City of Monash

ROAD MANAGEMENT PLAN 2009

Adopted by Council at its Meeting on 27 October 2009
Date of effect of Plan: 28 October 2009

Plan Adoption Record

Version	Comment	Date Adopted
Draft	Draft Plan accepted by Council for public consultation	31 August 2004
Version 1	Final Plan adopted by Council	14 December 2004
Version 2	Proposed amendments resulting from 2005 audit	6 June 2006
Version 3	Proposed amendments resulting from 2009 review	27 October 2009

Note: This Road Management Plan is a controlled document

Amendments

Version	Comment	Amendment Date
Version 1	Original document approved	14 December 2004
Version 2.0 (draft)	Issued for discussion	2 March 2006
Version 2.0	Amendments to: P#9, P#20, P#22-27, P# 40-48	6 June 2006
Version 3.0	Amendments to Schedule 4	27 October 2009

The master control document is held in the Corporate Records Department and the latest approved version will be available at:

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Adopted by Council 27 October 2009

TABLE OF CONTENTS

Executive Summary

The Road Management Act 2004 sets a range of principles and activities that Road Authorities need to undertake to provide for the proper management of the road system. The City of Monash is the Road Authority for approximately 710 kilometres of local roads and their associated footpath and other assets.

This Road Management Plan has been prepared to document the principles, methods and systems used by the City of Monash in managing the local road system. The Plan has two major components:

- Road Asset Management System – A description of the systems used by Council to manage all aspects of the road system;
- Schedule of Maintenance Standards – A statement of the levels of service that the City of Monash provides in managing the local road network.

The Register of Public Roads is a separate document.

The Plan seeks to balance the competing influences that impact on the level of service adopted by Council. These include economic, technical, social, safety and environmental influences. In managing the local road system, Council seeks to establish a reasonable level of service to meet the expectations of road users and the local community.

A key driver to the preparation of the Plan is to demonstrate that Council is also managing the risks associated with the use of the various assets in the road reserve. The management of risk drives the allocation of resources within the systems used to provide the reasonable level of service.

This Plan is a dynamic document that will be reviewed regularly and checked against the current needs and expectations of the community. Council will review the performance of the Plan on an annual basis through the Budget preparation process.

ROAD MANAGEMENT PLAN

1. Introduction

Council is responsible for approximately 710 kilometres of local roads. These roads have been created over a period of 100 years or so, with the bulk of the roads being constructed in a 20-year period between the 1960's and 1980's. The current value of this asset group, road pavements, when last valued in the year 2002 is approximately $370m.

Council is responsible for the assets on the roads shown on the Register of Public Roads. Road assets include the road pavement, kerb and channel, footpaths, and line- marking, local area traffic management devices (LATMs) and traffic signs.

Arterial Roads and State Highways and Freeways (State Roads) within the municipality are maintained by VicRoads with respect to the road pavement and infrastructure relating to road drainage (kerb and channel and road pits). Council retains the responsibility for assets behind the kerb. These include footpaths, service roads, signage associated with local road system and outer separator areas.

Any roads that:

- are not State Roads for which Council is the responsible Road Authority, and;
- are included on the Register of Public Roads,

are referred to as Local Roads. The Act refers to them as Municipal Roads.

Council maintains the local road system through road management programs. These programs include:

- Maintenance – routine and non-routine maintenance for roads and footpaths.
- Capital Works – road reconstruction program, road re-sheet program, footpath replacement program.

2. Legislative Basis for Plan

This Road Management Plan (referred to hereafter as the 'Plan') is prepared in accordance with Division 5, Sections 49 to 55 of the Road Management Act 2004 (referred to hereafter as the 'Act').

The stated Purpose of the Road Management Act (2004) is to reform the law relating to road management in Victoria and amend related Acts with respect to roads.

The Act outlines the following principles and activities:

1. Establishes a new statutory framework for the management of the road network that assists the co-ordination of the various uses of road reserves for roads, paths and other infrastructure located in the road reserve;
2. Sets out certain rights and duties for road users;
3. Establishes the general principles that apply to road management;
4. Provides for the role, functions and powers of a road authority;
5. Provides for the making of Codes of Practice to provide practical guidance in relation to road management;
6. Facilitates the preparation of Road Management Plans as part of the management and maintenance system implemented by the road authority to carry out its road management function;
7. Enable the creation/ declaration and discontinuation of roads;
8. Provides a process for the declaration and classification of roads and allocation of responsibility for management and maintenance for roads;
9. Provides for the road authority to prepare and maintain a Register of Public Roads. The Council is deemed to be the "Co-ordinating Road Authority" for the roads nominated in the Register;
10. Provides for the construction, inspection, maintenance and repair of public roads;
11. Defines the road management functions of road authorities;
12. Defines the road management functions for infrastructure and works managers in providing and maintaining infrastructure contained within the road reserve;
13. Provides for issues relating to civil liability relating to the management and maintenance of road related infrastructure;
14. Provides for the mechanisms to enforce and administer the provisions of the Act;
15. Amends related Acts including:
    - Transport Act 1983
    - Road Safety Act 1986
    - Local Government Act 1989

This Plan reflects the purposes and objectives of the Council as defined in the Local Government Act, 1989.

Section 24 of the Act proposes a set of Codes of Practice. These include:

- Preparation of Road Management Plans;
- Operational responsibility for Declared Freeways and Arterial Roads;
- Clearways on Declared Arterial Roads;
- Managing Utility Infrastructure in Road Reserves
- Worksite Safety Traffic Management

At present these are only available in draft form. These will be considered for incorporation into the Plan when they are finalised.

3. Purpose of Plan

In accordance with Section 50 of the Act, the purpose of a Road Management Plan is to demonstrate with respect to:

- The objective of road management and maintenance principles, and;

- The management of road and related infrastructure works principles;

is to:

1. Establish a management system for the road management functions assigned to Monash City Council as the Road Authority for local roads;

2. Base the system on policy and operational objectives within the resources available, and;

3. Set relevant standards for carrying out management and maintenance functions for the local road system.

The major elements of a Plan may include:

- Register of Public Roads
- Road Asset Management System
- Schedule of Maintenance Standards

The Register of Public Roads for the City of Monash is available as a separate document. This Plan incorporates the latter two sections listed above.

The key stakeholders in this Plan include:

- The community in general;
- Residents and businesses abutting and using the road network;
- Pedestrians;
- Cyclists;
- Utilities with assets in the road reserve.

In preparing this Plan, road users are to be reminded of their obligations under the Road Management Act 2004, Part 8 (Amendment of Other Acts), Division 2 (Road Safety Act 1986), Section 138, a new section (17A) is to be inserted after section 17 of the Road Safety Act 1986 as follows:

17A. Obligation of Road Users

1. *A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all the relevant factors including (without limiting the generality) the:*
   (a) physical characteristics of the road
   (b) prevailing weather conditions;
   (c) level of visibility;
   (d) condition of the motor vehicle;
   (e) prevailing traffic conditions;
   (f) relevant road laws and advisory signs; and
   (g) physical and mental condition of the driver.
2. *A road user other than a person driving a motor vehicle must use a highway in a safe manner having regard to all the relevant factors.*
3. *A road user must*
   (a) have regard to the rights of other road users and take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users;
   (b) have regard to the rights of the community and infrastructure managers in relation to road infrastructure and non-road infrastructure on the road reserve and take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve; and
   (c) have regard to the rights of the community in relation to the road reserve and take reasonable care to avoid conduct that may harm the environment of the road reserve.

4. Meaning of Terms

Terms used in this Plan have the same meaning as the specific definitions included in Section 3 of the Act.

Additional terms used include:

- Days – where this term is used to describe service levels, the intent is 'normal week days', which excludes weekends and public holidays. (see note 1)
- Emergency Situations – Event or occurrence within the road reserve that creates a life-threatening hazard to road users.
- Financial Management System – Oracle Applications is used to provide the financial recording and control for Council activities.

- Geographic Information System (GIS) – Spatial related system providing map-based display of asset based features and links to databases relating to information on assets;
- Infrastructure Management System (IMS) – used by Monash to receive, record and issue works. Currently this is based on selected modules of the Confirm Asset Management System;
- Property and Rates System – The Pathways Customer Request module is used to record and issue matters reported by the community and refer those relating to road infrastructure assets to the Confirm system;
- Repair – has the same meaning as per the Road Management Act (see note 1)
- Statutory Linemarking - pavement markings (including associated RRPM's) to support signage defined as major traffic control items in accordance with Road Safety (Road Rules) Regulations 1999, Schedule2. Parking bays are excluded from this definition for the purposes of this Plan. (see note 1)
- Traffic Signs – Safety (see note 1)
    - signs associated with Major Traffic Control Items (excluding parking signs); and
    - warning signs – signage to warn drivers of potentially hazardous conditions, on or adjacent to the road, and of conditions which may require them to take evasive action

5. Roads For Which Plan Applies

The provisions of this Plan apply to those local roads and pathways shown in the Register of Public Roads as outlined in Schedule 1.

