises that because the majority of Wyndham's assets are relatively young in their life cycle, overall spending on asset renewal is likely to continue to be below its depreciation charge in the medium term. Conversely, the impact of population and urban growth has resulted in a large demand for new infrastructures resulting in a relatively high proportional spend on the creation of new assets.

3.5 Wyndham City Operating Surplus

One of the most critical measures of financial sustainability is the measure of a Council's underlying operating surplus. From the above table, VAGO has assessed Wyndham's underlying operating result as being positive for each of the previous 5 annual reporting cycles.

One of the main criticisms of the VAGO assessment of underlying operating result is that it is too broad to be of any real value. Importantly, the VAGO assessment rightfully excludes non cash developer contributions (i.e. donated assets) from its assessment, as this does not represent cash to the Council. However, in its assessment of the underlying result it includes the following 3 items;

- The impact of developer cash contributions
- The impact of one off capital grants
- The net impact of commercial undertakings (i.e. the RDF)

The major issue with including these items in the measure of operating performance, particularly developer contributions and one off capital grants lay in the fact that they are generally "one off" in nature and will fluctuate from year to year. It is generally accepted that there is a risk inherent in relying on one off grants and developer contributions to generate surpluses or "balance the books". The VAGO assessment of underlying operating surplus fails to take this into account.

In developing Council's internal reporting and budgeting mechanisms over a number of years, Wyndham has established its own assessment of its underlying operating result that addresses the deficiencies in the VAGO's assessment of the underlying Operating surplus.

In approaching its budgeting and reporting mechanisms in recent history, Wyndham has applied a measure of its own underlying surpluses that seek to measure Council's ongoing operating surplus excluding the following items;

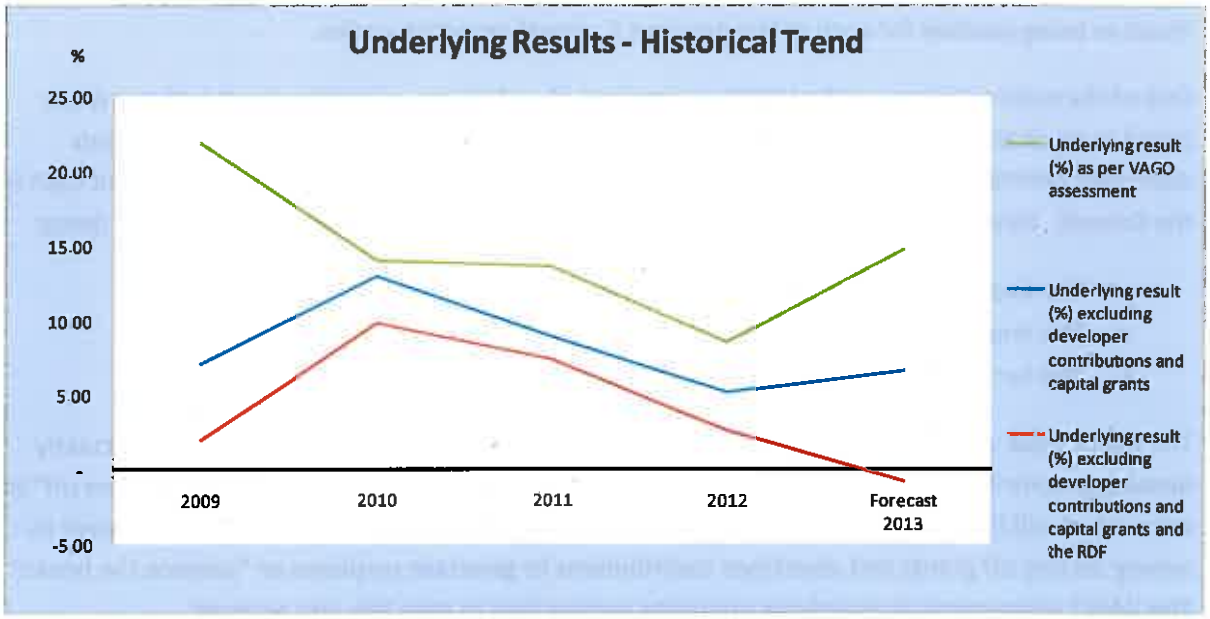
- excluding the impact of developer cash contributions
- excluding the impact of one off capital grants
- excluding the net impact of commercial undertaking (i.e. the RDF)

The table below shows comparison of VAGO's assessment of underlying result and the adjusted underlying result for Wyndham City.

	2009	2010	2011	2012	Forecast 2013
Underlying result (%) as per VAGO assessment	21.86	13.98	13.62	8.56	14.76
Underlying result (%) excluding developer contributions and capital grants	7.10	12.91	8.87	5.13	6.61
Underlying result (%) excluding developer contributions and capital grants and the RDF	1.95	9.76	7.36	2.61	0.78

The above table indicates some of the dangers inherent in relying on the VAGO assessment as a means of measuring overall health of a council's operating position. Significantly, what the above table shows is that in any given year, it can be the receipt of one off grants, developer contributions

and profits from the RDF that is helping to generate consistent operating surpluses. When presented graphically, the red line indicates what Council's operating surplus would be had it not been for developer contributions, one off grants and the RDF.



In considering the measure of underlying financial performance that Council would seek to apply to its financial strategy, it is important to understand the following:

- At some point in Wyndham's future, development activity will slow and eventually stop. Along with this, cash contributions from developers will cease. A reliance on one off developer contributions as a means of sustaining operating surpluses will potentially result in large rate increases at some point in the future as Council seeks to replace diminishing revenue streams.
- One off capital grants will fluctuate from year to year depending on the vagaries of elected governments and macro-economic pressures. These are usually for specific purposes and hence should not form part of the underlying result. An over reliance on one off grants will potentially cause large fluctuations in rate years where Council attempts to substitute fluctuating revenue streams.
- The RDF is a highly profitable business undertaking that will generate significant profits now and into the foreseeable future. At some point in the future, the RDF operations will cease. Equally, there is risk of government intervention that may have an adverse impact on the future cash flows of the landfill operations. Any reliance on the RDF annual operating surpluses to sustain Council's operations will potentially result in severe financial sustainability issues for Wyndham in the future.

3.6 Future Outlook

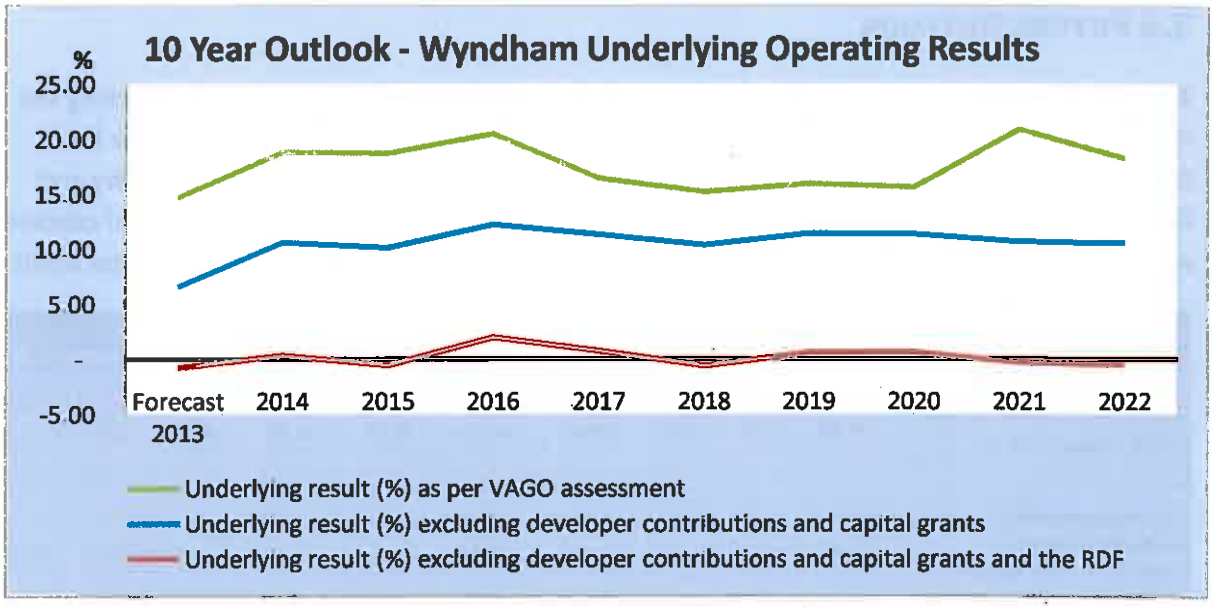
Based on the growth assumptions built into Council's preliminary long term plan and assuming the rate increases proposed as part of the 2012/13 Rating Strategy review, the 10 year outlook for Council's underlying surpluses are positive and indicate a high level of financial sustainability and financial independence, when VAGO's definition is applied. There is however some level of concern when the impact of developer contributions, capital grants and the RDF is excluded from the result.

	Forecast 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Underlying result (%) as per VAGO assessment	14.76	18.82	18.73	20.47	16.49	15.27	15.99	15.66	20.87	18.29
Underlying result (%) excluding developer contributions and capital grants	6.61	10.65	10.15	12.27	11.37	10.39	11.46	11.37	10.71	10.64
Underlying result (%) excluding developer contributions and capital grants and the RDF	- 0.78	0.32	- 0.55	1.97	0.74	- 0.61	0.57	0.60	- 0.33	- 0.52

Equally, when presented graphically, the financial strategy endorsed by Council in 2012/13 underlines that when excluding the impact of the developer contributions, capital grants and the RDF, that Council will likely generate an underlying loss in 5 out of the 10 years in the forward outlook. The reasons for the deficits are mainly attributable to the Global Financial Crisis and the projected impact of funding shortfalls for the Vision Super Defined Benefit Superannuation fund. The potential for future losses have been factored into the forward outlook in line with Councils prudent financial framework and demonstrate that future budgets will likely experience some level of difficulty in generating sustained underlying surpluses.

Of equal concern to the forward outlook is the general slowdown in recurrent revenue streams which will likely have a greater impact on revenue growth in the medium term;

- Subdivisional and building activity lead time indicators suggest that growth has now stabilised back to pre- boom levels. In the current financial year, preliminary advice received from Officers via the mid-year review suggests a significant slowdown in discretionary revenue streams, particularly in Statutory Fees and fines and building related revenue streams.
- Equally, the slowdown in subdivisional and building activity will impact the rate base and result in lower levels of supplementary rates revenue received.
- Revenue growth from state and federal governments will likely be constrained as both try to mitigate the impact of large budget deficits.
- The poor economic environment has resulted in large cuts in interest rates which will significantly impact on the return Council receives on its cash reserves



In considering the target or optimum level of underlying Operating surpluses required to sustain Council's overall financial health, regard should be given to a number of issues, namely;

- Council needs to consider the size of the proposed Capital Works program and the level of Operating surplus that will be required to achieve its Capital Works priorities;
- Council needs to carefully consider the level of investment required to fund capital renewal expenditure. In the absence of a Strategic Asset Management Plan, Council should consider providing for a suitable contingency to cover unknown items in the 10 year plan; and
- Council should consider the impact that its financial decisions will have on future generations.

The underlying operating results have the financing of a considerable amount of debt to assist in funding the Capital Works Program which is a change from the past where Council have taken out little borrowings.

3.7 STRATEGY

Outcome

1. That Wyndham City has enough cash to fund daily cash requirements and to enable flexibility to respond to opportunities as they arise.

Policies

1. That Wyndham City adopts a formal policy position that the annual operating surplus from the Refuse Disposal Facility be allocated toward the provision of Capital Works. In years where Council is liable for unfunded superannuation shortfalls it will be excluded from this requirement and the surplus from the RDF can be used to fund any calculated shortfalls.
2. That Wyndham City ensure that developer cash contributions and non-recurrent grants (capital grants) be set aside for the purposes intended and not used to fund the ordinary operations of Council.

Strategy

1. That Wyndham City target to achieve an underlying surplus in the Income Statement (Profit and Loss Statement) excluding the impact of developer contributions, non-recurrent grants and the RDF. The requirement to generate surpluses excluding the RDF will not be required in those years when Council is liable for unfunded superannuation shortfalls.
2. That the Liquidity ratio of Wyndham City in the Long Term Financial Plan be maintained at a rate of 1:1.5 as per the VAGO recommendation.

SECTION FOUR: LONG TERM BORROWING STRATEGIES

4.1 Introduction

The Local Government Act allows councils to take out loans for the purpose of covering large expenditure items such as new community facilities, new roads, or new council buildings but not to cover for ordinary day-to-day recurrent expenses.

Section 146 'Budget or revised budget must include proposed borrowings' of the Local Government Act 1989, require councils to disclose total amount to be borrowed (other than borrowings to refinance existing loans), the total amount of loan redemption and any debt servicing costs.

4.2 Background To Current Debt Portfolio

In the recent financial history of Wyndham, successive Councils have embraced an active strategy of reducing debt. New borrowings have been limited to fund specific major assets or to complete works raised through special rates and charges.

The following table highlights Council's interest bearing liabilities and the movements that have occurred during the past two financial years and the current year forecast.

For the 2012/13 year, Council has budgeted $29 million in new borrowings to assist in funding its Capital Works Program.

	Position at 30 June 2011	Position at 30 June 2012	Forecast at 30 June 2013
Loan borrowings $'000	1,895	1,358	27,477
Movement from previous year $'000	-500	-537	26,119

Deciding on the appropriate level of debt can be a difficult task. Each council is different and the level of debt that is appropriate for Wyndham City may not be acceptable for another Council. The following factors are seen as important issues for consideration by Wyndham City:

- The level of debt as a proportion of rate revenue
- State Government prudential threshold guidelines
- Growth rate of the municipality
- Community needs versus the level of debt
- Usage of borrowed funds
- Council's capacity to deliver the capital program
- Ability to service the debt

The use of loan borrowings allows Council to accelerate capital works and provides a means where future ratepayers will contribute towards the Capital Works through their rates in repaying the loan, including interest. On the other hand, the downside of utilising loan borrowings is that the debt

servicing costs paid reduces the future funds available for capital works or service delivery in future years.