The guiding principles that apply to the selection of the roads within the City of Monash that are listed on the Register are as follows:

- Principle 1 – A local road that provides primary vehicle access to abutting properties
- Principle 2 – Local Roads are managed and maintained by Council
- Principle 3 - Council is not responsible for roads on land that has not been vested in Council
- Principle 4 – Public roads are open to and are required for use by the general community
- Principle 5 – Local Roads do not include:
    - Roads, ROWs and laneways that do not provide primary vehicle access to abutting properties;
    - Private roads and common property roads;
    - Unused, unconstructed or fenced off ROWs and laneways
    - Roads in reserves and open space areas;
    - Bike paths, walking tracks and carriageway easements;
    - Off road car parks and associated access roads.

Note 1: Definition inserted in Version 2.0 – June 2006

The Council has determined that those local roads and pathways on the Register of Public Roads are those roads that are:

1. Managed and maintained by Council, and;
2. Considered to be reasonably required for general public use.

The Register of Public Roads establishes a road hierarchy (Refer Schedule 2) and the relevant road categories are used only to differentiate service levels and maintenance standards.

The demarcation of asset ownership will be defined by the negotiation of Agreements between the Council and other road authorities in accordance with the Act. These will include agreements with:

- VicRoads and other authorities with road assets;
- Adjoining Councils (Knox, Whitehorse, Boroondarra, Stonnington, Glen Eira, Kingston, Greater Dandenong.

Such agreements will define the extent of boundary roads, private roads, arterial roads, other authority roads and structures.

This Plan does not apply to any driveway or pathway providing access from private property to a public road.

6. Level of Service

The standards specified under this Plan will maintain the local public road network at the level applicable at the time of publication of this Plan.
The levels of service identify the following activities:

- Inspection of Assets – Condition and Non Routine
- Intervention Standards
- Management Controls and Response Times

In terms of the inspection of assets, the following describe the types of inspection carried out:

Type	Description
Condition	Programmed assessment of the current condition of an asset in relation to its current serviceability at current usage levels
Non Routine	Identification of report of defect or unserviceable asset and assessment of response.

This level of service is considered reasonable as demonstrated by the outcomes of the Best Value Review for the Infrastructure Services Division and is documented in Schedule 4.

In Emergency Situations, Council is required to provide a response. The sequence of activities for an emergency response is as follows:

- Initial inspection to confirm the extent of the hazard as soon as practical;
- If hazard effects the public, reduce the extent of the hazard and if necessary barricade off the area;
- Inspect site regularly to ensure the hazard reduction measures are maintained;
- Carry out repair works within required Levels of Service.

7. Risk Assessment

The standards of construction and maintenance, as outlined in this Plan, have been determined on the basis of a risk assessment undertaken generally in accordance with the principles of the Standard AS/NZ 4360-1999. This standard is reflected in the City of Monash's Risk Management Strategy. The Strategy and Risk assessment are provided in Schedule 9.

The Best Value Review for the Infrastructure Services Division used this process to carry out a risk assessment on the operations and activities undertaken by the division..

8. Construction Standards, New Works, Upgrading, Rehabilitation

The standards for construction of new local roads and pathways, and for the expansion, upgrading, renewal and refurbishment of existing local roads and pathways will be in accordance with the standards and specifications adopted by council from time to time.

Standards for construction are generally in accordance with current VicRoads specifications appropriately defined for the City of Monash.

Council has adopted a program for the Local Road Reconstruction Priorities. (Refer Schedule 3) This is an example of Councils consideration of the Road Reconstruction program. This is reviewed annually as part of the budget process.

9. Standards of Maintenance

The standards of maintenance applicable to the local roads and pathways subject to this Plan are detailed in Schedule 4, that encapsulates:

a. The task or work expected to be undertaken;
b. The schedule of inspections to be undertaken at specified intervals:
c. The circumstances under which intervention action is to be taken with respect to repair or maintenance needs for defects reported or found on inspection;
d. Provision, as far as practicable, for the unpredictable, i.e. emergencies, natural 'disasters'; and

the schedule provides the maintenance information for Councils' assets in the following groupings:

- Roads including road surface & pavement, kerb and channel, drains and pits, fences and other structures, traffic signals, streetlights, roadside vegetation, line marking and signage.
- Footpaths constructed by Council.

Street trees and street furniture are not considered to be part of the road related infrastructure and are therefore not included in this Plan. These will be considered in separate Asset Plans.

The Plan acknowledges the importance of understanding and monitoring the linkage between workload indicator and intervention action, as a substantial increase in area of pavement or asset to be maintained can materially impact upon intervention action (and resident satisfaction and duty of care requirements) if not accompanied by a comparable increase in budget and resource allocation or productivity improvement.

Given the outcomes of the Best Value Review of Infrastructure Services, the standards of maintenance detailed in the Plan are considered reasonable in the context of the provisions of the Act.

10. Financial Resources

The commitments and obligations specified in this Plan are matched to the financial resources available to deliver those commitments and obligations.

Schedule 5 summarises the financial resources allocated for the construction, upgrading, renewal, refurbishment and maintenance of local roads and pathways.

The financial resources allocated for works on local roads and pathways have been established from historical budget allocations for these activities, responses received in customer satisfaction surveys and condition surveys previously undertaken. These allocations are considered reasonable having regard to the overall service delivery priorities of the Council and the outcomes of the Best Value Review.

The distribution of financial resources is contained within Council's Management Budget.

11. Worksite Safety within Road Reserves

All construction and maintenance work on local roads and pathways will be undertaken in accordance with the relevant occupational, health and safety legislation, codes of practice and guidelines.

For works on State Roads, VicRoads will be considering applications for works within the road reserve.

A system of permits and local laws is in place to inform and guide external contractors working in the local road reserve. For the City of Monash, these include:

Obstruction of Footpaths and Roads

Under the provision of Council's Local Law No. 3, landowners have a responsibility:

- Keep the footpath clear of vegetation growing from their property;
- Keep the footpath and road clear of items obstructing vision; and
- Not to occupy, or conduct works, on any footpath or road for any purpose other than the lawful movement of vehicular and pedestrian traffic unless otherwise permitted by Council or other appropriate authority.

Nature Strips

The Council does not maintain nature strips. Historically the abutting landowner has undertaken mowing and up-keep as a part of the presentation of their property, in terms of appearance and surface condition.

Nature strip trees are planted and maintained by Council.

Fencing Adjacent to a Road Reserve

The Council does not contribute to any fencing costs along road reserves/property boundaries.

"Asset Protection" Permit

In any case where a building permit is issued or building works are to be undertaken, the builder or the owner must prior to commencing any works on the site;

- Obtain an "Asset Protection" Permit; and
- Lodge a security deposit, if required, with the Council against any damage, which may occur to the Council's assets, located adjacent the property where the building works are to be undertaken.

Applications for an "Asset Protection" Permits are available from the Civic Centre, Glen Waverley.

"Road Occupation" Permit

A person on a road under the control of Council must not, without a permit

- Occupy or fence off part of a road;
- Erect a hoarding or overhead protective awning;
- Use a mobile crane or travel tower for any building work;

Applications for a "Road Occupation" Permit are available from the Civic Centre Glen Waverley.

"Road Opening" Permit

A person on a road under the control of Council must not, without a permit perform works within the road reserve, including:

- Make a hole or excavation; or
- Reinstate a hole or excavation.

Applications for a "Road Opening" Permit are available from the Civic Centre, Glen Waverley.

Heavy Vehicle Restrictions

Heavy vehicle restrictions apply to some roads within the boundaries of the City of Monash. It is the obligation of the road user to adhere to applicable restrictions.

- B-Doubles are not permitted on any local road without approval from the Council and a permit from VicRoads;
- Heavy vehicle parking restrictions apply within built up and residential areas;

Vehicle Crossings

Vehicle crossings (driveways) are the responsibility of the property owner. The owner must apply to Council for a permit to construct the vehicle crossover, which is to be constructed to meet current Council standards.

Vehicle Crossing Responsibilities:

- Vehicle crossing (driveway) infill between the kerb and channel and the footpath, and the footpath and the property line;
- Modified section through the kerb; and
- Footpath crossover.

The owner is also responsible for maintaining the vehicle crossing in a safe condition.

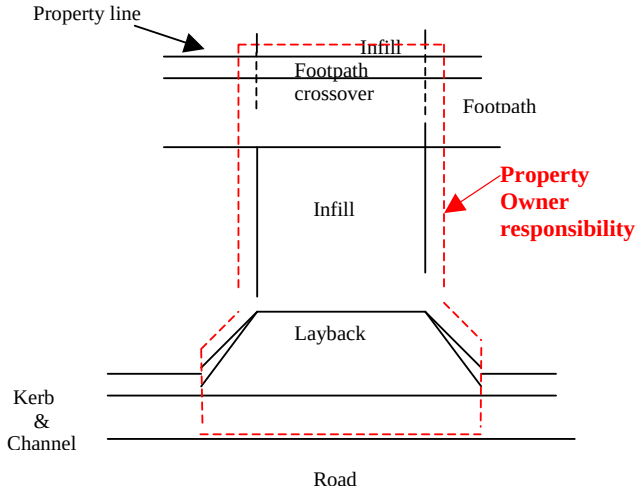


Figure: Extent of Landowner Responsibility

On Arterial Roads, the property owner must contact VicRoads to obtain their approval for works.

12. Quality Assurance

Construction and maintenance services within the City of Monash are delivered with the following systems in place to ensure the ongoing delivery of the adopted Levels of Service for roads.

- Quality Assurance to ISO 9001 (2000)
- Safety Map accreditation

Schedule 6 details the quality management system that has been established to ensure that the requirements of the Plan are met and so thereby provide the requisite level of duty of care to meet community expectations.

The aim of the quality management system is to:

- Provide greater 'ownership' of work by all staff and maintain a quality culture;
- Ensure that unforseen circumstances can be addressed in a systematic and cost-effective way;
- Ensure that there is a structured approach to reviewing processes when things go wrong, with the view to preventing recurrences;
- Enable all stakeholders to clearly understand their role through the use of easily understood process maps;
- Provide a structured way of eliminating waste, rework, duplication and non-value adding tasks, hence cutting costs and/or improving service delivery;
- Ensure that external contractors meet their contractual obligations and the requirements of the Plan;
- Ensure that all processes are current and appropriate for the contemporary environment;
- Ensure that both existing and new staff remain or become familiar with the process requirements; and
- In the context of Best Value, provide means by which continuous improvement in methods, procedures, standards, service delivery and efficiency can be achieved.

13. Customer Service Requests

The City of Monash uses a series of interlinked systems to manage Customer Service requests. The systems used are:

- Pathways to log on and track customer service requests;
- Confirm works management system to issue and track work orders and record works undertaken on individual road assets.

A summary of the processes and systems that have been established to receive and deal with service requests, complaints is provided in Schedule 7, and other information from

users and the community, including information regarding emergency situations occurring outside normal working hours and those circumstances that might develop into claims against the Council or other parties (refer to Sections 115 and 116 of the Act).

Schedule 7 also outlines the procedures for collecting and storing information regarding road asset condition to assist in the development of maintenance programs and the allocation of maintenance tasks.

The processes and systems encapsulated in Schedule 7 provide for the recording of:

- Defects or other matters requiring repair or maintenance found on inspection or reported to the Council;
- The nature, location and time of the proposed repair and maintenance works;
- When the necessary repair and maintenance works have been completed;
- Name and address of person reporting the defect(s);

The quality management system detailed in this Plan provides for the regular monitoring and review of users' and community service requests, complaints and information regarding the nature and standard of responses.

14. Duty to Inform Service Provider or Works and Infrastructure Manager

If in the course of meeting it obligations under this Plan, the Council becomes aware that any road and non-road infrastructure for which an external service provider or works and infrastructure manager is responsible:

- Is not in the location shown in the relevant records; or
- Appears to be in an unsafe condition; or
- Appears to be in need of repair or maintenance,

the Council will convey that information in writing to the relevant service provider or works and infrastructure manager in accordance with the QA processes for reporting Damage to 3rd Party Assets.

Service Authorities that have assets in the local road reserves include:

- South East Water/ Yarra Valley Water – sewers and associated pits, water mains, valves
- Alinta – gas and power services
- VicTrack – rail tracks and crossings, overhead cables
- Telstra, Optus – overhead and underground cables and pits
- United Energy – poles, overhead and underground cables
- VicRoads – road pavement and kerbing, traffic signals, signage and bus stops.
- Melbourne Water – Water mains, Main drains;
- GasNet, Multi Net –
- Commuter Bus Companies

This also applies to their successor organisations.

15. Management Systems

In carrying out its responsibilities under the Act for the Local Road system, Monash uses a number of integrated systems to record, process, issue and track the various activities being undertaken. These are:

- Property and Rates System - Pathways Customer Request System
- Infrastructure Management System – Confirm Asset Management System
- Quality Management System – 2nd Party Accreditation to ISO 9001 (2000)
- Safety Map Accreditation

These are further detailed in Schedules 6 and 7.

16. Performance Management

In accordance with the Best Value principles and good management practice, a performance measurement, monitoring and reporting regime will operate as outlined in Schedule 8.

This performance management regime is based on key performance indicators relating to those intervention levels and standards of maintenance that are crucial to ensuring that the council meets its duty of care obligations under the Act. This regime also includes processes for receiving regular feedback from samples of road users and the community pertinent to the key performance indicators.

The Council's asset management performance, against planned targets and key performance indicators, will be reported to the community through the Council's Annual Report.

17. Plan Review

This Plan as part of the QA process will be reviewed at least annually having regard to:

- Asset performance following delivery of maintenance program;
- The level of achievement of asset management strategies against the expected benefits to road users, stakeholders and the community; and
- The consideration of any external factors that are likely to influence the contents of this Plan.

Improvements to this Plan will be included in Plan Reviews. Such improvements will include:

- Refinements to Register of Public Roads;
- Confirmation of appropriate resource allocation to achieve inspection and response targets

18. Supporting Documents

In managing the system of public roads within the City of Monash, a number of documents and references have been used as sources in the preparation of this Plan. The documents are not be considered as forming part of this Plan. These include:

Technical References

- MAV Asset Management Improvement STEP Program – Road Asset Plan Framework 2003
- International Infrastructure Management Manual (IIMM) 2006
- Standard Specifications for Road works and Bridgeworks – VicRoads as updated.

Council Documents and Procedures

- Our Vision Monash – A Thriving Community - Business Plan 2003-2004 – City of Monash
- Monash 2012 – City of Monash
- Specification for Line marking – City of Monash
- Specification for Crack sealing Pavements – City of Monash
- Specification for Supply and Placement of Bituminous Products – City of Monash
- Specification for Concrete Reinstatement & Grinding, Saw cutting & Minor Drainage Works – City of Monash
- Specification for Asphalt Repairs – City of Monash
- Specification for Paving Maintenance – City of Monash
- Asset Management Plan – Pathway Assets – City of Monash - (Internal Document)
- Asset Management Plan – Road Pavement – City of Monash – (Internal Document)
- Asset Management Plan – Structures – City of Monash – (Internal Document)

CITY OF MONASH

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 1 – Register of Public Roads

Register of Public Roads

The City of Monash Register of Public Roads is a map based display of the road system within the municipality. These maps are incorporated into the Corporate GIS System. The City is divided into 31 map areas. The Plan for each map area displays the road system. Roads are differentiated by colours into the following categories:

- Public Roads
- Private Roads
- VicRoads responsibility
- Right of way – Public (Sealed and Un-sealed)
- Rights of Way
- Other Council

The Register is prepared in accordance with the requirements of Section 19 of the Act. The City of Monash is the Co-ordinating Authority for the following:

- Public Roads
- Rights of Way – Public (Sealed and Unsealed)

The GIS system includes the following information for those roads for which The City of Monash is the Co-ordinating Road Authority:

- Name of the road
- Date of creation as a public road

All public roads are either: (see note 1)

- Category 1 Roads – high usage and around major retail precincts
- Category 2 Roads – all other public roads (not category 1 or 3)
- Category 3 Roads – Rights of Way

for the purpose of this Register.

Copies of the GIS display maps are available for viewing at the Civic Centre, Springvale Road, Glen Waverley.

Note 1: Road categories inserted. Categories 1 & 2 replaced ‘public/local road’ category in Version 2.0 – June 2006

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 2 – Hierarchy of Roads

The following Table defines the Hierarchy of Roads used within the City of Monash

Table 1– Hierarchy of Roads

Classification of Road	Definition	Community Understanding	Examples
Arterial	Multi lane roads carrying traffic through suburbs Primarily used for inter-suburban travel	Roads used for inter-suburban travel Roads with series of traffic signals	Springvale, Blackburn, High Street Road, Ferntree Gully Road
Category 1 Roads (see note 1)	a) Primarily provide a route between and through residential, industrial and commercial areas and to convey traffic to the arterial network; or b) Roads within major retail precincts that are subject to high pedestrian traffic	Busy roads that provide links between the arterial roads and/or busy roads in major shopping centres	a) Generally are highly trafficked roads. Eg Gallaghers Rd, Wanda St b) Roads in the major retail precincts (Oakleigh, Mt Waverley, Clayton and Glen Waverley). Eg Kingsway
Category 2 Roads (see note 1)	All public roads that are not arterial roads; or Category 1 or 3 public roads. Provide access to properties. Low speed environment.	Provides for travel within the suburbs and access to properties. Expect to be used by cars, pedestrians, bicycles etc	Eg. Petronella Ave, Grenfell Road, (most streets in municipality)
Category 3 (see note 1)Public Road/ Right of Way (ROW's) –	Limited and secondary access to properties Single lane in nature	Limited access for properties and vehicles Walking speed traffic	Lanes for deliveries behind shopping centres eg lane behind Syndal strip shopping centre
Non Public Road (ROW)/ Private Road	Provides limited access to properties Land owned privately	Road may be gated off in providing access to properties	Pinewood Shopping Centre – Central area, Enterprise Court

Note 1: Categories 1 & 2 replaced "public/local road category" in Version 2.0 – June 2006

Table 2 – Hierarchy of Footpaths

Sensitivity	Description	Frequency of Inspection	
		Surface Type 1 (see note 1)	**Surface Type 2** (see note 1)
High	Major Shopping Centres refer to hierarchy schedule	1 month	1 year
Medium	Minor Shopping Centres, refer to hierarchy schedule	3 months	1 year
Low	All other roads	1 year	As per road pavement inspection schedule **(see note 2)**

Surface Type 1 –Segmental paving

Surface Type 2 – Concrete or asphalt paving

Refer also to Schedule 4

Note 1: Terminology 'surface type' replaced 'category' to eliminate confusion with road hierarchy changes. Version 2.0 - June 2006
Note 2: Frequency of inspection changed from '2 years' to match frequency of road inspections. Version 2.0 - June 2006