Ultimately, Council is responsible and accountable for indebtedness and the cost of debt needs to be controlled to manageable levels.

4.3 Borrowing Assessment

Council assesses its capacity to borrow against the Victorian State Government's Prudential Guidelines. The administration of the Local Government sector's borrowing involves:

- The collation of the sector's borrowing requirements through an annual survey;
- The assessment of individual councils' borrowings; and
- Recommendation to the Department of Treasury and Finance (DTF) of the aggregate net new borrowing requirement of the sector.

All borrowings by individual Councils are assessed under a borrowings assessment policy adopted by the Local Government Division. The policy identifies four key areas of financial management with certain thresholds that are required to be met.

The table below outlines Wyndham City's ratio / threshold levels that had been developed to serve as a guide in setting loan borrowings and Council's Financial Plan.

INDICATOR	FORMULA	PRUDENTIAL GUIDELINES	WYNDHAM CITY THRESHOLD	EXPLANATION & WYNDHAM CITY THRESHOLD
Liquidity	Current assets / current liabilities	1:1.1	1:1.5	A minimum ratio of 1:1.5 was agreed by Council to ensure the organisation is able to meet creditor's commitments
Debt Management - Debt servicing cost % total revenue (%)	Debt servicing costs / total revenue	5%	5%	The strategy involves the payment of loan interest. This indicator reflects the proportion of total revenue that is used to service debt. The threshold is set no higher than 5%
Debt Management - total debt % rate revenue (%)	Total debt / rate revenue	80%	60%	Wyndham City threshold is set at no higher than 60% of rate revenue
Debt Exposure (%)	Total liabilities / total realisable assets	50%	50%	This ratio enables assessment of Council's solvency and exposure to debt

Where a council exceeds the threshold level, it is required to provide a strategy/plan to ensure that within a reasonable time it again meets these indicators.

4.4 WHAT DO THE FINANCIAL INDICATORS MEAN?

Liquidity – Current Assets to Current Liabilities

Threshold 1: 1.5

This indicator reflects the short-term liquidity position; that is, Council's ability to repay current commitments from cash or near cash assets. Councils with a ratio of 1:1.1 and below, or with a deteriorating trend, may be financially at risk of not being able to meet creditors' commitments.

The VAGO recommends a liquidity ratio of 1:1.5. Council has adopted a policy position of maintaining the liquidity ratio of 1:1.5.

The higher liquidity ratio takes into account Council's Developer Contribution cash holdings which cannot be used to meet creditor's commitments.

Debt Management: Debt servicing costs as a percentage of total revenue

Threshold 5%

This indicator reflects the proportion of total revenue that is used to service debt (interest on outstanding debt and any loan administration charges) and which cannot be used directly for service delivery. Council has adopted a policy position of 5% as per the State Government Prudential Guidelines. Current performance levels show a significant amount of room to move on this ratio.

Debt Management - Total debt as a percentage of rate revenue

Threshold 60%

The Local Government Act (1989) requires that all loans are secured against the revenue stream from rates. A council with total debt in excess of the revenue from rates would be unable to meet all debt commitments from rate revenue should they be required to be repaid at the one time. Council has adopted the policy position that debt should not exceed 60% of total rates.

Debt Exposure: Total Indebtedness / Realisable Assets

Threshold 50%

This indicator reflects the ability to acquit liabilities with the proceeds from the disposal of its realisable assets. Ideally, total liabilities should be significantly less than 50% of total realisable assets. Council has adopted a policy position of 50% as per the State Government Prudential Guidelines.

Based on Wyndham's low levels of debt, the 2012/13 Long Term Financial plan and Strategy has allowed for the take up of strategic loan borrowings to assist in the delivery of Capital Works;

The Council currently has a very low debt level which translates to healthy debt ratios as displayed in the table below. Perhaps given the community needs, even an under geared balance sheet.

Ratios	Budget 2012/13	Budget 2013/14	Budget 2014/15	Budget 2015/16	Budget 2016/17
Loan borrowings proposed	26.69M	0	0	26.0M	4.03M

Ratios	Target	Actual 2011/12	Forecast 2012/13	Outlook 2013/14	LTFP Average
Liquidity	≥ 1.5	2.61	2.40	2.50	2.53
Debt Management - debt servicing cost % total revenue	≤ 5%	0.04%	0.03%	0.53%	0.62%
Debt Management - total debt % rate revenue	≤ 60%	1.18%	21.61%	18.28%	23.92%
Debt Exposure	≤ 50%	7.61%	8.90%	8.71%	10.03%

Council has taken a conservative approach and set a lower target of 60% for total debt as a percentage of rate revenue. The State Government target is set at a maximum level of 80%.

4.5 What is a prudent debt level?

The use of loan borrowings as a funding source for the budget and long term financial plan warrants careful consideration. The application of loan borrowings as a funding source is best applied within a financial strategy framework where the use of loan borrowings is governed by a set of agreed principles which are further reinforced by a set of financial ratios (i.e. Wyndham's prudential thresholds) which ensure that debt levels are retained within manageable levels.

For Wyndham City, the rapid and unprecedented rate of population expansion has brought with it many financial challenges. In an environment of such rapid growth, the propensity to make "knee-jerk" reactions in relation to the use of loan borrowings is a risk. In making the decision to use loan borrowings as a valuable source of funding for the capital works program, it is recommended that Council determine an overall policy position on the use of loan borrowings. For example;

- Council will borrow for new assets that provide intergenerational equity, where the asset life and benefit to the community is greater than one generation.
- Council will consider loan borrowings for the acquisition of land, where the acquisition will have a long term benefit to the community.

By developing a set of agreed principles that govern the use of loan borrowings this ensures that loan borrowings are only considered for projects that will deliver strategic long term benefits to the community.

In considering loan borrowings as a potential funding source, it is important to consider the financial impact of loans in absolute dollar terms. The following table highlights the overall financial impact of taking out a fixed interest loan for a 20 year period. The table highlights the overall cost of taking out the loan both in terms of principle and interest and the cost over a 10 year timeframe and a 20 year timeframe;

Timeframe	$20M 7.5% fixed	$30M 7.5% fixed	$40M 7.5% fixed
10 Year Plan	$28.49M	$42.73M	$56.98M
20 Year Plan	$38.67M	$58.00M	$77.34M

The table highlights that loan borrowings are a means of accelerating future cash flows (namely rates revenue). Ultimately, Council must "pay its own way" and resolves that by undertaking a loans program accepts the trade-off of higher debt servicing and consequential impact on the operating budget.

Council needs to balance the borrowings at manageable levels with the community need for infrastructure today.

4.6 Future Borrowings

As per the 2012/13 Long Term financial Strategy, Council has earmarked a total of $69.67M to a loans program for future years. Whilst the value and quantum of an active loans program is a matter for Council to decide as part of the annual budget process, it does indicate that previous Councils have not been averse to actively pursuing a loans program, notwithstanding Wyndham's low levels of historical debt.

4.7 STRATEGY

Outcome

1. That Wyndham City resolves to consider loan borrowings as a potential source of funding for future budgets according to an agreed set of principles.

Policy

1. Council will consider loan borrowings for new assets that provide intergenerational equity, where the asset life and benefit to the community is greater than one generation.
2. Council will consider loan borrowings for the acquisition of land, where the acquisition will have a long term benefit to the community.
3. Council will consider loan borrowings for the acquisition of land or other assets, where the potential for commercial or other economic benefits, such as capital appreciation will flow to the community.
4. Prior to undertaking loan borrowings, Council will consider options to reduce overall reliance on borrowings.
5. Subject to Council approval, any material favourable budget variations realised in a given financial year be quarantined and allocated to:
   - Re-instating monies into Councils Long Service Leave Liability account to replenish funds which were previously used to settle Councils unfunded superannuation liability shortfall from the 2011/12 fiscal year; or
   - Reducing the level of loan borrowings proposed in the current financial year; or
   - Reducing the level of loan borrowings proposed in the following financial year; or
   - Repayment of existing loan borrowings where this is financially beneficial to Council; or
   - Funding the replacement of existing infrastructure (asset renewal) or held as a contingency to finance projects deemed as unavoidable.

Strategy

1. Council will ensure that it complies with its loan borrowings policy and the State Government Prudential Guidelines to ensure that loan borrowings are retained at manageable levels.

SECTION FIVE: STATUTORY AND DISCRETIONARY RESERVES

5.1 Introduction

Like many other Victorian councils, Wyndham City has reserves that are allocated for specific purposes. For Wyndham these can be broadly defined by two categories - Statutory and Discretionary Reserves. Statutory Reserves are primarily derived from developer cash contributions which are allocated for specific purposes. Discretionary Reserves are funds from Council's operating surplus or unspent grants.

This section of the report details Wyndham City's Statutory and Discretionary Reserves.

5.2 Nature and Purpose of Discretionary Reserves

As at the end of June 2012, the Council has a total of $68M in reserve of which, 97% are Statutory Reserves.

	Balance 2010/11 $'000	Income 2011/12 $'000	Expense 2011/12 $'000	Balance 2011/12 $'000
Statutory Reserves	62,923	21,453	18,280	66,096
Discretionary Reserves	1,402	1,769	1,212	1,959
Total Reserves	**64,325**	**23,222**	**19,492**	**68,055**

Developer Contribution Reserves

Development contributions are divided into 3 groups:

- Major roads;
- Other 'Development Infrastructure' such as pre-schools, child health centres, playgrounds and basic sporting open space such as playing fields, pavilions and parking; and
- 'Community Infrastructure' such as community centres, libraries and indoor sports facilities.

The contributions do not meet the full cost of such facilities, but they are a key to Council's capacity to deliver such facilities as development surges on.

Recreational Land

Most public open space acquired by Council is provided directly, in the form of land. An additional $2.66M in the 2011/12 financial year was provided in cash to help fund recreational land purchases in future years.

Other Contributions

Significant other contributions have been made towards street lighting, and to a lesser extent, drainage and car parking. The table below shows total Developer Contributions segregated into major growth fronts within the municipality.

Growth Front	Balance 2010/11 $'000	DC Income 2011/12 $'000	DC Exp 2011/12 $'000	Balance 2011/12 $'000
North	14,965	5,742	3,915	16,792
Point Cook	21,798	9,742	6,874	24,666
West	12,252	2,757	7,240	7,769
Other Growth Fronts	1,379	2,583	0	3,962
Other Contributions	12,529	628	251	12,906
Statutory contributions held in reserves	**62,923**	**21,453**	**18,280**	**66,096**

Historically, Council has taken the conservative approach with statutory reserves by keeping the reserves fully cashed up. While there is no legislation requiring Council to keep the reserve fully cashed up, the Victorian Auditor-General's Office (VAGO) fully supports this practice. Having the cash readily available means that Council can meet its statutory obligations at any point in time.

VAGO has indicated that Councils should not borrow against or from the developer contributors within the reserves.

VAGO takes great interest in how councils manage development contributions. An audit published in December 2009 examined the nature and use of development contributions and Wyndham City was selected as one of the participants. The audit concluded that there was a need for greater accountability on what had been delivered as well as the need for better understanding of future obligations tied with the contributions. The audit also found weaknesses in the control and associated management practices in the collecting and effective use of contributions to meet statutory obligations. VAGO recommended councils improve the level of transparency and accountability over the collection and use of development contributions.

In light of the risks and challenges that these issues present, the management of development contributions, the staging of infrastructure delivery and ultimate accountability to the community continues to be an area in which Council's practices needs to improve.

Discretionary Reserves

Discretionary reserves are made up of unspent grants and the native vegetation offset reserve.

Although these reserves are deemed discretionary, in real term the funds can only be spent on the purpose that they were received.

Council's current policy is to transfer the interest earned on its cashed up Statutory Reserves back into these reserves as a means of preserving the purchasing power of its reserve balance. There is no legislative restriction or VAGO direction on Council to utilise the interest component of the reserves to borrow from or against them and repay the interest.

Alternatively, Council could cease the current policy and consider utilising the interest generated from Statutory Reserves to fund the Capital Works programs, thus possibly reducing the level of borrowings, if applicable.

	Balance 2010/11 $'000	Income 2011/12 $'000	Expense 2011/12 $'000	Balance 2011/12 $'000
Native vegetation offset	190	194	0	384
Unspent grants	1,212	1,576	1,212	1,576
Total Discretionary Reserves	**1,402**	**1,769**	**1,212**	**1,959**

In relation to Native vegetation, Council policy requires third parties to compensate Council financially where building activity occurs on native vegetation, which is then expended on creating native vegetative land elsewhere in Wyndham. As at the end of 2011/12 financial year, there was $0.4M set aside in the native vegetation offset reserve. Council also maintains a reserve for unspent grants. These reserves exist for the purpose of transparently recognising the portion of Council's unspent cash resources that are pre committed to finalising external funding arrangements.

Currently, all of Council's discretionary reserves are fully cashed up.

5.3 STRATEGY

Outcome

1. That Wyndham City resolves to consider its Statutory and Discretionary Reserves and how it will impact in the Long Term Financial Plan.

Policy

1. Council will continue to cash up its Statutory and Discretionary Reserves and will resolve that these funds are to be used for the purpose for which they are intended.
2. Council will transfer interest earned on its cashed up Statutory Reserves back into these reserves as a means of attempting preserving the purchasing power of its reserve balances.

Strategy

1. That Wyndham City target to achieve an underlying surplus in the Income Statement (Profit and Loss Statement) excluding the impact of developer contributions and non-recurrent grants (capital grants) to ensure that these funds are available to be transferred into reserves.

SECTION SIX: RATING AND OTHER REVENUE STRATEGIES

6.1 INTRODUCTION

The majority of Council's revenue is derived from rates and charges, followed by user fees, recurrent grants and cash contributions.

This section considers:

- Valuations
- Rating Structure
- Overview of current rating levels
- Rates and charges budget 2012/13
- Other revenue

6.2 VALUATIONS

General Valuations

Every two years, Victorian Councils are required under Valuation of Land Act 1960 to conduct a review of property values based on market movements and recent sales trends. Property valuations are currently based on levels as at 1 January 2012. The revaluation does not in itself raise the total rate income for the Council; the rates are distributed based on the property values of all the properties across the municipality.