Schedule of Footpaths of High and Medium Sensitivity
(High Sensitivity Sites in Bold)

Map No.	Site Description	Street Name	From	To	Sensitivity	Surface Type (see note 1)
1	Ashwood Shopping Centre	Warrigal Rd	Douglas St	High St Rd	Medium	1
	Yertchuk Av Shops	Yertchuk Av	Arthur St	No 22 Yertchuk Av	Medium	1
2	Barlyn Rd Shops	Barlyn Rd	Huntingdale Rd	ROW	Medium	2
	Andrew St Shops	Andrew St	Highbury Rd	ROW	Medium	1
3	Leeds Rd Shops	High St Rd	Leeds Rd	ROW	Medium	2
	Tally Ho Shops	Blackburn Rd	Lucerne St	ROW	Medium	2
	Syndal Shopping Centre	High St Rd	Larch Crs	Blackburn Road	Medium	1
		Blackburn Rd	No 185	High Street Road	Medium	1
4	Willow Avenue Shops	Willow Ave	Medina Rd	ROW	Medium	1
6	Holmesglen Shops	Warrigal Rd	Rail Line	Batesford Rd	Medium	1
	Batesford Road Shops	Batesford Rd	Woonah St	Power Ave	Medium	1
	Cleveland St Shops	Cleveland St	High St Rd	Mavron St	Medium	1
	Jordanville Shops	Huntingdale Rd	Railway Pde Sth	ROW	Medium	2
7	Waverley Rd Shops	Huntingdale Rd	No 414	Waverley Rd	Medium	2
	Mt Waverley Shopping Centre	Alexander St	Full length		High	1
		Hamilton Pl	Full length		High	1
		Winbourne Rd	Alexander St	Stephensons Rd	High	1
		Virginia St	Alexander St	Stephensons Rd	High	1
	Wadham Parade Shopping Centre	Wadham Pde	Miller Cres	No 45 Wadham Pde	Medium	2
8	**Mt Waverley Shopping Centre**	Stephensons Rd	Railway Line	No 318 Stephensons Rd	High	1

Map No.	Site Description	Street Name	From	To	Sensitivity	Surface Type (see note 1)
	Syndal Shopping Centre	Blackburn Rd	High St Rd	Price Av	Medium	2
9	Syndal Shopping Centre	Blackburn Rd	High St Rd	No 260A Blackburn Rd	Medium	1
	Glen Waverley North Shops	High St Rd	No 676 High Street Rd	No 706 High Street Rd	Medium	1
	Glen Waverley Shopping Centre	Kingsway	Bogong Av	O'Sullivan Rd	High	1
		Snedden Dve	O'Sullivan Rd	High St Rd	High	1
		O'Sullivan Rd	Kingsway	Springvale Rd	High	1
		Railway Pde-North	Euneva Av	Springvale Rd	High	1
		Coleman Pde	Myrtle St	Springvale Rd	High	1
		Bogong Av	Kingsway	Myrtle St	High	1
		Montclair Av	Myrtle St	Kingsway	High	1
		High Street Rd	Springvale Rd	Snedden Dv	High	1
		Springvale Rd	High St Rd	Kingsway	High	1
	Glen Waverley South Shops	Springvale Rd	Richard St	Waverley Rd	Medium	2
10	Kerrie Rd Shops	Kerrie Rd	High St Rd	ROW	Medium	2
11	Dominion Ave Shops	Waverley Rd	Dominion Ave	ROW	Medium	2
13	Stanley Avenue Shops	Stanley Avenue	Ian Gve	ROW	Medium	2
	Bellerive Ave Shops	Bellerive Ave	Stephensons Rd	ROW	Medium	2
14	Pinewood Shopping Centre	Centreway	Pinewood Dve	No 27 Centreway	Medium	1
		Blackburn Rd	No 425 Blackburn Rd	Centreway	Medium	1
15	Glenwood Ave Shops	Glenwood Ave	Waverley Rd	Juniper Ave	Medium	2

Map No.	Site Description	Street Name	From	To	Sensitivity	Surface Type (see note 1)
18	Hughesdale Shopping Centre (East side)	Poath Rd	Paget St	Arthur St	Medium	1
19	Warrigal Rd Shops	Warrigal Rd	North Rd	No 170	Medium	2
	Oakleigh Shopping Centre	Drummond St	Logie St	Atherton Rd	High	2
		Atherton Rd	Warrigal Rd	Drummond St	High	2
		Atherton Rd	Drummond St	Palmerston Grove	High	1
		Atherton Rd	Palmerston Gve	Clyde Street	High	2
		Hanover St	Atherton Rd	Burlington St	High	1
		Chester St	Jones St	Hanover St	High	1
		Portman St	Jones St	Hanover St	High	1
		Jones St	Atherton Rd	Chester St	High	2
		Station St	Atherton Rd	Portman St	High	2
		Eaton Mall	Full Length	Full Length	High	1
	Huntingdale Rd Shops	Huntingdale Rd	Croft St	North Rd	Medium	1
20	Huntingdale Rd Shops	Huntingdale Rd	Hargreaves St	North Rd	Medium	1
	East Oakleigh Shopping Centre (State Street)	Huntingdale Rd	No 184 Huntingdale Rd	Princes Hwy	Medium	2
	Berrima Street Shopping Centre	Berrima St	No 9 Berrima St	No 23 Berrima St	Medium	2
21	Shopping Centre	Princes Highway	Clayton Rd	Glenbrook Av	Medium	2
22	Westerfield Drive Shops	Westerfield Dv	Samada St	No 49 Westerfield Dv	Medium	2
23	Brandon Park Shopping Centre	Springvale Rd	Ferntree Gully Rd	Magid Av	Medium	2
		Ferntree Gully Rd	Springvale Rd	Brandon Park Dv	Medium	2
		Magid Av	Springvale Rd	Brandon Park Dv	Medium	2
		Brandon Park Dv	Springvale Rd	Magid Av	Medium	2
	Lum Road Shopping Centre	Lum Rd	No 200 Brandon Park Dv	No 212 Brandon Park Dv	Medium	2

Map No.	Site Description	Street Name	From	To	Sensitivity	Surface Type (see note 1)
	Shopping Centre	Clunies Ross Dv	No 39 Clunies Ross Dv	Monash Dv	Medium	2
26	**Clayton Shopping Centre**	Clayton Rd	Centre Rd	No 299 Clayton Rd	High	1
		Cooke St	Centre Rd	Dunstan St	High	2
		Dunstan St	Cooke St	Clayton Rd	High	2
		Carinish Rd	Madeleine Rd	Clayton Rd	High	2
27	**Clayton Shopping Centre**	Clayton Rd	Centre Rd	Carinish Rd	High	1
		Haughton Rd	Clayton Rd	Thomas St	High	2
		Carinish Rd	Clayton Rd	Mary St	High	2
	Shopping Centre	Centre Rd	No 1459 Centre Rd	No 1485 Centre Rd	Medium	2
	Shopping Centre	Clayton Rd	No 162 Clayton Rd	No 176 Clayton Rd	Medium	2
28	Gateway Shopping Centre	Springvale Rd	Princes Hwy	Wilma Av	Medium	1
29	Mackie Rd Shops	Mackie Rd	No 71 Mackie Rd	No 81 Mackie Rd	Medium	2
	Dunoon Crt Shops	Dunoon Crt	Full length	Full length	Medium	2
	Wanda St Shops	Wanda St	No 26 Wanda St	No 50 Wanda St	Medium	2
30	Shopping Centre	Hansworth St	No 114 Hansworth St	No 122 Hansworth St	Medium	2
	Waverley Gardens Shopping Centre	Police Rd	Hansworth St	Jacksons Rd	Medium	2
		Hansworth St (west side)	Police Rd	Opp Locarno Ct	Medium	2

Note 1: Terminology ‘surface type’ replaced ‘category’ to eliminate confusion with road hierarchy changes. Version 2.0 - June 2006

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 3 – Standards for Construction, Expansion, Upgrading, Renewal and Refurbishment

VicRoads

STANDARD SPECIFICATIONS FOR ROADWORKS AND BRIDGEWORKS

INDEX

			Last Updated
CONCRETE PAVEMENTS			
Section	501	Materials and Construction Plant for Concrete Base and Subbase Pavement Courses	July 1999
	502	Construction of Lean Mix Concrete Subbase Pavement Courses	July 1993
	503	Construction of Concrete Base Pavement Courses	July 1993
	520	Materials and Construction Plant for Roller Compacted Concrete Pavement Courses	February 1995
	521	Construction of Roller Compacted Concrete Base Courses	July 1993
BRIDGEWORKS			
Section	602	Excavations	July 1993
	603	Cofferdams	February 1995
	604	Cylinders	July 1993
	605	Driven Piles	February 1997
	606	Bored Cast-In-Place Piles (without Permanent Casing)	July 1999
	608	Cast-In-Place Socketed Piles (with Permanent Casing)	July 1999
	610	Structural Concrete	July 2000
	611	Steel Reinforcement	February 1995
	612	Post-Tensioning	July 2002
	613	Falsework	February 1995
	614	Formwork (Cast-In-Situ Concrete)	July 1993
	619	Manufacture, Testing and Delivery of Precast Reinforced Concrete Box Culverts	February 1995
	620	Precast Concrete Units	July 1999
	622	Pre-Tensioning of Concrete Units	July 2002
	626	Installation of Precast Concrete Crown Unit Culverts	July 1993
	630	Fabrication of Steelwork	July 2000
	632	Corrugated Steel Pipes	July 1993
	641	Zinc-In-Silicate Coating	July 1993
	652	Supply of Elastomeric Bearings	July 1993
	653	Pot Type Confined Elastomeric Bearings	February 1998
	656	Installation of Elastomeric Bearings and Pads	July 1993
	660	Deck Expansion Joints	February 1998
	670	Steel Bridge Barriers	July 1999
	671	Concrete and Combined Concrete and Steel Bridge Barriers	July 1999
	675	Cast Steel Railing Posts and Sleeves	July 1999
	682	Reinforced Soil Structures	July 1999
	683	Soil Nail Walls	July 1998
	684	Sprayed Concrete	September 2001
	685	Anti-Graffiti Protection	February 1998
	686	Coating of Concrete	July 2000
	687	Repair of Concrete Cracks	September 2001
	690	Materials to be Supplied by VicRoads	July 1993

		Last Updated
INCIDENTAL CONSTRUCTION		
Section 701	Underground Stormwater Drains	July 1997
702	Subsurface Drainage	July 1996
703	Cast-In-Place Concrete Edgings, Paths and Other Surfacings	February 1998
704	Precast Concrete Kerb	February 1998
705	Drainage Pits	February 1998
706	Installation of Utility Services within Road Reserves	July 1993
707	Fencing	February 1995
708	Steel Beam Guard Fence	September 2001
709	Guide Posts	February 1995
710	Fixing Raised Pavement Markers	July 1998
712	Block Paving	July 1993
713	Beaching	July 1996
714	Erection of Signs	July 2000
720	Landscape Works	September 2001
721	Pavement Markings - General	July 2002
722	Pavement Markings – New Surfacings	July 2002
733	Service Ducts, Conduits and Pits	July 2000
750	Routine Maintenance	September 2001
752	Routine Roadside and Reserve Maintenance	February 1995
MATERIALS		
Section 801	Source Rock for the Production of Crushed Rock and Aggregates	July 1996
802	Bituminous Cold and Warm Mixes	February 1995
811	Gravel, Sand and Soft or Ripped Rock for Base and Subbase Pavement	February 1998
812	Crushed Rock and Plant Mixed Wet-Mix Crushed Rock for Base and Subbase Pavement	July 2000
815	Cementitiously Treated Crushed Rock for Subbase Pavement	July 2002
818	Crushed Scoria for Base and Subbase Pavement	July 1993
820	Recycled Crushed Concrete for Pavement Subbase and Light Duty Base	September 2001
821	Cementitiously Treated Crushed Concrete for Pavement Subbase	July 2002
831	Aggregate for Sprayed Bituminous Surfacing	July 2002
832	Sands for Sprayed Bituminous Surfacing	July 1993
853	Hot Melt Bitumen Adhesive for Raised Pavement Marker Installation	February 1994
860	Manufacture of Road Signs	July 1998

SAMPLE OF THE ESTABLISHMENT OF COUNCILS LOCAL ROAD RECONSTRUCTION PROGRAM - REPORT TO COUNCIL MEETING 12 JUNE 2001

5.10 LOCAL ROAD RECONSTRUCTION PRIORITIES

(CC:TRAF12, ROADS32)
Responsible Director: Don Cameron

RECOMMENDATION

1. *That the Council notes that the Victorian Grants Commission funding for the municipality's local road reconstruction will reduce from $949,190 in 2000/2001 to $350,000 in 2003/2004, due to a change in the distribution formula by the Grants Commission.*

2. *That the Council adopts the amended local road reconstruction priority program as per Attachment A to this report, for the development of future Capital Works programs with the implementation of the program being subject to the decrease in Victorian Grants Commission funding levels.*

INTRODUCTION

Council adopted a " 4 year road reconstruction program" on the 27 February 2001, based on the expected level of funding at that time. However the Victorian Grants Commission has now advised Council that a significant reduction in the grants commission funding will occur over the next 3 financial years. At this stage there has been no change to the Federal "Roads to Recovery" program of approx. $709,000/annum over the next 4 financial years however this was linked to the Grants Commission formula at the time of the announcement.

This report re-evaluates the road reconstruction program based on a priority ranking system for the expected funding levels including the "Roads to Recovery" program and the decrease in funding from the Victorian Grants Commission.

BACKGROUND

The road reconstruction program was re-evaluated in February 2001. This report now recommends reducing the number of roads to be reconstructed to reflect the decrease in Victorian Grants Commission funding. Table 3 in Attachment A are the roads that have been removed from the "4 year road reconstruction program" as a consequence of the reduced funding.

ANALYSIS

The Victorian Grants Commission has reduced funding for local road reconstruction and re-sheeting from an expected $950,000 in 2000/2001 to $350,000 in 2003/2004, as shown in Fig. 1.

FIGURE 1 – Road Funding

FINANCIAL YEAR FUNDING SOURCE	2000/2001 $	2001/2002 $	2002/2003 $	2003/2004 $	2004/2005 $
Victorian Grants Commission (1)	949,190	771,000	581,000	379,000	391,000
Council Reconstruction	480,000	480,000	480,000	530,000	530,000
Council resheet	300,000	300,000	300,000	400,000	450,000
Federal Roads To Recovery	354,412	709,000	709,000	709,000	354,000 (2)
TOTAL	2,083,602	2,260,000	2,070,000	2,018,000	1,725,000

(1) Includes funding for road reconstruction and resheeting and incorporates 3% inflation adjustment (as advised by Grants Commission).

(2) Last year of program.

Council in the 4-year budget is proposing to increase internal funding for road reconstruction and resheeting by $50,000 and $100,000 for the 2003/2004 year. Despite this, as a consequence of the reduction of Grants Commission roads funding, there will be a substantial reduction in total road funding particularly when the "Roads to Recovery" program finishes. Accordingly, a number of roads on Council's 4 year road reconstruction program will need to be delayed.

Table 1 is a re-tabulation of roads for reconstruction and highlights projects for consideration in the next 4 years predicated on the current funding levels. Table 2 is a re-tabulation of roads for reconstruction funded by the Federal Government's "Roads to Recovery" program over the next 4 years.

Table 3 is a tabulation of roads (un-prioritised) that have been removed from Tables 1 and 2 as a consequence of the reduced Victorian Grants Commission funding.

The priority order for roads listed (in Tables 3 & 4) beyond the 4 year program will need to be re-evaluated in the future.

The above proposals will reasonably address the immediate issues relating to road refurbishment and reconstruction. Agreement to the priority listing provides for advanced project planning and design to be carried out.

IMPLEMENTATION

Using the current 4 Year Base Capital Program funding amounts for road reconstruction works, the 28 (increased from 21) non-prioritised roads could be undertaken within a 10 year (increased from 6 year) time frame following this current program. Other roads not currently identified for reconstruction will need to be considered at the end of the current 4-year, reconstruction program.

CONCLUSION

It is proposed that Attachment A Tables 1 & 2 which outlines the 4 year road reconstruction program 2001/2002 – 2004/2005 for both current and "Roads to Recovery" funding be adopted as the outline road reconstruction program for Monash.

Adoption of the subject road construction priority list in Attachment A will establish a priority of local road reconstruction for consideration in annual budgets for at least the next 4 years after which it will be re-evaluated.

ATTACHMENT A

PERIOD 2001/2002 – 2004/05

TABLE 1 – Using Current Funding

(excludes Road Resheeting)

	Map No.	Street/Road	Section	Length (m)	Estimated Cost
01/02	18	Poath Road(half width)	Willesden Rd – Princes Hwy	750	$375,000
	18	Bletchley Road	Euston Rd - Neerim Rd	270	$170,000
	19	Howden Street	Ferntree Gully Rd – Princes Hwy	160	$120,000
02/03	19	Regent Street	Burlington St – Atherton Rd	300	$220,000
	25	Bossington St	Golf Rd – Warrigal Rd	370	$290,000
	11	*Waverley Road	Jells Park – WWSC entrance	200	$50,000
03/04	25	Taunton Avenue	Bossington St – Picadilly St	280	$220,000
	25	Reid Street	Warrigal Rd – Cul de sac	200	$150,000
04/05	19	Schoolhall Street	Golf Links Ave – Warrigal Rd	480	$340,000

PERIOD 2001/2002 – 2004/05

TABLE 2 – Federal "Roads to Recovery" Program Funded

	Map No.	Street/Road	Section	Length (m)	Estimated Cost
01/02	25	*Alleford Street	Warrigal Rd – Golf Road	380	$300,000
	25	Summerset Avenue	Bossington St – Picadilly St	280	$220,000
	19	Palmerston Grove	Atherton Rd – cul de sac	200	$180,000
02/03	25	Devoy Street	Golf Rd – Warrigal Rd	370	$280,000
	25	Delos Street	Delia St – Devoy St	290	$220,000
	18	*Bowmore Street	Poath Rd – Hughes Pl	210	$160,000
03/04	19	Haughton Road	Gadd St – Princes St	425	$340,000
	19	Haughton Road	Gadd St – Moroney St	455	$364,000
04/05	25	Delia Street	Golf Rd – Warrigal Rd	610	$470,000
	25	Dermont Street	Delia St – Devoy St	290	$230,000