Having reviewed the various valuation bases for determining the property value component of rates, Wyndham City uses the Capital Improved Value (CIV) base on the grounds that it provides the most equitable distribution of rates across the municipality. One of the advantages of CIV is its flexibility to apply an unlimited range of strategic differentials. The Council's rating structure currently comprises of 10 differential rates. These rates are structured in accordance with the requirements of Section 161 'Differential Rates' of the Act.

Supplementary valuations

Supplementary valuations bring the property affected into line with general valuation of the properties within the municipalities. Supplementary valuations occur when building or planning changes have been made to the property such as the erection, demolition, extension or renovation of a dwelling, or subdivision of land.

6.3 Rating Structure

Councils may use site valuation (land value), net annual value (annual rental less outgoings) or Capital Improved Value, CIV (land plus improvements). The levying rates are based on the CIV method of valuation. Using CIV allows Council to utilise differential rating to provide an appropriate contribution to Council's expenditure having regard to the characteristics of the land. In addition, Wyndham City levies a Municipal Charge and a Garbage Charge. The Municipal Charge is a standard charge per property and ensures that all properties pay an equal contribution to the unavoidable fixed costs of the Council. The Garbage Charge is a standard charge on residential properties which recovers the costs of the municipal waste collection and disposal in addition to covering the costs of litter control across the municipality. Council's adopted budget provides a detailed analysis of Council's Rating structure.

Under the Capital Improved Value (CIV) method of valuation, Council employs the use of rating differentials to vary the relative rate burden on properties with differing land use. To this end, Council is able to shift the relative rate burden to achieve a more equitable rate outcome based on a number of factors such as:

- Higher differentials which reflect a greater capacity of certain land uses to pay a higher rate
- Higher differentials for certain land uses where Council rates are deductible under the Income Tax Assessment Act
- Higher differentials for certain land uses which reflect a greater demand on Council resources (i.e. user pay)

Rates are distributed based on the relative value of properties within the municipalities taking into account the differential that has been applied to a particular differential rate category. In most cases, property owners with higher valued assets will have a greater capacity to pay.

The table below provides a summary of the various rate categories that currently exist under Councils rating strategy. The differential rating categories provide a flexible vehicle for Council to shift the rating burden from one category to another. This may be especially useful in revaluation years where valuation increases may lead to large discrepancies in rating outcomes for particular categories of ratepayers or types of properties. Equally, differential categories provide Council a flexible vehicle for pursuing further rate increases.

In the 2012/13 budget, the differential rating categories adopted by Council did not change as compared to the prior year. It is envisaged that the Rating Strategy review as proposed for the 2013/14 planning cycle would cover the adequacy of Councils differential rating system.

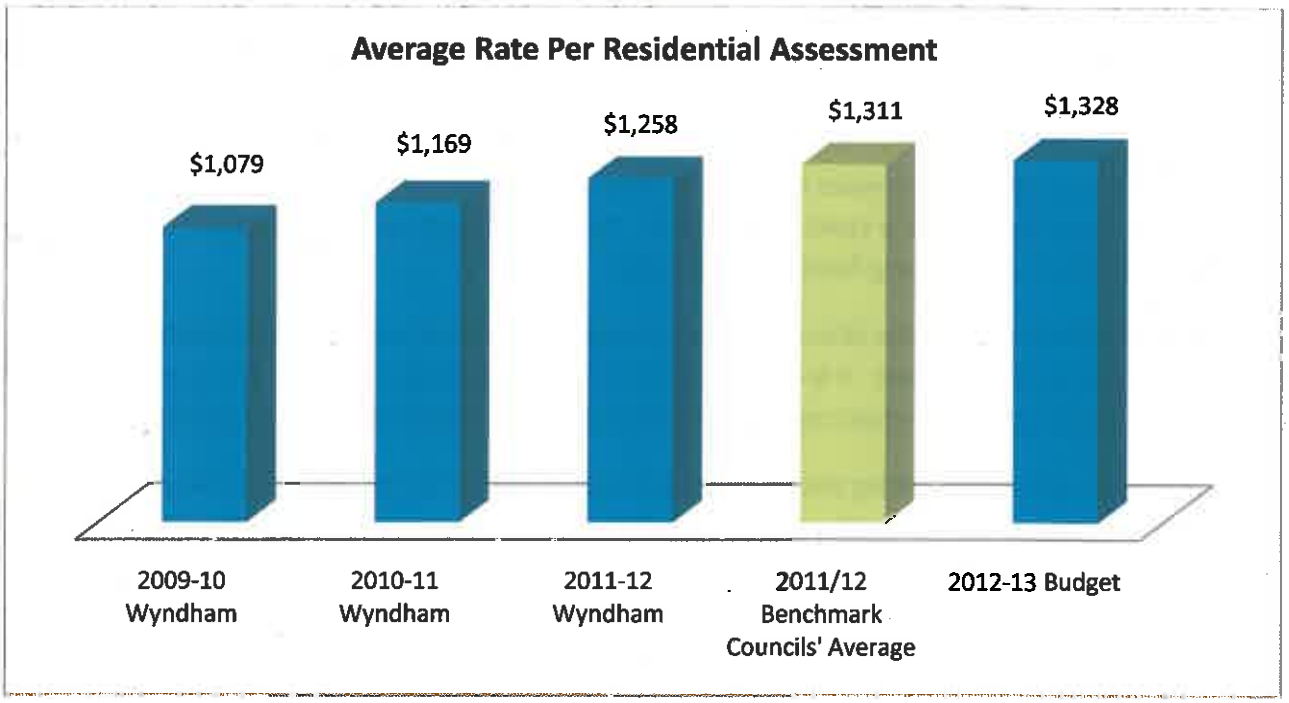
Below is a table summarising the rating differentials as applied for the last 4 financial years and a forward outlook for the next 6 years. It indicates that in the last 4 years Council has made minimal changes to the rating differentials and the forward outlook from 2012/13 onwards is unchanged. This by a large part reflects uncertainty as to future municipal revaluations.

Rate Differential	Actual 2009/10	Actual 2010/11	Actual 2011/12	Actual 2012/13	LTFP 2013/14
Developed Land	1.00	1.00	1.00	1.00	1.00
Commercial Developed Land	1.40	1.50	1.50	1.50	1.50
Industrial Developed Land	1.50	1.60	1.60	1.60	1.60
Recreation Land	0.50	0.50	0.50	0.50	0.50
Government	0.50	0.50	0.50	0.50	0.50
Vacant Residential Land	1.30	1.40	1.40	1.40	1.40
Vacant Commercial Land	1.50	1.60	1.60	1.60	1.60
Vacant Industrial Land	1.50	1.70	1.70	1.70	1.70
Residential Development Land	1.30	1.60	1.60	1.60	1.60
Agricultural Land	0.90	0.80	0.80	0.80	0.80
Urban Growth Zone	0.90	0.90	0.90	0.90	0.90
Late Licence Premises	1.50	1.60	1.60	1.60	1.60

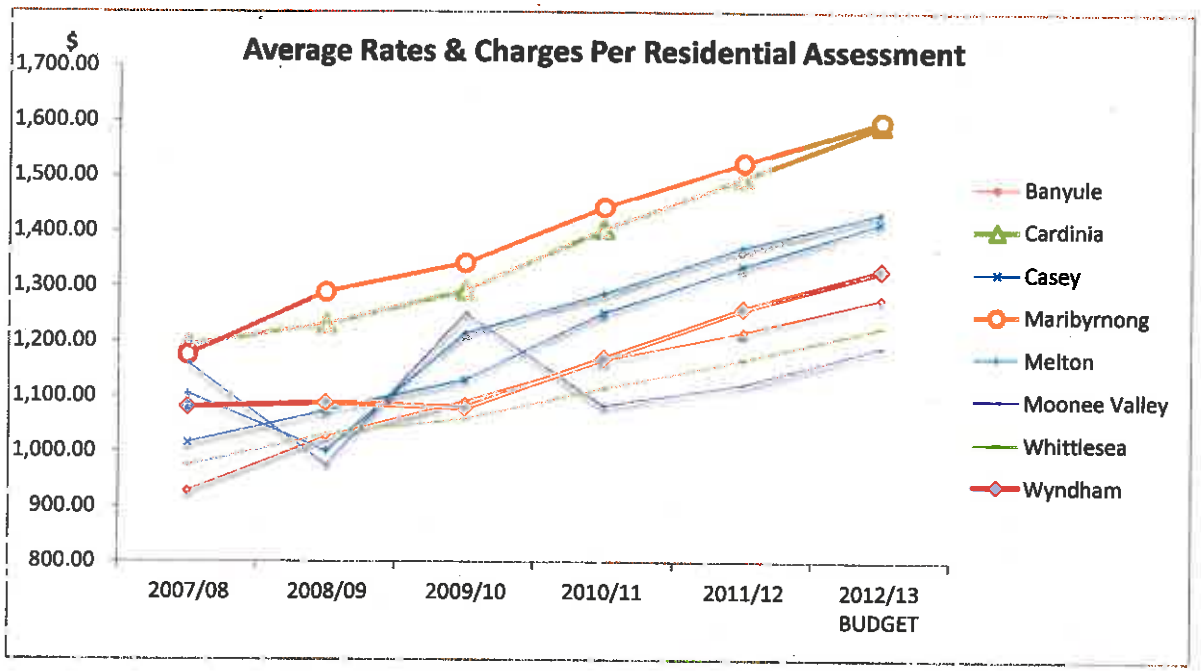
6.4 Overview of Current Rating Levels

Comparing the relativity of rating levels between councils can be a difficult exercise due to the differing rating methodologies employed by various councils. Additionally, councils have significantly differing geographic sizes, populations and infrastructure needs which impact on the rating strategies of each council.

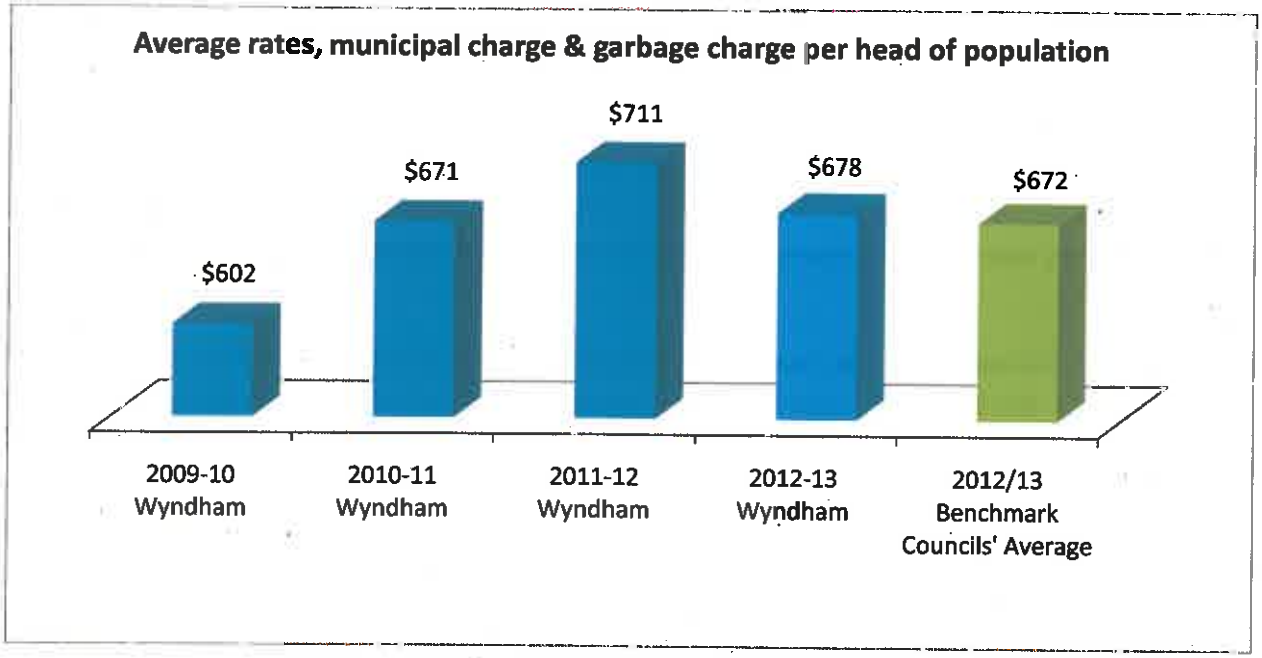
Prior to the 2008/09 Budget, the Council adopted the approach that rates would not increase by more than consumer price index (CPI). In 2008/09, the development of Council's 10 year financial plan and capital works plan confirmed that rate increase at or below CPI were unsustainable in the long term. In 2012/13, a rate increase of 5.50% was adopted for the 2012/13 financial year and all future years in the LTFP for planning purposes.



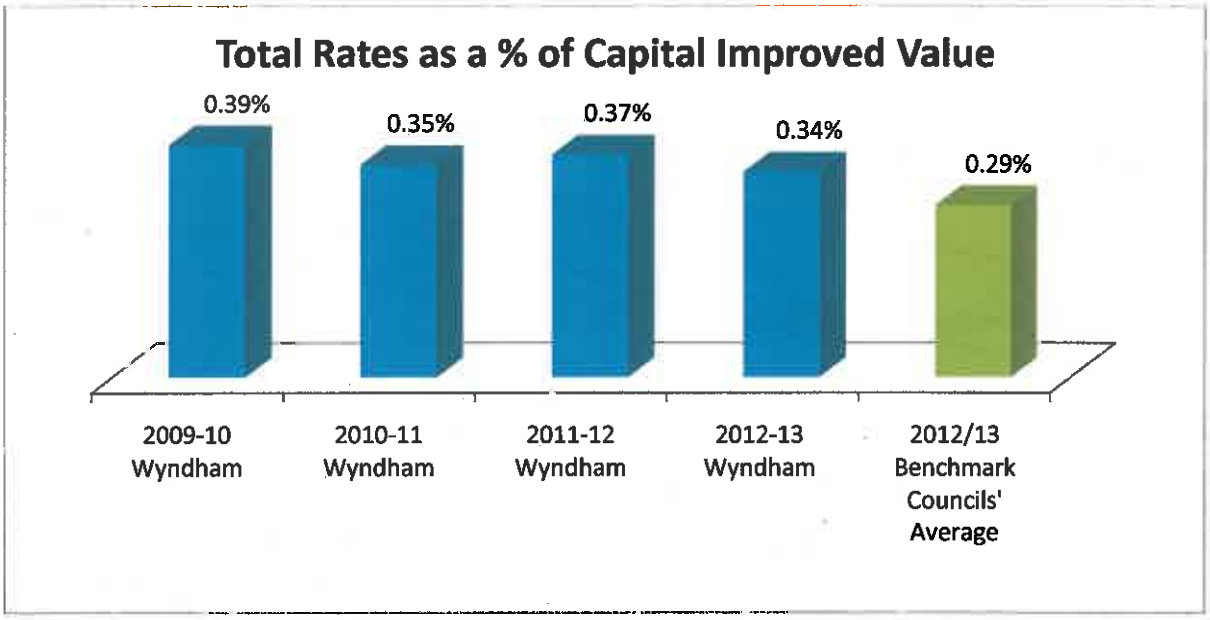
On 2011/12 average rates per assessment, the Council is slightly lower than the growth councils' average.



The graph below shows Wyndham's average rates, municipal charge and garbage charge per head of population. Wyndham's average has dropped in 2012/13 and is close to the benchmark Councils' average, which includes Banyule, Cardinia, Casey, Maribyrnong, Melton, Moonee Valley and Whittlesea.



The graph below shows Wyndham's total rates raised as a percentage of total value of land. Wyndham's 2012/13 value is lower than it has been in recent years, but is slightly higher than the benchmark Councils' average, which includes Banyule, Cardinia, Casey, Melton and Moonee Valley. Note that some of these Councils are more established Councils rather than growth Councils.



6.5 Endorsed Rating Strategy 2012/13

A key decision of Council during the life of the long term financial plan is to determine the level of rate increase that will address funding levels for capital works and service provision for the municipality whilst improving Council's long term financial sustainability.

The endorsed rating strategy established in the last annual planning process estimated to bring in a total of $1.98 billion for the ten year period from 2012/13 to 2021/22. The following rate increases are currently built into the scenario modelling for the adopted long term financial plan and strategy for 2012/13.

In the 2012/13 budget process, Council took the position that a 5.5% annual increase was appropriate. This is however subject to review annually as part of the budget process.

These rate increases were premised on a number of major issues being population growth, the demand for infrastructure and the anticipated shortfall in developer contributions revenue which in the past have been estimated between $160M – $180M over the long term financial plan.

Equally, the level of the rate increase has been premised on the notion that Council provide a responsible level of rate increases that are both reasonable and stable over time and avoid the significant fluctuations in rate increases that existed prior to the 2010/11 budget process.

Notwithstanding the recent history of responsible and stable overall annual rate increases, some degree of variability will exist in rate outcomes for individual properties in municipal revaluation years, especially those properties whose value significantly changes.

Municipal Charges increase

In developing the rating strategy for 2012/13, the Municipal Charge was earmarked as an important revenue source for Wyndham. Under the Local Government Act, the Municipal Charge can be set at a maximum allowable 20% of the total revenue from rates and charges to cover administration costs of Council. Having a municipal charge, results in lower valued properties incurring a high rating burden, particularly if the charge is increased towards the 20% maximum allowance. The following table provides a summary of the impact of the proposed increase in the Municipal Charge over the four year period:

	2012/13	2013/14	2014/15	2015/16
Annual Increase	$ 2.05	$ 2.16	$ 2.28	$ 2.41
Municipal Charge	$ 39.35	$ 41.52	$ 43.80	$ 46.21
Number of properties	61,522	64,937	68,287	71,721
Total revenue $000	$ 2,421	$ 2,696	$ 2,991	$ 3,314
Additional revenue generated $000	$ 126	$ 141	$ 156	$ 173

Garbage Charge Increase

The Garbage Charge predominantly recovers the cost of roadside waste, but also includes the estimated cost of providing two tip tokens to each rateable property, two annual household hard waste collections (maximum), street sweeping, litter and dumped rubbish collection and a waste reduction education program.

For 2012/2013, the garbage charge was set at $254.25, which is a $30.25 increase from 2011/12. For the second and subsequent garbage bins, the Garbage Charge for 2012/13 is costed at $244.25 and includes a second recycling bin if desired.

The cost of disposing of the waste collected (roadside, hard waste, litter and rubbish) includes an EPA levy. For 2012/13, the State Government EPA levy was increased from $44 per tonne to $48.40 per tonne. The introduction of the Carbon Tax from 1 July 2012 onwards will have a significant impact on the costs of waste disposal, as well as energy and general cost inputs. Both of these factors, the increased EPA levy cost and the carbon tax, have contributed to the increased garbage disposal charge for households.

Council could elect not to have a municipal charge and/or separate garbage charge (user pay) and roll the costs into rates. Such a decision would result in a shift in rate burden across categories and individual properties and would require further analysis.

Rebates

Council has two rebates in place. The Owners Corporations established for Sanctuary Lakes and the Alamanda Estate undertake a range of public works and services on behalf of residents of that development. Council has agreed to contribute an amount equal to that which would normally be spent by Council in providing public works and services within these estates to the standard that Council applies across the municipality.

The rebates are consistent with the projected costs Council would otherwise incur and is cost neutral from the viewpoint of Council and other ratepayers.

In summary, rates and charges are identified as Council's most important source of revenue. The rating strategy determines how Council will divide or allocate the total rate pool from properties within the municipality. It does not influence the total money to be raised, only the share of revenue contributed by each property. The total money to be raised is determined by Council, and is a decision based on the service and infrastructure needs of the community also taking into account the need to be sustainable in the longer term.

6.6 Other Revenue

Grant Revenue

Each year Council receives recurrent grant funding and appropriations from various State and Federal departments to contribute toward the cost of providing services to the community. In the long term financial plan, Council estimates annually the recurrent grants will increase on average by the Consumer Price Index (CPI) and a population growth factor which takes into account the rapid population growth within the municipality. The reality is that grant funding seldom keeps up with growth in expenditure resulting in a higher cost burden to Council on a year by year basis. This is a form of cost shifting and has been highlighted as an ongoing problem by the MAV, who advocate for councils on a range of issues.

Developer contributions

Developer contributions are cash payments made by developers as a contribution towards the provision or upgrade of infrastructure. The Planning and Environment Act 1987 allow for development contributions through the:

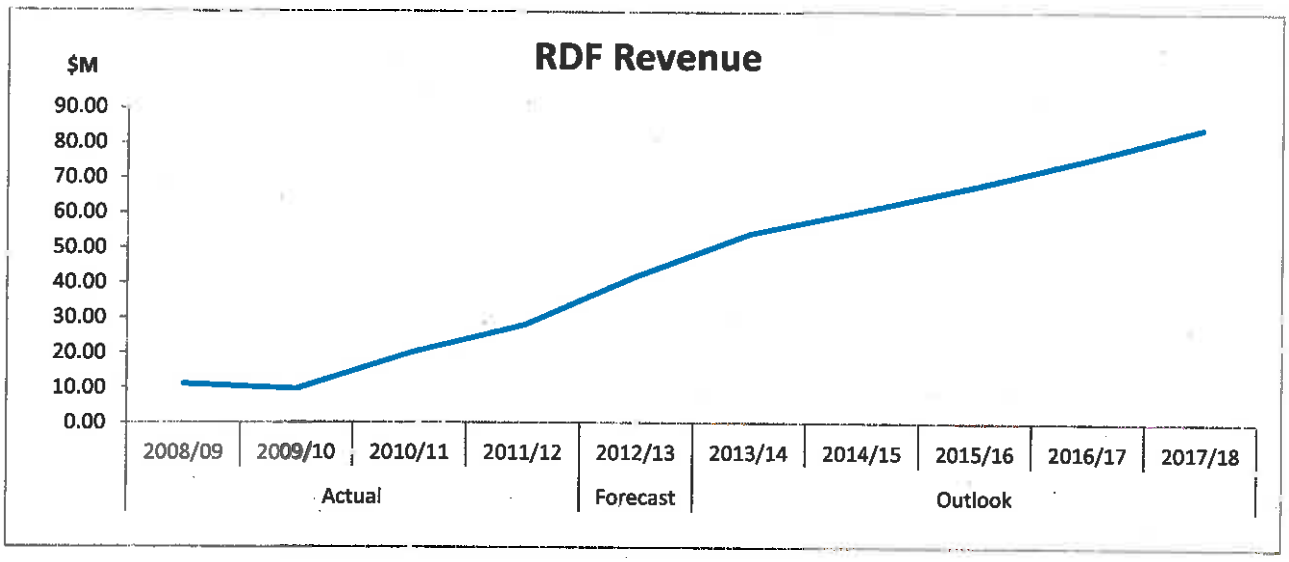
- Planning scheme amendment process;
- Planning permit process; and
- Building permit process.

Developer contributions are estimated to reach approximately $199M by the end of the 2021/22 financial year. The figure is based on allowance made for about 2,500 new lots forecast to be developed each year from 2012/13 to 2021/22.

Council currently adopts a conservative approach to the accounting and management of developer contributions as discussed in Section 5 of the long term financial plan. In measuring Council's Operating performance in the Income Statement (Profit and Loss Statement), Council excludes the impact of developer contributions which are capital receipts that are one off in nature. This in turn ensures that there is no risk that Council will need to draw on developer contributions reserves to "balance the books" or to fund its Operating budget.

User Fees and Charges (including the Refuse Disposal Facility)

Wyndham City is unique to most other councils in that it operates a commercial landfill that is a highly efficient and profitable undertaking. It represents an ongoing revenue stream to Council that is predicted to grow at a rate in excess of Council's other revenue streams, including rates. The growth in the RDF can be attributed to a couple of factors. The closing of various landfills within and around metropolitan Melbourne and the declaration of the RDF as one of the 4 major designated landfills in addition to good management and stewardship by Council over a number of years are some of the factors that have contributed to the growth of the RDF. The following graph highlights the growth in total RDF revenue over the last 5 years and forward projections for the next 5 years.



User Fees and Charges and Statutory Fines (excluding RDF)

Council Officers have commenced a process toward implementing a formal pricing policy to assist Council in formulating fee pricing which reflects an agreed set of standards and to ensure that the subsidisation of Council services is understood and agreed upon.

At the core of the proposed policy, is a set of seven pricing principles that is proposed to form the basis of the final policy. These seven pricing principles have been developed as a result of an external review of best practice pricing policy across different local government and are shown below;

As a minimum, modelling of increases in Council controllable fees and charges includes a provision for CPI and a population growth factor to ensure that each year's fees and charges make provision for the increase in the costs of service inputs (i.e., salaries and materials) and include revenue growth due to population increases.

Pricing principle	Pricing Basis	Pricing definition	Pricing Principle includes
A	***Partial Cost Recovery***	The price charged for this service makes a partial contribution towards the total cost of providing the service, rather than the full cost recovery, recognising the community benefit it provides	* The benefits of the provision of the service accrue to the community as a whole as well as individual users
			* Charging prices to recover full/true cost may result in widespread evasion
			* Other government funding is received, to subsidise the service cost
			* The service is targeted to low income users or a differential service fee is charged according to the classification of users to maximise access to the service
			* The service promotes or encourages local economic activity
B	***Full Cost Recovery***	The price charged for this product is based on full cost recovery	* The service benefits particular users, making a contribution to their individual income, welfare or profits or a private benefit without any broader benefits to the community
			* Council has a monopoly over the provision of the service and there are no community service or equity obligations
C	***Full Cost Recovery + Rate of Return***	The price charged for this product / service generates cost recovery and an appropriate return	* The service is a profit making activity and the price paid by users should recover an amount greater than the full cost of providing the service

D	***Market Competitive***	The price charged for this product / service is set by reference to market prices	* The service provided is in competition with that provided by another Council or agency (private or public) and there is pressure to set a price which will attract adequate usage of the service
E	***Regulated and Prescribed***	The price charged for this product / service is set by regulation or other legal agreement	* The amount of the fee is prescribed in regulation or legislation or another authorised authority. Council has no discretion to determine the amount of fee for the service
			* The amount of the fee prescribed is specified in a contractual agreement and Council has no discretion outside of that agreement to vary the fee
F	***Security Deposits to Cover Costs of Damage***	The charge is a refundable deposit against possible damage to infrastructure, footpaths, kerb, gutters, roadways, buildings, parks , reserves caused by adjacent development or use of facilities	* Security deposits for the payment of making good any damage caused to Council property and / or completing any works requested with the approval.
G	***Overdue Fees***	Overdue fees levied on library items (and other items available for hire) to discourage the late return of borrowed items whilst balancing the need for deterrent with the likelihood of collection	* Overdue fees on late items

It is hoped that by moving to a formal pricing policy approach to the setting of controllable fees & charges, Council will move to a principle based fee setting structure. This will result in fee setting being based on a full understanding of the extent to which services are being subsided, facilitate a move toward a user pays philosophy where this is in the public interest, and minimise the extent to which rate revenue underwrites the provision of discretionary Council services.

6.7 STRATEGY

Outcome

1. To provide a reasonable degree of consistency and stability in the level of rates burden.

Policy

1. Wyndham City resolves to use the CIV (Capital Improved Value) method of valuation. Council will strategically employ the use of rating differentials to ensure the most equitable spread of the rate burden across the municipality taking into account financial, social and environmental factors. Council resolves to benchmark its rating differentials to ensure comparability to its benchmark partners.
2. Wyndham City resolves to apply a Municipal Charge to all rateable properties to cover the non-avoidable governance costs of Council.
3. Wyndham City resolves to apply a Municipal Garbage Charge to all developed land properties.
4. Wyndham City resolves to implement a Fees and Charges pricing policy and facilitate a move towards a principle based approach to fee setting.
5. As per the Fees & Charges pricing policy, Wyndham City will consider opportunities for adopting a 'user pays' philosophy in the setting of fees and charges to reduce the reliance on rates, where this is in the public interest.
6. Wyndham City aims to provide a reasonable degree of consistency in the level of the rates burden.