TABLE 3 – Roads previously on 4 year program(as per Council report 27/02/2001) now unprioritised

Map No.	Street/Road	Section	Length (m)	Estimated Cost
19	Downing Street	Burlington Rd – Atherton Rd	300	$250,000
19	Andrew Street	Wilson St – North Rd	250	$200,000
19	Andrew Street	North Rd - Haughton Rd	300	$270,000
19	Westminster Street	Burlington Rd – Atherton Rd	300	$220,000
25	Picadilly Street	Golf Rd – Warrigal Rd	370	$290,000
25	Dalgan Street	Delia St – Devoy St	290	$230,000
15	Westgate Street	Queens Ave – North Rd	640	$480,000

FUTURE PROJECTS
TABLE 4 – Unprioritised roads

Map No.	Street/Road	Section	Length (m)	Estimated Cost
19	Hatter Street	North Rd – Cul de sac	610	$470,000
19	Eastgate Street	North Rd – School Hall	290	$230,000
19	Eastgate Street	School Hall - Queens Ave	350	$270,000
19	Young Street	Haughton Road - North Rd	480	$370,000
19	Railway Avenue	Parkside Ave – Huntingdale Rd	480	$370,000
27	Kanooka Grove	Wright St – Carinish Rd	560	$430,000
27	Kanooka Grove	Wright Street - Cul de sac	300	$230,000
19	Hamilton Street	Edward St – Railway Ave	330	$255,000
12	Allen Street	Drummond St – Warrigal Rd	210	$160,000
12	Caloola Avenue	Drummond St – Warrigal Rd	210	$160,000
18	Simmonds Street	Dallas Ave – North Rd	425	$330,000
18	Long Place	Dallas Ave – North Rd	425	$330,000
19	Johnson Street	Mora Ave – Mill St	70	$60,000
18	Wilbur Crescent	Euston Road – Neerim Road	220	$170,000
18	Ellendale Street	Poath Road – Hotham St	250	$195,000
19	Edward Street	Westminster St – Huntingdale Rd	860	$660,000
19	Moller Street	Croft Street – Railway Ave	200	$160,000
19	Abbeygate Street	North Rd – School Hall	290	$220,000
19	Abbeygate Street	School Hall – Eastgate St	310	$240,000
25	Selworthy Avenue	Bossington St – Picadilly St	300	$230,000
18	Callander Street	Poath Road – Hughes Pl	210	$160,000

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 4 – Standards of Maintenance

- **Schedule of Inspections**
- Schedule of Intervention Levels and Response Actions

Schedule 4A – Inspection of Road Assets

Asset	Condition Inspection	Non Routine
Road Pavement (see Note 1) • **Category 1** (includes assets on arterial roads where Council is the responsible authority) see note 6 • **Category 2** • **Category 3**	2 Years (see note 7) 3 Years (see note 2) 3 Years (see note 2)	**For all categories:** As reported by the community or observed by staff. Assess within 5 days.
Kerb and Channel	As per road pavement above (see note 2)	As reported by the community or observed by staff. Assess within 5 days.
Drainage/ Table Drains	Stormwater pits are to be inspected at the same frequency as the kerb and channel or, if part of the footpath, the same frequency as the footpath inspection (see note 8)	As reported by the community or observed by staff. Assess within 5 days.
Footpaths (see note 3) • High Sensitivity –Surface Type 1 • High Sensitivity –Surface Type 2 • Medium Sensitivity - Surface Type 1 • Medium Sensitivity – Surface Type 2 • Low Sensitivity - Surface Type 1 • Low Sensitivity – Surface Type 2	1 Month 12 Months 3 Months 1 Year 1 Year As per road pavement above (see note 2)	As reported by the community or observed by staff. Assess within 5 days.
Traffic Signs	As per road pavement above (see note 2)	As reported by the community or observed by staff. Assess within 5 days.
Linemarking, includes reflective pavement markers (see note 4) Statutory linemarking (excluding parking bays)	As per road pavement above (see note 2)	As reported by the community or observed by staff.
Traffic Signals • Council	In accordance with the Traffic Signal Maintenance agreement with VicRoads.	As reported by the community or observed by staff. Assess within 2 days.
Streetlights (Council owned) • Electrical • Structural	In accordance with maintenance agreements and/or Public Lighting Code, by the relevant Service Authority (see note 5)	As reported by the community or observed by staff. Assess within 5 days.

Asset	Condition Inspection	Non Routine
Bridges	Level 1 – 2 Years (alternate years to Level 2 inspections) Level 2 – 2 Years	As reported by the community or observed by staff. Assess within 5 days.
Road side Vegetation	Not subject to this RMP (see note 9)	
Fencing	As per road pavement above (see note 2)	As reported by the community or observed by staff. Assess with 5 days
Retaining Walls (see note 10)	2 years	As reported by the community or observed by staff. Assess with 5 days

Note 1: Inserted categories 1, 2 & 3 to replace 'sealed/unsealed road' categories – Version 2.0, June 2006
Note 2: Inserted to replace '2 years' – Version 2.0 – June 2006
Note 3: Inserted 'surface type' to replace 'category'– Version 2.0 – June 2006
Note 4: Inserted 'includes reflective pavement markers'. Parking bays now excluded from statutory linemarking. Advisory and bike lane linemarking no longer included.
Note 5: Inserted to replace '2 years' – Version 2 – June 2006
Note 6: Added comment to include arterial roads in Category 1 – Version 3 – October 2009
Note 7: Amended inspection frequency – Version 3 – October 2009
Note 8: Deleted reference to 'preventative maintenance schedule' – Version 3 – October 2009
Note 9.: Deleted - Vegetation not considered "road infrastructure" – Version 3 – October 2009
Note 10: Inserted – retaining walls are defined as "road infrastructure" in the Act – Version 3 - October 2009

Schedule 4B – Intervention Standards and Management Controls

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Road Pavements – Sealed	1. Potholes	Hole in road surface extending into base material	Greater than 300 mm diameter and 50 mm deep	Holes less than 2 sq m – repair, greater than 2 sq m dig out and patch.	Assess – 5 days. Category 1 – repair within 10 days, Category 2/3 – repair within 20 days (see note 1)
	2. Surface condition	Deterioration of road surface requiring repair	Defects include polishing, delamination, ravelling, stripping of greater than 50% of surface.	Refer to resheet program for assessment and prioritisation	Category 1 – repair within 12 months. Category 2/3 – repair within 2 years (see note 22)
	3. Cracking (see note 21)	Delete this defect from the RMP			
	4. Pavement Failure	Loss of shape and geometry of road structure such as shoving, wheel ruts, depressions	Depth greater than 50 mm over 3 m length and/or extent of movement is causing vehicles to slow or deviate.	Refer to road reconstruction/ rehabilitation program	Category 1 – repair within 20 days, Category2/3 – repair within 2 years (see note 22)
	5. Slippery materials spilt on pavement traffic lanes	Materials, such as oil, have been spilt on the pavement within traffic lanes	Area affected greater than $1m^2$	If necessary, divert traffic and apply absorbent material	Assess and reduce hazard – within 12 hours.
Road Pavements - Unsealed	1. Potholes	Hole in road surface extending into base material	Greater than 1000 mm diameter and 150 mm deep	Fill potholes with granular material	Assess – 10 days, Repair within 30 days,
	2. Pavement Failure	Loss of shape and geometry of road structure such as, wheel ruts, depressions	Depth greater than 150 mm over 3 m length.	Fill potholes with granular material	Assess – 10 days, Repair within 60 days,

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Kerb and Channel	1. Displacement	Break in bay(s) resulting level difference between sections or change in alignment of K&C along length	Displacement greater than 50 mm	Replace effected length of bays to restore water flow	Category 1 – repair within 12 months. Categories 2/3 – repair within 2 years (see note 22)
	2. Cracking (see note 21)	Delete this defect from the RMP			
	3. Ponding of water	Section of K&C where water collects and does not drain away.	Ponding of greater than 50 mm	Replace effected length of bays to restore water flow	Category 1 – repair within 12 months. Category 2/3 – repair within 2 years (see note 22))
Drainage (see note 6)	1. Blocked throat	Entry of pit blocked by debris	Blockage causes water to pond across through lanes to a minimum depth of 50 mm (see note 5)	Clear blockage	Category 1 – clear within 10 days. Category 2/3 – clear within 30 days (see note 1)
	2. Broken lintel (see note 7)	lintel is broken	Lintels missing or extensively damaged.	Replace lintel	Category 1 - 30 days, Categories 2/3 – 3 months (see note 8)
	3.Missing or damaged pit lid	Defect is a safety hazard.	Hole is sufficient for person to be injured	Temporary board cover then replace pit cover or lid, and/ or barricade is required	Reduce hazard within 1 working day, replace within 5 days

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Table Drains	1. Water ponding or deflecting out of the drain	Obstruction in drain	Drain cross sectional area reduced by >50% or water diverting out of drain	Clear obstruction	Assess – 5 days, Repair within 60 days
	2. Scour (see note 21)	Delete this defect from the RMP			
Footpaths • Concrete	1. Cracking	Breaks in footpath other than at joints	Condition Level 4 – High & Medium Sensitivity areas; Condition Level – 5 – all areas (see note 9)	Grinding; replacement	Condition level 4 - High & medium sensitivity – repair within 10 days Condition level 5 – High & medium sensitivity – repair within 5 days. Low sensitivity – repair within 10 days (see note 22)
	2. Joint displacement	Movement between bays of concrete	Condition Level 3 – High and Medium Sensitivity areas	Grinding, ramping & replacement (see note 11)	Within 12 months
			Condition Level 4 and 5 – all areas (see note 13)	Reduce the hazard and schedule for replacement	Repair within 5 days (see note 12)
				Interim treatments (see note 23)	High & medium sensitivity – treat within 1 month (see note 23) Low sensitivity – treat within 3 months (see note 23)
			Condition Level 5	Replace damaged slab	Replacement - Level 5 within 9 months (see note 24)
	3. Surface condition	Deterioration in footpath surface	Slippery surface, Refer Asset Plan – Pathways	Clean or treat surface	Clean and treat within 10 days,

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Footpaths • Asphalt	1. Surface undulations	Movement in the surface of pathway	Differential movement of greater than 50 mm over 1 m straight edge or 20 mm over 100 mm straight edge	Arrange dig out and patch of affected area	High & medium sensitivity – repair within 5 days. Low sensitivity – repair within 3 months (see note 14)
	2. Surface condition	Deterioration in footpath surface	Potholes (300 mm diam, 20 mm depth)	Arrange dig out and patch of affected area	High and medium sensitivity – repair within 10 days. Low sensitivity – repair within 3 months (see note 14)
Footpaths • Segmental paving	1. Depressions	Movement in the surface of pathway	Differential movement of greater than 50 mm over 1 m straight edge	Reset area of pavers to achieve continuous surface	High & med sensitivity – repair within 5 days. Low sensitivity – repair within 3 months (see note 16)
	2. Joint Displacement	Adjacent pavers are at differing levels	Difference in levels of greater than 10 mm (see note 15)	Reset area of pavers to achieve continuous surface	High & medium sensitivity – repair within 5 days. Low sensitivity – repair within 3 months (see note 16)
	3. Missing pavers	Pavers have been removed leaving a space	One or more pavers	Fill the space, arrange for replacement	High & medium sensitivity – repair within 5 days. Low sensitivity – repair within 10 days (see note 16)
Traffic Signs – Safety (see note 17)	1. Missing	Sign has been removed from fixing point	Sign cannot be located	Replace sign	Statutory - within 5 days, others 30 days
	2. Damaged	Sign has been damaged to reduce intent of message	Sign message cannot be understood	Replace sign	Statutory - within 5 days, others 30 days
	3. Illegible	Lettering has been altered to reduce intent of message	Sign message cannot be understood	Replace sign	Statutory - within 5 days, others 30 days

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Line marking (See note 18) Statutory (excluding parking bays)	1. Loss of integrity	Paint has faded or been eroded	Less than 50% of paint remaining	Add to line marking program	Statutory – within 12 months (see note 19)
Traffic Signals	1. Signals not operating of confusing	Signals not operating in accordance with normal sequence	Reactive	Repair signals	Assess – same day For minor repair – 2 days For major repairs – as programmed
	2. Lantern Failure	Lamp not illuminating	Reactive	Replace damaged or defective hardware	Low Level - 2 days High Level – 7 days
	3. Collision damage	Physical damage to hardware	Reactive	Replace or repair damaged hardware	Assess – same day Repairs – as programmed
Streetlights (Council owned)	1. Lamp not operating	Lamps are not operating	Reactive	Report to Power Company responsible for the area	10 days
	2. Support pole damaged	Support pole and/or brackets damaged	Reactive	Remove hazard; program repairs	Reduce hazard within one working day, replace within 90 days
Bridges	Loss of structural integrity	Structural members damaged	As per the VicRoads Bridge Inspection Manual	Undertake repair of defects	Assess – 5 days, Minor Repairs – 90 days Major Repairs – refer to Capital Works program
Roadside Vegetation (see note 26)					

Asset	Defect	Definition	Intervention Standard	Management Control	Response Time
Fencing	Damage to guardrail/ fence	Physical damage to fence/ guardrail structure	Structure no longer performs design function or poses hazard to road	Reduce/ remove hazard, program repairs	Reduce hazard within 2 working day, arrange repairs within 90 days
Retaining Walls (walls over 1.0m height) - see note 25	1. Loss of structural integrity	Wall is tilting or sliding on foundations	Tilt greater than 100mm or displacement greater than 50mm	Barricade path, stabilise/demolish	Category 1 – repair within 1 month Category 2 & 3 – repair within 3 months
	2. Loose elements	Wall elements (bricks, concrete, rock spalls, timber) loose or cracked	Disjointed area greater than 1.0m^2	Barricade path, stabilise/demolish	Category 1 – repair within 1 month Category 2 & 3 – repair within 3 months

Note: For Emergency Situations and extreme events, the Response Times listed in the schedule may not be met

Notes for Amendments in Version 2.0 – June 2006

Note 1: Inserted categories to replace '10 days'
Note 2: Inserted categories to replace 'Programming within 12 months, program and treat within 2 years'
Note 3: Inserted categories to replace '12 months unless included in resheet or reconstruction program'
Note 4: Inserted categories to replace 'Repair within 60 days'
Note 5: Replaced "Blockage causes pit to be bypassed in low level events"
Note 6: Defect 'water ponding' deleted as this is a result of other drainage defects
Note 7: Reference to 'lids' deleted from this defect. Lids are included in drainage defect No.3.
Note 8: Inserted categories to replace '30 days'
Note 9: Insert replaces 'Condition Level 3 – High Sensitivity areas; Condition Level 4/5'
Note 10: Insert replaced 'Grinding - Within 12 months; Replacement - Level 5 within 9 months, Level 4 add to program'
Note 11: Inserted ' ramping & replacement'
Note 12: Inserted 'repair', deleted 'hazard reduction'
Note 13: Inserted 'all areas'
Note 14: Inserted categories to replace 'Reduce hazard within 5 days, repair within 3 months'
Note 15: Inserted '10mm', deleted '5mm'
Note 16: Inserted categories to replace 'Reduce hazard within 5 days, repair within 3 months'
Note 17: Inserted 'Safety', deleted 'Regulatory, Advisory and Directional'
Note 18: Inserted 'excluding parking bays'. Deleted reference to asset 'advisory signs' and defect 'Loss of Reflectivity'.
Note 19: Inserted 'Statutory – within 12 months', deleted 'Statutory – within 6 months Advisory within 24 months'
Note 20: Inserted categories to replace 'further works 45 days'

Notes for Amendments in Version 3 – October 2009

Note 21: Delete defect as this is not an infrastructure hazard
Note 22: inserted defined time frame
Note 23: inserted interim treatments
Note 24: delete reference to level 4 replacement program
Note 25: added asset category for 'retaining walls'
Note 26: deleted this asset group as not "road infrastructure"

Adopted by Council 27 October 2009

Note:

1. The Condition Levels for concrete footpaths are listed in the following Table:
2. Refer to Schedule 2 – Hierarchy of Roads for Classification of Footpaths

Condition Ratings for Concrete Footpaths

Condition Level	Description	Type of Work appropriate to rectify the fault	Intervention Level
0	No path present	N/A	
1	As new or perfect condition	No work	
2	Some cracks, joint displacement or surface deterioration present	No work	Joint displacements less than 10 mm (see note 1)
3	Cracks and or joint displacements	Grinding of displacements	Joint displacements between 10 (see note 1) and 20 mm, cracks less than 10 mm (see note 2)
4	Cracking and joint displacement damage to bay(s)	Replacement of bays or asphalt ramping (for joint displacements) (see note 3)	Joint displacements greater than 20mm, cracks greater than 10mm (see note 2)
5	Extensive cracking and joint displacement damage to bay(s)	Replacement of bays	Joint displacements greater than 30mm, (see note 4) cracks greater than 10mm resulting in an unstable surface (see note 5)

Notes for Amendments in Version 2.0 – June 2006

Note 1: Inserted '10mm', deleted '5mm'
Note 2: Inserted '10mm', deleted '2mm'
Note 3: Inserted 'of bays or asphalt ramping (for joint displacements)'
Note 4: Inserted '30mm', deleted '20mm'
Note 5: Inserted '10mm resulting in an unstable surface', deleted '2mm'

CITY OF MONASH

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 5 – Roads Budget

Schedule 5 – Budget for Road Associated Assets

	Budget ($)			
Activity	**2001-02**	**2002-03**	**2003-04**	**2004-05**
Road Related				
Rehabilitation	1,495,000	1,518,000	1,675,800	1,969,700
Programmed Maintenance	1,270,000	1,270,000	1,293,000	1,337,000
Routine Maintenance	1,069,000	1,093,800	1,233,980	1,275,700
New Works (Traffic Management)	285,000	235,000	315,000	380,000
Footpath Related				
Routine Maintenance	292,500	356,600	359,500	363,100
Replacement:	867,100	877,400	1,300,000	1,345,000
New Works	Nil	Nil	30,000	Nil

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 6 – Management Systems

- Confirm Infrastructure Management System
- Quality Management System

Schedule 6A – Confirm Infrastructure Management System

The Confirm Asset Management System provides a comprehensive means of managing, programming and recording all information relating to the road related infrastructure assets for the City of Monash. The system is currently used as a works management system, recording the day to day works carried out on individual assets. The system is capable of being expanded to a full asset management system.