Strategy

1. That Council consider the most appropriate rating and revenue strategy to provide adequate funds to :
    - Achieve an underlying surplus in the Income Statement (Profit and Loss Statement) over the term of Financial Plan excluding the impact of developer contributions, non-recurrent grants and the RDF;
    - Achieve an adequate cash flow; and
    - Fund the 10 year Capital Works forecast.

SECTION SEVEN: CAPITAL WORKS PROGRAM

7.1 INTRODUCTION

Council has developed a 10 year Capital Works Program that attempts to identify the infrastructure needs of the community. The 10 year Capital Works program is a particularly important planning tool for Wyndham City as it attempts to balance competing infrastructure priorities, namely asset renewal versus the provision of new infrastructure for a growing community.

Council categorises capital works as follows:

Renewal expenditure reinstates existing assets. There is no impact on revenue but the works could potentially reduce future operating and maintenance expenditure if completed at the optimum time.

New Assets may or may not result in additional revenue for Council and will result in additional burden for future operation, maintenance and capital renewal.

This section considers:

- Levels of service
- Depreciation
- Capital works program 2012/13 – 2021/22

The challenge for Council in managing the 10 year Capital Works program is to ensure that adequate allowance is made to meet the future needs of the community. To this end, a number of external measures exist to provide Council with broad economic indicators as to the adequacy of its resource allocation decisions in the 10 year Capital program.

7.2 LEVELS OF SERVICE

The updated 10 year Capital Works program allows for $1.146 billion in infrastructure works over the next 10 years. Two key outcomes from the 10 year Capital Works program are the need to maintain asset renewal investment to appropriate levels whilst providing new infrastructure for a growing population base. The use of various external indicators can help Wyndham gauge whether it is achieving these aims.

Council's historical level of Capital expenditure and outlook for the next two years demonstrate a continued high level of capital expenditure. Currently, the draft 10 year capital works program anticipates an $86.64M Capital program for 2013/14.

Capital Works Areas	2009/10 $M	2010/11 $M	2011/12 $M	2012/13 Forecast $M	2013/14 Outlook $M
Buildings	6.55	25.26	18.98	51.15	37.34
Furniture, Equipment and Information Technology	2.62	1.75	2.52	2.94	1.16
Land	14.93	15.07	0.14	0.67	0.00
Open Space and Associated Developments	4.83	11.95	34.67	30.10	17.94
Other Structures	0.49	0.87	0.50	0.21	0.15
Plant & Equipment	3.76	2.44	4.86	4.38	2.18
Roads & Pavements	15.94	31.95	28.04	43.69	26.76
Total excl RDF	**49.13**	**89.29**	**89.71**	**133.12**	**85.52**
Refuse Disposal Facility	5.27	1.24	6.64	6.51	1.12
Total incl RDF	**54.40**	**90.53**	**96.34**	**139.63**	**86.64**

7.3 Depreciation

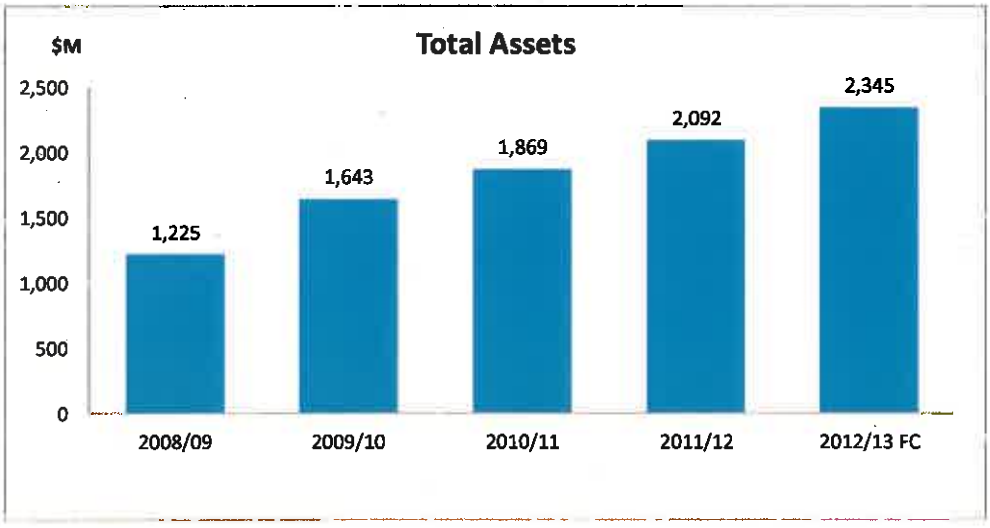
Assets such as buildings, equipment, roads, drains, etc have relatively long lives. For this reason, such expenditure is treated as capital (asset) rather than operating expenditure.

Depreciation expense is a method of spreading the cost as the asset is consumed, based on its estimated useful life.

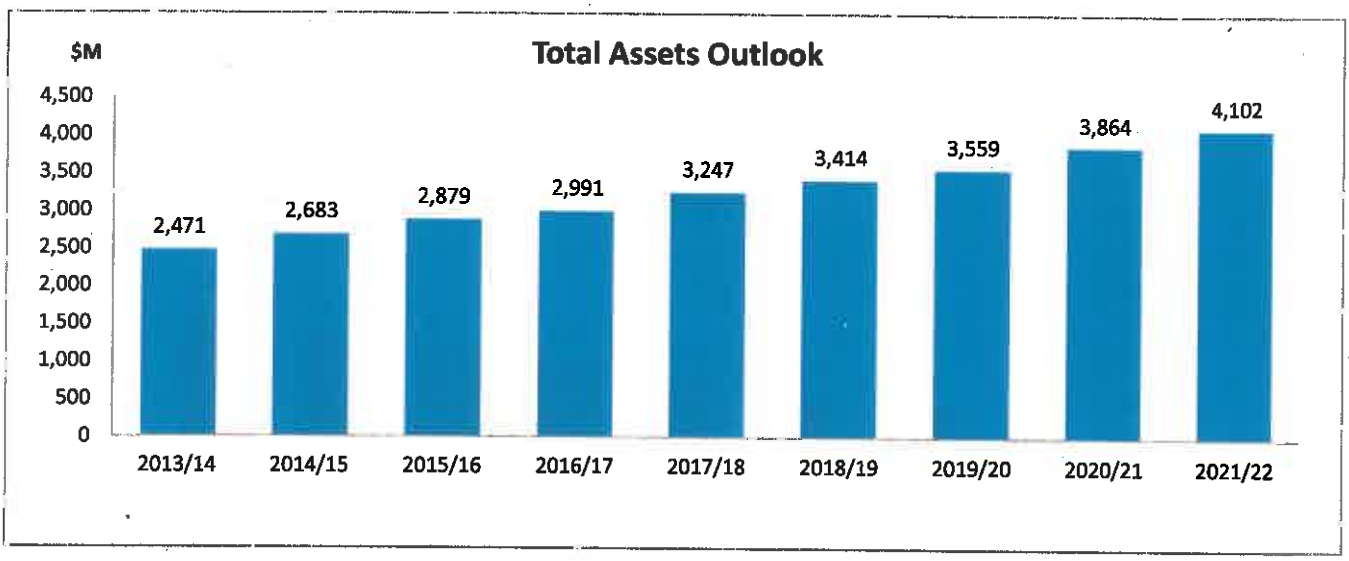
Intangible assets such as Refuse Disposal airspace are treated in a similar method, however `the cost as consumed are classified as amortisation expense.

Summary of Fixed Assets

As at the 30th June 2012, Council's fixed asset base was $2.090 billion, which represented an increase of $225.6M over the previous year. In analysing the Council's asset base over the last 5 financial years, the growth in total dollar terms can be seen below.

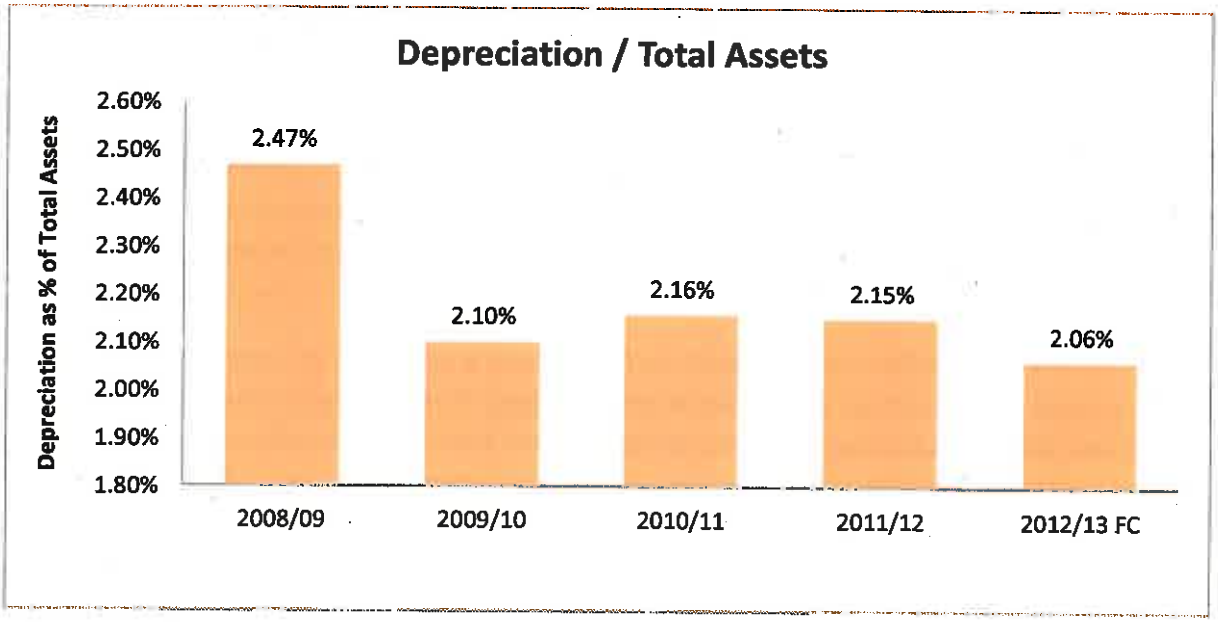


Preliminary modelling indicates that Council's asset base will increase by at least $100 - $300M per annum for each of the next 9 years. At the end of the 10 year plan, Council's asset base is estimated to be $4.10 billion in value.



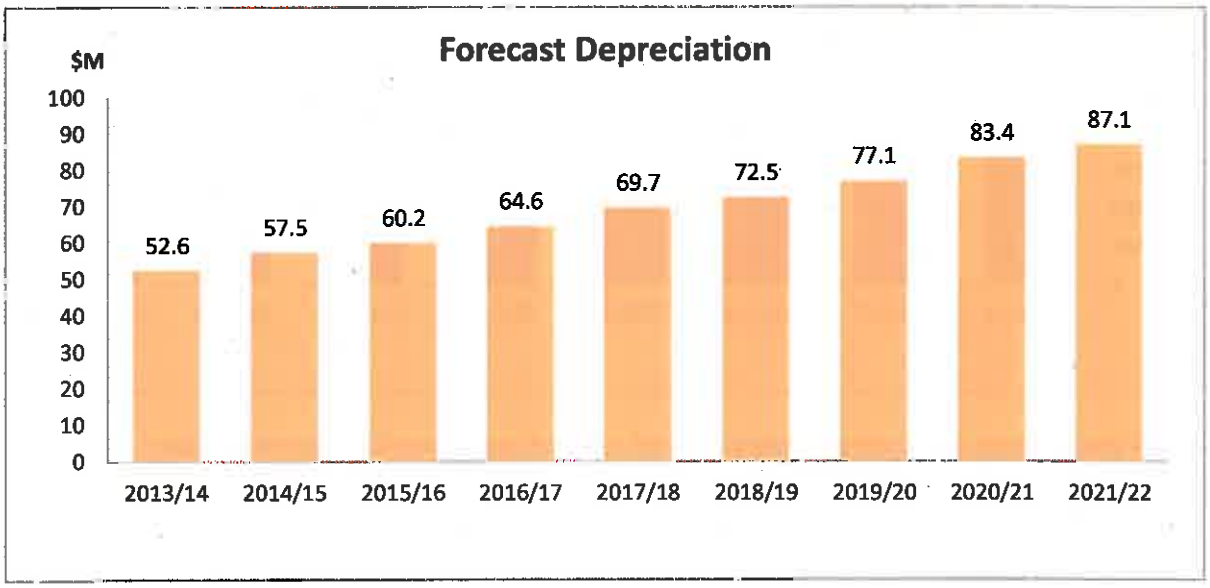
The 9 year outlook demonstrates the impact of a robust capital works program, donated subdivisional assets from developers (e.g. roads, footpaths, drains, lands, etc) and the impact of progressive revaluations of Council's asset base which will substantially increase the value of Council's assets, and in turn the obligation to maintain and renew these assets. The increasing level of assets drives the amount of depreciation that is charged.

Depreciation is the process of recognising the annual consumption of Council's fixed assets over the duration of their useful lives. Council's depreciation charge as a percentage of its total assets is depicted in the following graph.



The depreciation charge as a percentage of its total assets will vary depending on the mix of asset class, roads, buildings, drains, etc. as each asset class will have different service lives. Comparing 2008/09 to 2012/13 highlights that on average, the service lives have increased on Council total asset base, thus reducing the depreciation charge as a percentage of its total assets.

The 9 year outlook based on preliminary modelling for forecast depreciation is depicted in the following graph.



The long term outlook for forecast depreciation indicates that based on the increasing asset base and the historical depreciation levels, the renewal of existing assets will become an ever increasing presence in Council's forward outlook. To this end, the implementation of the Asset Management Information System and the creation of strategic asset management plans will provide guidance as to the level of resources that will be required to ensure that Council's ever increasing asset base is maintained and renewed at desired levels.

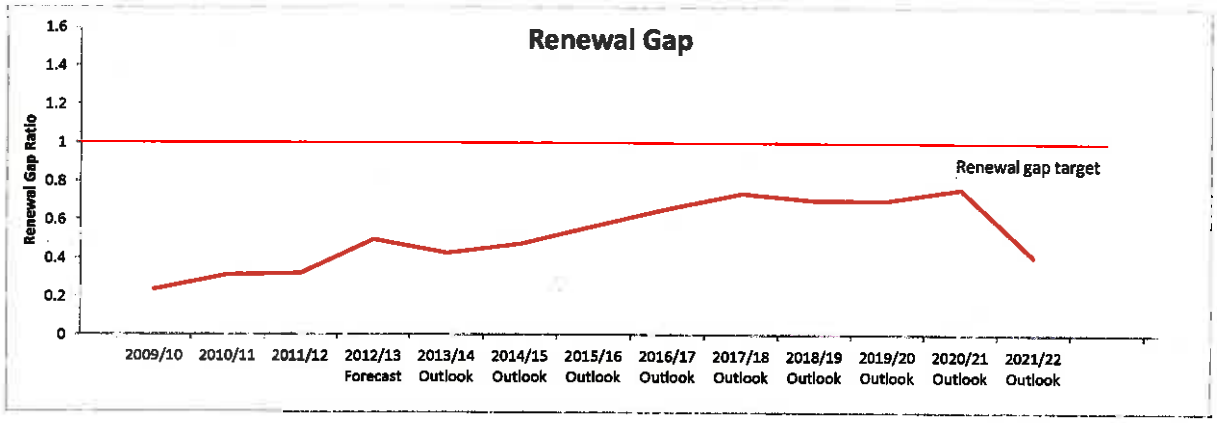
Asset Renewal gap

It should be noted that the renewal gap provides Council with a guide as to the level of expenditure it should be spending on renewal. It doesn't provide accurate representation of when assets need to be renewed. The Asset Management Information System will, in the future, provide more accurate renewal information for financial planning.

As discussed in Section 3 of this document, the renewal gap is a measure of Council expenditure on asset renewal as a percentage of total depreciation charges. A ratio of higher than 1:1 is desirable as it indicates adequate spending on existing assets is greater than the annual depreciation charges. The renewal gap is a long term indicator and indicates that where asset renewal expenditure is consistently lower than annual depreciation charges, Council may not be spending sufficient funds to maintain and restore existing infrastructure.

It is important to note that the VAGO 2008-09 audit results found that 70% of councils are not spending sufficient funds to maintain and restore existing infrastructure.

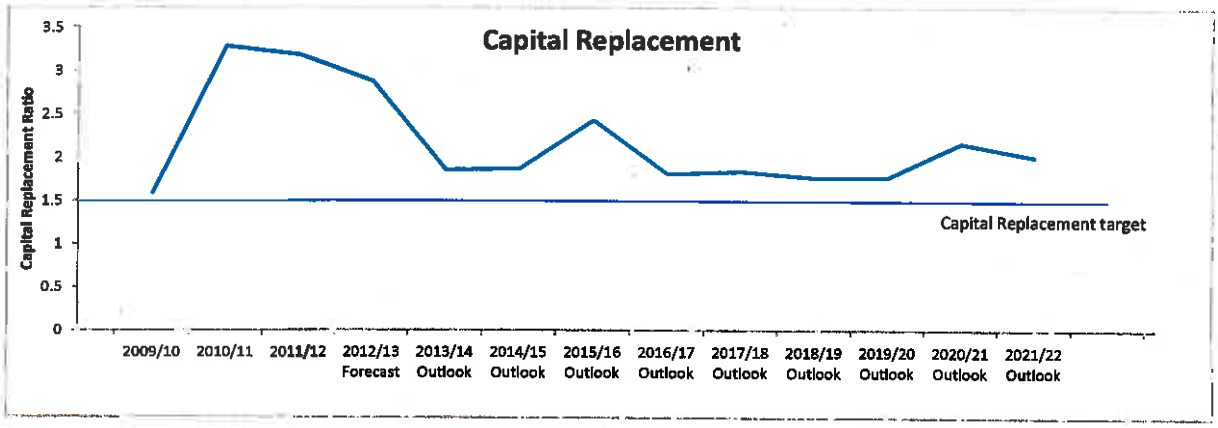
The preliminary modelling in the 10 year Capital Works plan based on an assessment of the individual projects contained in the plan, tend to indicate that Council's expenditure on asset renewal is less than a ratio of 1:1.



Capital Replacement

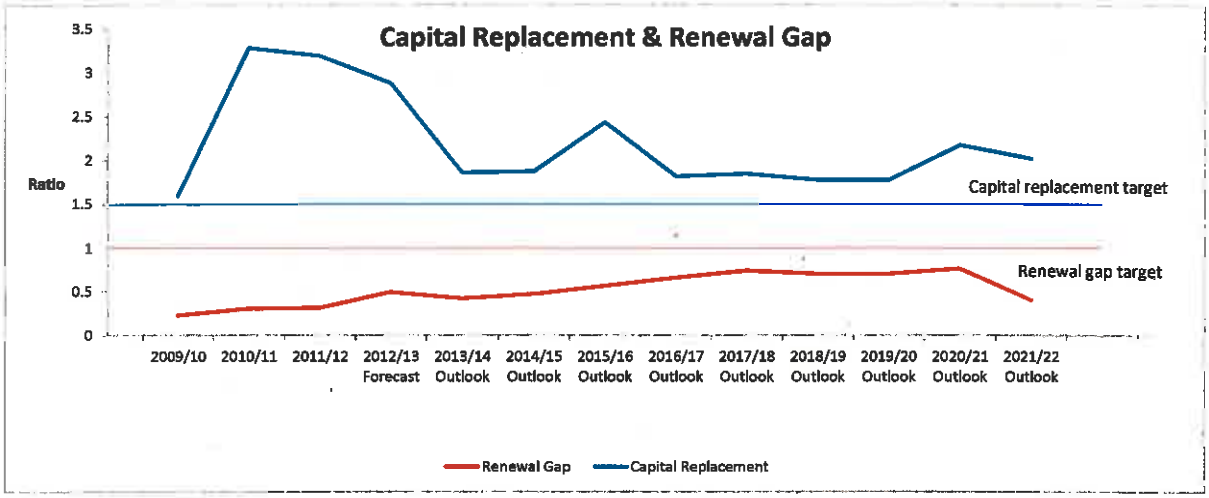
As discussed in Section 3 of this document, the Capital Replacement ratio is a measure of total capital expenditure as a percentage of total depreciation. The Capital replacement measure is a long term indicator and a ratio greater than 1:1.5 indicates low risk. A ratio of 1:1.5 indicates that Council has the capacity to fund a Capital Program 1.5 times greater than its depreciation levels.

As can be seen from the graph below, preliminary modelling in the 10 year financial plan indicates that Council is spending more on total Capital Works than its annual depreciation charges.



Overall results

The two graphs when read in conjunction with one another, highlight some potential issues in the future. The average capital replacement ratio over the ten years is 2.05 and renewal gap average is 0.59.



Although the projected level of renewal expenditure over the ten years is averaging at 0.59 of the projected depreciation, it is likely that over time, the level of renewal will increase as existing assets age and require replacement or upgrade.

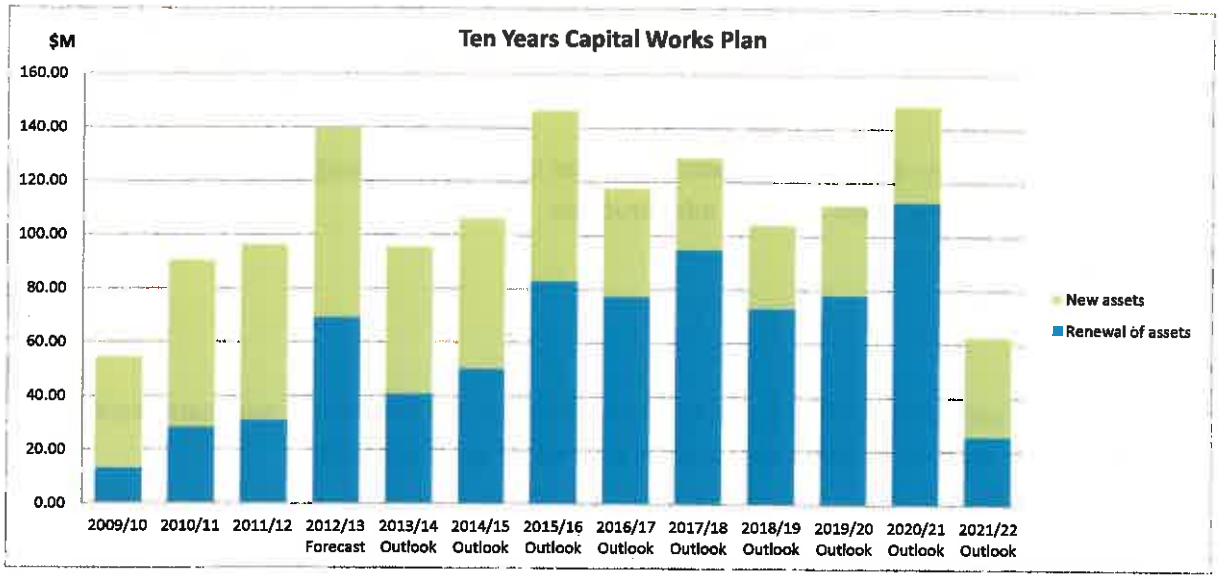
Council's capital replacement ratio is projected to be 2.05 times depreciation over the ten years. This provides Council with the flexibility and ability to move expenditure from Asset creation to renewal if required.

7.4 Capital Works Program 2012/13 – 2021/22

The annual budget process enables Council to identify individual projects for funding. The 2012/13 budget provided for a total of $142.57M for capital works, which included $58.67M in carry over projects from 2011/12.

The capital works expenditure over the next ten years is estimated at $1.146 billion (or $867M in present value). On average, new assets expenditure will take up 41% while asset renewals make up the remaining 59%.

This is based on each project within the Capital Works Program being classified as renewal or new. In some cases, projects may have both a renewal and new component, e.g. Wyndham Leisure and Events Centre (WLEC) Pool. Further work will be undertaken to breakdown such project between renewal and new.


Ten Years Capital Works Plan
$M
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
2009/10
2010/11
2011/12
2012/13 Forecast
2013/14 Outlook
2014/15 Outlook
2015/16 Outlook
2016/17 Outlook
2017/18 Outlook
2018/19 Outlook
2019/20 Outlook
2020/21 Outlook
2021/22 Outlook
New assets
Renewal of assets

7.5 STRATEGY

Outcome

1. That Wyndham City resolves to consider its 10 year Capital Works program in light of the challenges of asset renewal and new infrastructure.

Policy

1. That Council consider the 10 year Capital Works program and ensure that adequate provision is made for the creation of new assets and the renewal of existing assets.
2. That where the relative life cycle of Wyndham's assets justify a lower expenditure on asset renewal in the 10 year plan as assessed by the asset renewal gap, Council give consideration to a provisional financial allowance for future asset renewal in the 10 year plan.

Strategy

1. As per the Capital Replacement ratio, Council aim for an annual capital works program 1.5 times the value of depreciation as a means of ensuring that adequate financial capacity exist to fund capital works.

SECTION EIGHT: SERVICE PROVISION AND PLANNING

8.1 Introduction

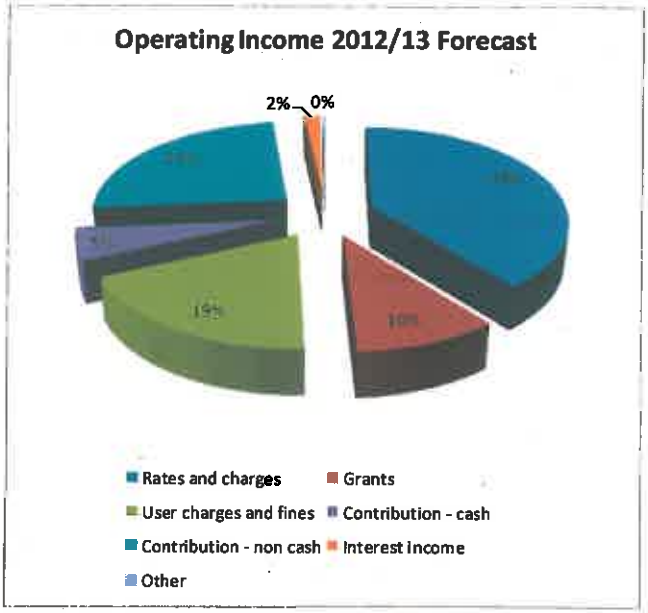
A key objective in the LTFP is to increase service levels in line with population growth and community expectations whilst maintaining an acceptable increase in operating surplus, to fund the provision of social and physical infrastructure.

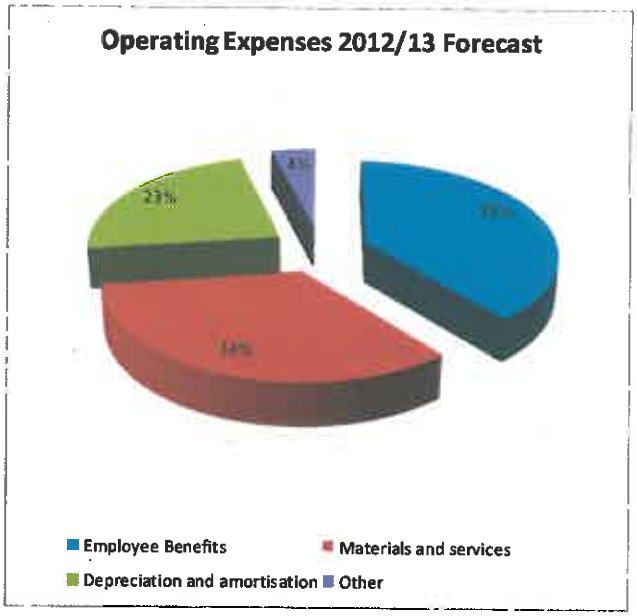
This section includes:

- Operating expenditure / revenue
- Growth of Council
- Service provision and planning

8.2 Operating Expenditure / Revenue

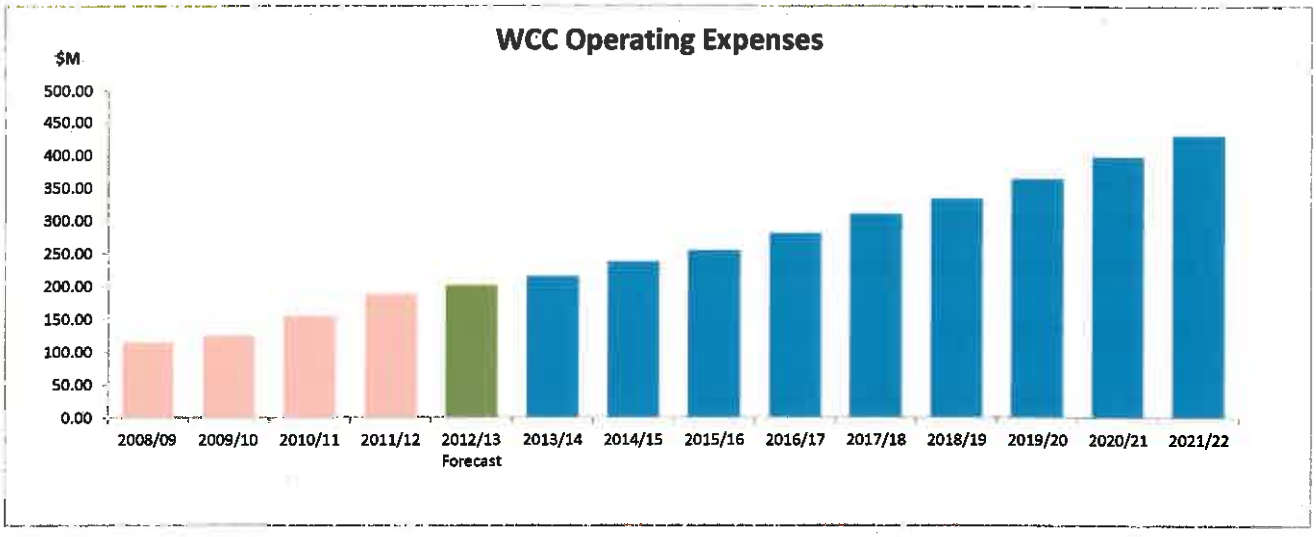
The 2012/13 operating expense and revenue forecast are $208M and $324M respectively. Wyndham Council's provision of service includes infrastructure, sustainable development, community, corporate support services and advocacy.





Operating expenses up to 2012/13 have had an average increase of 15% per annum over the past four years. The key contributions to this increase are:

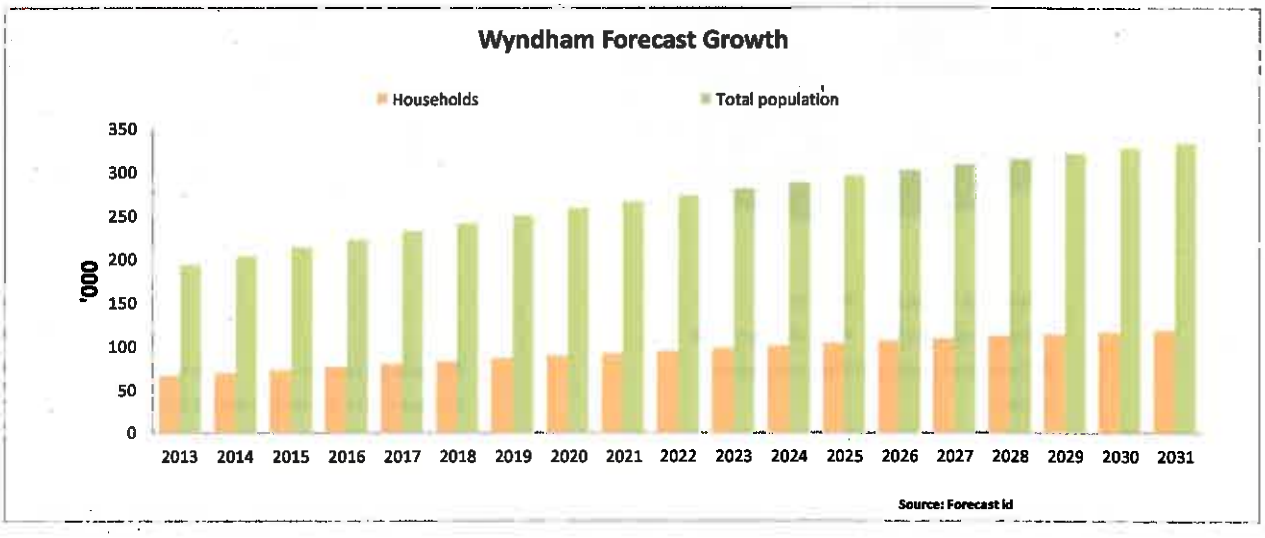
- Rapid population growth has been the driver for increasing staff numbers;
- Council's fixed asset register is also increasing at a fast rate which impacts on depreciation and in turn, increasing expenditure on asset renewal;
- Growth in other discretionary expenses such as materials and services for example, waste management contracts and other maintenance expenses; and
- Increased service standards.
- Salary increases above consumer price index (CPI)



Over the 10 year period of the long term financial plan, preliminary modelling indicates an average annual increase of 9% for operating expenses.

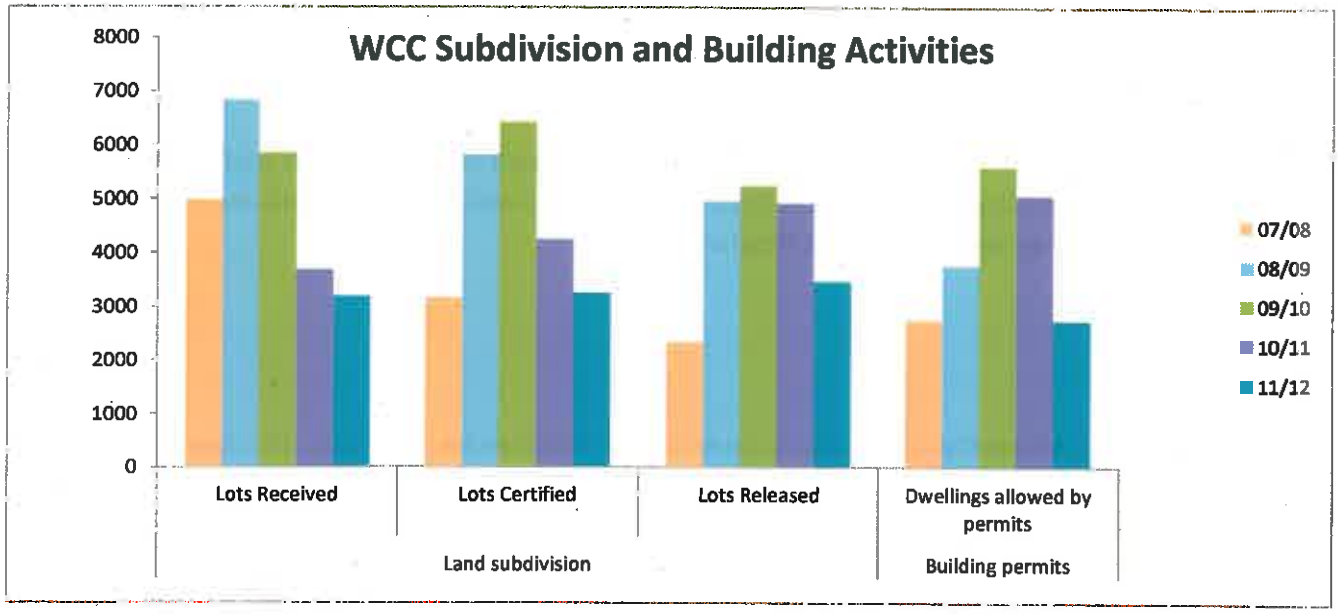
8.3 Council Growth

Wyndham has experienced the largest and fastest growth in all Victorian local government areas and is the third fastest growing in Australia. The population is expected to increase from 184,190 at June 2012 to 334,678 by 2031. Below is a graph showing the forecast growth:



As a result of rapid population growth, other areas within Council have also experienced strong growth, particularly in subdivision and building activity. As can be seen in the graph below, there has been significant movement within these activities in the last five years peaking in 2009/10, and now stabilising back to pre-boom figures.

Continuing demand in these areas will mean greater demand on current and future services.



8.4 Service Provision and Planning

As a consequence of a faster than projected growth, there is a need to bring forward the planning, construction and funding of new infrastructure to provide facilities and services for the needs of the growing community.

The range and level of service provision is determined by the Council. This is reviewed annually based on the outcome from community consultations. Service provision is then finalised through the annual budget process with the LTFP providing preliminary guidance based on previous year's service delivery model.

One of the key objectives of Council's LTFP is to increase service levels in line with population growth and community expectations. To achieve this objective, the Council makes annual commitments to new staff and new initiatives. Below is a budget summary for both new staff and new initiatives in the past few years.

	New Staff $000	New Initiatives $000
2012/13	2,745	1,109
2011/12	5,626	2,981
2010/11	3,296	2,113

The commitment to new staff and new initiatives will have a carry on effect in future operating periods. This will result in operating expenses increasing at a higher level than the standard CPI or wage index.

8.5 STRATEGY

Outcome

1. That Wyndham City generates sufficient surpluses from operations to continue to provide the existing level of services to our community as well as repaying debt and assisting in funding the Capital Works Program.

Policy

1. Wyndham City will resolve to undertake periodic service reviews for all Council Services to ensure service levels meet the needs of the community.
2. Council will annually provide adequate resources to maintain its assets and provide its services to appropriate standards.
3. Council will annually provide resource increases commensurate with growth in the municipality to the agreed service standards.
4. Council will periodically review benchmarks to ensure its resources are consistent with industry service and maintenance standards.

Strategy

1. Council will commit to maintaining its intervention levels in all maintenance areas to ensure that the presentation standards in the municipality are consistent with industry standards and community expectations.
2. Council will commit to increasing staffing levels through a business case process whereby staffing requests will be assessed relative to the priorities of the community.
3. Council will commit to funding new initiatives through a business case process whereby these initiatives will be assessed relative to the priorities of the community.

SECTION NINE: STRATEGIC FINANCIAL PLAN

9.1 Long Term Financial Plan (refer to attachments)

- **This section has been left intentionally blank**

APPENDIX A GLOSSARY OF TERMS – DEFINITIONS

Adjusted operating surplus / deficit	Operating surplus/deficit less revenue from contributions non-monetary assets (donated assets).
Current assets	Total current assets from "Balance Sheet".
Current liabilities	Total current liabilities from "Balance Sheet"
Debt redemption	Debt principal repayments.
Debt servicing costs (interest)	Total borrowing costs or interest expense as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.
Fees and charges revenue	Total fees and charges revenue as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statement (includes fines).
Granted assets	Total value of assets received from developers (in kind) as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.
Interest earnings	Total interest received as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.
No. of rateable properties	Number of rateable properties in the municipality.
Non-recurrent grants (Capital grants)	Non-recurrent grants (capital grants) as disclosed in notes.
Non-current liabilities	Total non-current liabilities from "Balance Sheet".
Proceeds from sale of non-current assets	Total proceeds from asset sales as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements (gross received not Written-down value).
Rate revenue	Total rate revenue as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.
Total assets	Total assets from "Income Statement" (Profit and Loss Statement).
Total depreciation	Total depreciation expense as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.

Total depreciation on infrastructure assets	Total depreciation on infrastructure assets as disclosed in "Depreciation expense" note.
Total debt	Total interest bearing liabilities (current and non-current) from "Balance Sheet".
Total indebtedness	Total liabilities (current and non-current) from "Balance Sheet".
Total infrastructure assets	Total infrastructure assets from "Balance Sheet" or as disclosed in the notes (Written-down value). Infrastructure includes roads, bridges, drains, road structures and other like categories. Work in progress, where not separately split, has been included as infrastructure.
Total net realisable assets	Total assets less total infrastructure assets.
Total operating expenses	Total operating expenses as per the "Income Statement" (Profit and Loss Statement).
Total revenue	Total revenue from "Income Statement" (Profit and Loss Statement).
Written-down value of assets sold	Written-down value of assets sold as per the "Income Statement" (Profit and Loss Statement) or as disclosed in the notes to the Financial Statements.

Long Term Financial Plan - 2016/17 to 2025/26

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Key Assumptions										
General Assumptions										
Population Growth (PGF) (source: ID Forecast)	4.4%	3.7%	3.5%	3.5%	3.4%	3.3%	3.4%	3.2%	3.1%	3.2%
Household Growth (HGF) (source: ID Forecast)	4.3%	3.7%	3.5%	3.6%	3.5%	3.4%	3.5%	3.3%	3.2%	3.2%
Future Consumer Price Index (CPI)	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**	**2.50%**
Rates Revenue Assumptions										
# of Assessments at beginning of the year	84,200	86,244	89,132	91,981	94,994	98,029	101,060	104,278	107,497	110,692
Increase in tenements %	*3.9%*	*3.3%*	*3.2%*	*3.3%*	*3.2%*	*3.1%*	*3.2%*	*3.1%*	*3.0%*	*3.0%*
Recurrent Grants, User and Statutory Fees & Charges (CPI + PGF)	6.9%	6.2%	6.0%	6.0%	5.9%	5.8%	5.9%	5.7%	5.6%	5.7%
Non-recurrent Grants (CPI)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Swap rates	1.99%	1.98%	2.07%	2.31%	2.44%	2.57%	2.70%	2.79%	2.88%	2.97%
Interest on investments (swap interest rates) + 1.0%	2.99%	2.98%	3.07%	3.31%	3.44%	3.57%	3.70%	3.79%	3.88%	3.97%
LGFV (MAV) 7 year bond rate	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%
Expenditure Assumptions										
Employee costs - base	3.40%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%
Employee costs - banding increment	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Materials and Services increase (CPI + PGF + efficiency) %	3.9%	4.2%	4.0%	5.0%	4.9%	4.8%	4.9%	4.7%	4.6%	4.7%
Building and Construction Cost Escalation	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Efficiency dividend applied to discretionary opex expenditure	3.0%	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Wyndham City requests that the following additional context be published with the previous financial information provided to the Commission.

Council provides the following context in relation to our 10 Year Long Term Financial Plan (LTFP):

- Council's Long Term Financial Plan (LTFP) is a guiding document which provides modelled financial outcomes closely aligned with key Council strategies and policies
- Like any LTFP in either government or private enterprise settings, assumptions and fluctuations are used in a business planning sense to inform and update working and published budgets
- Our LTFP informs two reporting requirements of the Local Government Act 1989 (the Act) – our Annual Budget and Strategic Resource Plan
- The first four years of the balanced LTFP becomes the Strategic Resource Plan in the annual budget
- Councillors are briefed in detail on assumptions underpinning our LTFP during the induction of a new Council every four years as well as annually during our annual planning and budget processes. A budget is then released for community feedback and consideration by the Council before it adopts a final budget, as also required by the Act
- Scenario analysis is undertaken within each year for key variables and any changes as appropriate (e.g. indexation, adoption and review of strategies and policies, operational service reviews, comparison against financial metrics of the Victorian Auditor General's Office)
- In addition to informing Council's strategic and operational decisions, the LTFP assists in establishing what funding capacity is available for capital works
- Council's Capital Works Program is developed independently based on adopted strategies, the estimated timing of community infrastructure requirements and Asset Management Plans
- The "bottom-up" capital works program is brought into the LTFP to determine any funding shortfalls
- The options to "close the gap" are considered (e.g. changes to services and service levels, cost management, increase revenue sources, borrowings, reprioritising the capital works, revenue from external businesses), and
- The pros and cons of all the options to "close the gap" are then considered in detail by Council each year and any funding gap is closed after Council considers a combination of options .

Operating Statement

	Forecast 2015/16 $'000	Budget 2016/17 $'000	Budget 2017/18 $'000	Budget 2018/19 $'000	Budget 2019/20 $'000	Budget 2020/21 $'000	Budget 2021/22 $'000	Budget 2022/23 $'000	Budget 2023/24 $'000	Budget 2024/25 $'000	Budget 2025/26 $'000
Revenues from ordinary activities											
Rates and charges	161,525	171,875	187,436	201,950	217,509	234,305	252,127	271,292	291,925	313,787	337,132
Contributions - Cash	15,786	13,712	15,212	36,176	52,281	73,101	98,503	19,434	26,173	73,397	22,485
Grants - operating	27,817	35,353	37,527	39,775	42,166	44,650	47,251	50,038	52,903	55,874	59,033
Grants - Capital	10,057	8,183	2,973	4,097	9,252	8,412	3,579	6,257	7,440	4,129	4,329
User fees	69,155	79,012	83,830	88,988	94,443	100,156	107,903	114,735	121,912	129,484	137,532
Statutory fees and fines	10,190	11,449	11,874	12,585	13,342	14,127	14,950	15,832	16,739	17,679	18,678
Other revenue	4,316	5,052	5,453	5,881	6,410	6,859	7,463	7,256	7,880	8,489	8,353
Contributions - Non-monetary assets	59,000	61,000	63,000	66,000	68,000	71,000	74,000	74,000	74,000	74,000	74,000
Total revenues	**357,846**	**385,636**	**407,305**	**455,452**	**503,402**	**552,611**	**605,777**	**558,844**	**598,971**	**676,838**	**661,544**
Expenses from ordinary activities											
Employee benefits	110,003	117,016	126,083	137,367	149,521	162,665	176,856	192,214	208,696	226,311	245,130
Finance costs	2,362	3,015	3,304	3,915	4,881	4,894	4,904	4,918	4,928	4,942	4,954
Other expenses	3,146	3,037	3,076	3,153	3,232	3,313	3,395	3,480	3,567	3,657	3,748
Depreciation and amortisation	64,412	70,577	73,959	79,940	84,159	88,172	96,777	102,374	107,746	115,662	120,893
Materials & Services	90,480	94,571	99,100	103,578	109,145	115,182	120,121	126,423	132,393	139,589	145,812
Bad & doubtful debts	111	101	101	101	101	101	101	101	101	101	101
Total expenses	**270,514**	**288,317**	**305,623**	**328,053**	**351,039**	**374,327**	**402,154**	**429,510**	**457,432**	**490,261**	**520,638**
Net Surplus(Deficit) from operations	**87,332**	**97,319**	**101,682**	**127,399**	**152,363**	**178,284**	**203,623**	**129,334**	**141,539**	**186,577**	**140,906**
Net gain (loss) on disposal of property, plant and equipment, infrastructure	- 1,309	- 3,560	- 3,380	- 2,823	- 3,342	- 3,785	- 3,722	- 3,878	- 3,795	- 4,050	- 3,959
Net surplus (deficit)	**86,024**	**93,759**	**98,302**	**124,576**	**149,021**	**174,499**	**199,901**	**125,456**	**137,744**	**182,528**	**136,947**

Balance Sheet/Financial Position	Forecast 2015/16 $'000	Budget 2016/17 $'000	Budget 2017/18 $'000	Budget 2018/19 $'000	Budget 2019/20 $'000	Budget 2020/21 $'000	Budget 2021/22 $'000	Budget 2022/23 $'000	Budget 2023/24 $'000	Budget 2024/25 $'000	Budget 2025/26 $'000
ASSETS											
CURRENT ASSETS											
Cash and cash equivalents	131,921	118,398	127,271	120,230	120,583	120,603	118,981	145,953	150,537	145,012	165,479
Other assets	3,435	3,590	3,761	3,931	4,142	4,371	4,558	4,797	5,024	5,296	5,532
Trade and other receivables	35,819	38,834	41,693	49,378	56,042	64,024	73,710	57,772	63,000	78,318	69,910
Inventories	150	157	164	171	181	191	199	209	219	231	241
Non-current assets classified as held for Sale	23	23	23	23	23	23	23	23	23	23	23
TOTAL CURRENT ASSETS	**171,348**	**161,001**	**172,912**	**173,733**	**180,971**	**189,211**	**197,471**	**208,754**	**218,803**	**228,881**	**241,186**
NON-CURRENT ASSETS											
Trade and other receivables	2,025	2,214	2,361	2,907	3,364	3,922	4,614	3,207	3,518	4,647	3,831
Property, plant and equipment, infrastructure	3,140,531	3,246,636	3,357,010	3,692,719	3,874,957	4,053,744	4,496,026	4,631,441	4,777,622	5,247,020	5,398,696
Intangible assets	17,535	12,052	21,855	14,962	25,837	18,295	29,800	20,978	31,763	20,061	32,828
TOTAL NON-CURRENT ASSETS	3,160,091	3,260,902	3,381,225	3,710,588	3,904,159	4,075,961	4,530,439	4,655,626	4,812,903	5,271,728	5,435,355
TOTAL ASSETS	**3,331,439**	**3,421,903**	**3,554,137**	**3,884,321**	**4,085,129**	**4,265,172**	**4,727,911**	**4,864,380**	**5,031,706**	**5,500,609**	**5,676,540**
LIABILITIES											
CURRENT LIABILITIES											
Trade and other payables	29,883	31,149	32,605	34,057	35,857	37,807	39,408	41,444	43,375	45,698	47,711
Trust funds and deposits	8,445	8,803	9,215	9,625	10,134	10,685	11,138	11,713	12,259	12,915	13,484
Provisions	17,516	18,624	20,056	21,839	23,758	25,835	28,076	30,502	33,105	35,888	38,860
TOTAL CURRENT LIABILITIES	**55,844**	**58,576**	**61,876**	**65,521**	**69,749**	**74,327**	**78,622**	**83,659**	**88,739**	**94,500**	**100,055**
NON-CURRENT LIABILITIES											
Interest bearing loans and borrowings	55,000	55,000	63,000	73,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000
Provisions	4,873	5,183	5,585	6,085	6,623	7,205	7,834	8,514	9,244	10,024	10,858
Landfill Rehabilitation	18,585	15,101	21,064	16,205	16,709	17,092	17,626	18,033	18,600	19,032	19,633
TOTAL NON-CURRENT LIABILITIES	**84,724**	**75,284**	**89,649**	**95,290**	**120,332**	**121,298**	**122,460**	**123,548**	**124,844**	**126,057**	**127,491**
TOTAL LIABILITIES	**140,569**	**133,860**	**151,525**	**160,811**	**190,081**	**195,625**	**201,082**	**207,207**	**213,584**	**220,557**	**227,546**
NET ASSETS	**3,190,870**	**3,288,043**	**3,402,612**	**3,723,510**	**3,895,048**	**4,069,548**	**4,526,829**	**4,657,173**	**4,818,123**	**5,280,052**	**5,448,994**
EQUITY											
Accumulated surplus	**1,572,791**	**1,670,552**	**1,766,282**	**1,888,130**	**2,034,120**	**2,205,364**	**2,401,771**	**2,523,477**	**2,657,237**	**2,835,531**	**2,967,979**
Reserves	1,618,079	1,617,491	1,636,330	1,835,380	1,860,929	1,864,183	2,125,057	2,133,696	2,160,886	2,444,521	2,481,015
TOTAL EQUITY	**3,190,870**	**3,288,043**	**3,402,612**	**3,723,510**	**3,895,048**	**4,069,548**	**4,526,829**	**4,657,173**	**4,818,123**	**5,280,052**	**5,448,994**

Cash Flow Statement

	Forecast 2015/16 $'000	Budget 2016/17 $'000	Budget 2017/18 $'000	Budget 2018/19 $'000	Budget 2019/20 $'000	Budget 2020/21 $'000	Budget 2021/22 $'000	Budget 2022/23 $'000	Budget 2023/24 $'000	Budget 2024/25 $'000	Budget 2025/26 $'000
Cash flows from operating activities											
Rates	160,482	171,061	186,211	200,808	216,285	232,984	250,725	269,784	290,301	312,067	335,295
Grants	40,335	46,366	43,133	46,724	54,760	56,511	54,134	59,954	64,265	63,903	67,481
Customers	96,564	108,400	116,228	139,152	164,190	191,878	226,185	179,830	171,367	219,212	202,092
Net GST refund / payment	10,388	11,403	11,812	14,375	16,339	15,910	16,952	13,755	15,709	19,427	16,153
Trust funds and deposits taken	541	358	412	410	509	551	452	575	546	656	569
Payments to suppliers	- 112,457	- 127,661	- 122,538	- 136,655	- 146,397	- 147,954	- 162,422	- 156,607	- 170,981	- 178,015	- 187,421
Payments to employees	- 107,069	- 115,598	- 124,249	- 135,084	- 147,063	- 160,007	- 173,986	- 189,108	- 205,362	- 222,748	- 241,324
Interest	4,316	5,052	5,453	5,881	6,410	6,859	7,463	7,256	7,880	8,489	8,353
Net cash provided by operating activities	**93,101**	**99,381**	**116,462**	**135,610**	**165,033**	**196,731**	**219,504**	**185,440**	**173,724**	**222,991**	**201,198**
Cash flows from investing activities											
Payments for property, plant & equipment, infrastructure	- 95,508	- 111,886	- 114,379	- 151,634	- 186,127	- 193,816	- 218,394	- 155,680	- 166,533	- 225,756	- 178,162
Proceeds from sale of property, plant and equipment, infrastructure	3,691	1,540	1,720	2,377	1,958	1,615	1,778	1,722	1,905	1,750	1,941
Net cash used in investing activities	**- 91,817**	**- 110,346**	**- 112,660**	**- 149,257**	**- 184,168**	**- 192,201**	**- 216,616**	**- 153,958**	**- 164,628**	**- 224,006**	**- 176,221**
Cash flows from financing activities											
Finance Costs	- 2,041	- 2,558	- 2,930	- 3,395	- 4,511	- 4,511	- 4,511	- 4,511	- 4,511	- 4,511	- 4,511
Proceeds from interest bearing loans and borrowings	15,000	-	8,000	10,000	24,000	-	-	-	-	-	-
Net cash provided by (used in) financing activities	**12,959**	**- 2,558**	**5,071**	**6,606**	**19,490**	**- 4,511**	**- 4,511**	**- 4,511**	**- 4,511**	**- 4,511**	**- 4,511**
Net increase / (decrease) in Cash Held	14,242	- 13,523	8,873	- 7,041	354	20	- 1,622	26,972	4,585	- 5,525	20,467
Cash and cash equivalents at the beginning of the financial year	117,679	131,921	118,398	127,271	120,230	120,583	120,603	118,981	145,953	150,537	145,012
Cash at the end of the year	**131,921**	**118,398**	**127,271**	**120,230**	**120,583**	**120,603**	**118,981**	**145,953**	**150,537**	**145,012**	**165,479**

Statement of Capital Works

	Forecast 2015/16 $'000	Budget 2016/17 $'000	Budget 2017/18 $'000	Budget 2018/19 $'000	Budget 2019/20 $'000	Budget 2020/21 $'000	Budget 2021/22 $'000	Budget 2022/23 $'000	Budget 2023/24 $'000	Budget 2024/25 $'000	Budget 2025/26 $'000
Capital Works Categories											
Buildings	30,432	19,150	34,678	39,925	33,055	51,032	16,323	43,883	46,100	25,842	70,750
Furniture/Equipment & Information Technology	5,820	3,325	2,484	303	1,590	1,698	1,813	1,936	217	226	235
Land	8,205	22,826	4,075	8,970	9,704	13,108	14,026	16,508	16,058	17,182	18,385
Open Space & Associated Developments	12,189	18,427	17,600	32,419	13,330	10,807	30,460	44,295	60,043	57,044	33,901
Other Structures	4,687	680	856	773	713	292	-	-	-	-	-
Plant & Equipment	2,962	3,842	4,096	6,946	6,116	4,022	4,601	5,130	6,288	5,388	7,692
Roads, Pavements and Drainage	22,067	27,829	38,770	56,510	114,294	104,378	145,036	34,698	29,093	112,311	37,664
Refuse Disposal Facility	9,146	7,093	11,819	5,787	7,325	9,115	7,695	9,362	10,631	7,969	10,137
Total Capital Works	**95,508**	**103,172**	**114,379**	**151,634**	**186,126**	**194,452**	**219,953**	**155,811**	**168,429**	**225,962**	**178,763**