Accounting Financial Systems

While Monash City Council is operating the Oracle Financial Information Management System, it does not have the Asset Valuation or Depreciation module. Details on asset condition and value are derived from other applications within the organisation. These applications are typically spreadsheets or stand alone databases.

All assets are depreciated on a straight-line method over the life of the asset and not on condition. For depreciation calculations, pathway assets are grouped in the category of "Road Pavements - footpaths". New roads created since 1 July 2002 are recorded in the Financial Management Information System as an individual asset, along with the appropriate life for depreciation.

The following Legislation and Accounting Standards need to be complied with:

- Local Government Regulations 2001
- AAS 4 Depreciation
- AAS 5 Materiality
- AAS6 Accounting Policies
- AAS 27 Financial Reporting by Local Governments
- AAS 29 Financial Reporting by Government Departments
- AAS 31 Financial Reporting for Government
- AAS 38 Revaluation of Non-Current Assets
- AASB 1041 Revaluation of Non-Current Assets
- SAC 4 Definition and Recognition of the Elements of Financial Statements

For the purposes of this plan the following definitions apply to the various categories of expenditure:

- Maintenance expenditure is periodically or regularly required expenditure that allows the asset to achieve the applicable level of service that was assumed in the estimation of the asset's useful life.
- Refurbishment expenditure is periodically required expenditure that is capitalised and then depreciated as it renews component or sub component parts of an asset.
- Replacement expenditure periodically required expenditure that is capitalised and then depreciated as it replaces component or sub component parts of an asset.

Asset Management Systems

Council's current system is an Infrastructure Management System (Confirm) which delivers most of the functionality required of a basic asset management system. Additional modules are available that deliver all the functionality required of an advanced asset management system.

Confirm is being used to record all asset, works and condition related data and contains the corporate asset register. All data in Confirm is contained in tables that are located in the Oracle database and can be accessed by the corporate GIS (ESRI's ArcView). All assets in Confirm are related to sites and each sites is categorised as either being a road, a reserve or a building - it is understood that some road and reserve sites will contain building assets, and that some building sites will include roads and gardens.

Council has two asset registers. One is for financial purposes and is in the Financial Management Information System (Oracle). A second central asset register is for all operational and infrastructure related purposes and is contained within the Infrastructure Management System (Confirm). The use of a central asset register allows for a consistent approach for:

asset identification;

recording of condition, faults or corrective action;

the implementation of mobile computing initiatives; and

the display of asset data in the Geographic Information System.

The asset register allows for a hierarchical approach to identifying assets by facilitating the linking of sub-assets to assets. Attributes can be recorded against each asset to support the following asset management functions:

- valuation and depreciation;
- forward cash flow projections; and
- maintenance management.

Confirm Asset Management System

This section provides an overview of the AM functionality of the Confirm modules currently installed at Monash. Additional modules are available to increase the functionality. Functionality is based on International Infrastructure Management Manual guidelines.

The following questions are prompts that will be used to guide the future implementation of additional Confirm functionality, as both the corporate works and asset management system;

- What decisions do you regularly make?
- What information do you need to make those decisions?
- What information do you regularly get?
- What information would you want that you are not getting now?
- What information would you want daily? Weekly? Monthly? Quarterly? Yearly?
- What are the most helpful improvements that could be made to the existing system?
- What are the most helpful improvements that could be made to the existing processes?

Schedule 6B – Quality Management System

The Infrastructure Services Division of Council is primarily responsible for the installation and construction of road related assets, and the ongoing maintenance programs to ensure their ongoing serviceability for the community. To ensure that these activities are carried out in a systematic manner, the Infrastructure Services Division is certified with the following management systems.

- Quality Assurance to AS/NZS ISO 9001 – 2000 (Second Party)
- Safety Map Accreditation

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 7 – Customer Service Requests System

Schedule 7– Customer Services System – Pathways/ Confirm

To manage the various enquiries received and reported to Council, the Pathways system is employed to record the progress of each enquiry. The City Development Centre unit of the TRIPS Department receives and registers each enquiry.

In the case of road related assets, these are referred to the Customer Services Unit of the Infrastructure Services Division for investigation, assessment and appropriate action. The Customer Service Unit records these in the Confirm Management System.

The Pathways and Confirm Systems are electronically linked to enable Council officers to monitor the progress of each enquiry, and provide feedback to members of the community associated with the original enquiry.

The Confirm System is also part of the Quality Assured Systems used by the Infrastructure Services Division. (Refer Schedule 6 for details)

Example

Attached is a process map for addressing reports of Third Party Damaged Assets. This process addresses reports of damage to the assets of other authorities such as damaged hydrants. The map identifies the staff involved in handling the report and the various activities used to manage the issue through to resolution. In this example, resolution is in terms of handing over the issue to the appropriate responsible authority.

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 8 – Performance Management System

Schedule 8 - Performance Management and Review

Performance monitoring is undertaken on a programmed basis. In general this is undertaken as follows:

- Fortnightly meetings of the Infrastructure Services Division management group where Road Related Asset Management is a standing Agenda Item.
- Monthly Reports to the CEO that include reporting against Key Performance Indicators relating to road assets and their ongoing maintenance.
- Annual reporting included in the Council Annual Report providing information of the achievement against Annual Business Plan targets. These targets include activities and projects that relate to the performance of road related assets.

This performance management system is based on Key Performance Indicators and Business Plan Targets that relate to intervention levels and standards of maintenance. Such indicators and targets are required for Council to meet the requirements of the Act.

Key components of measuring the performance of the various management systems against the requirements of the Act include:

- **Audits** – A program of regular and ad hoc audits are planned for the purposes of ensuring that all management systems deliver the expected levels of service for maintaining the assets related to the road network.
- **Amendment of Road Management Plan** – Where the adopted Levels of Service are not achievable, the level of service or resource will need to changed. The level of service, quantity of works or budget/ resource allocation would be reviewed and an amended Plan proposed. The amendment of the Plan would be carried out in accordance with Section 54 of the Act.
- **Plan Review** – An annual review of this Plan will be carried out as part of the preparation of the annual budget process. Matters that may be taken into consideration include:
    1. Asset performance following delivery of the maintenance program;
    2. Level of achievement of asset management strategies against the expected benefits to road users and the community;
    3. Consideration of external factors that are likely to influence the contents and operation of this Plan.

City of Monash

ROAD MANAGEMENT PLAN 2009

Schedule 9 – Risk Management Strategy

CITY OF
MONASH

Risk Management Strategy

October 2003

TABLE OF CONTENTS

Attachment

1. RISK MANAGEMENT OVERVIEW

Risk management can be defined as the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.

Council first formalised a Corporate Risk Management Strategy in July 2001 as a means of recognising and implementing risk management into all strategic and operational planning. The strategy was important at that time to provide corporate recognition of and an understanding of the philosophy of risk management and to set some basic processes in place.

A number of key achievements have been made in the progressively risk aware environment of Council in recent years. These include the development of a central Contract Management System, Emergency Management plans for council buildings, an effective Occupational Health and Safety Strategy and a Business Continuity Plan to manage serious interruptions to Council business operations.

Some operational areas of Council have adopted and implemented the process very well and others are yet to come to grips with the extent to which risk management needs to be applied. This is both in terms of the identification and assessment of risks and the application of outcomes to program completion.

The Best Value program provided a vehicle for operational areas of Council to profile and better understand the core nature of each area's key functions. It also provided the opportunity to assess the key risks to those core activities.

The Best Value Review undertaken by the Risk Management Unit late in 2002 identified the requirement for a review of this strategy including an opportunity to re-evaluate current directions of Council's risk management program.

A management workshop conducted in June 2003, as part of the review, identified a number of key issues for improving Council's risk management performance. These were:

- Global view required
- Defining ownership and accountability
- Training and support for management application of process
- Application of risk management to project development

The workshop also identified the need for a greater indication of corporate commitment by recognition of the importance of risk management to business

operations. This has been achieved by inclusion of the concept in the Council's Business Plan through a series of specific business objectives.

This revised strategy is intended to reaffirm commitment to the risk management policy, and highlight the priorities for the next phase of risk management's continuous development and improvement in Council operations.

It will provide opportunities for the introduction of new, or refinement of, existing standardised systems to better manage the achievement of business objectives with minimal adverse impacts.

Risk Management is a process of continuous improvement that Council has embarked upon with success. This is now the next stage in a management process that will provide a greater level of comfort and security that risks to Council business are continuing to be identified, assessed, minimised or eliminated. This Should provide the financial and physical security to operations that ensures a sound platform from which to operate.

2. RISK MANAGEMENT POLICY

Council is committed to ensure that the Council, its employees and the community are reasonably protected against loss through the application of sound management principles and practices designed to minimise or eliminate exposure to risk and adverse impact on Council objectives.

Council recognises that risk management is an essential tool for strategic and financial planning and the ongoing physical operations of the Council.

3. RISK MANAGEMENT PERFORMANCE

In some form, everybody already practises risk management although many still do not recognise that this is the process they are applying.

The purpose of this strategy is to ***secure the commitment of every employee to better risk management practices*** by outlining Council's expectations and providing a framework by which they may be achieved.

It is important for both Council and its employees to recognise that risk management is not a distinctly separate corporate responsibility, but rather is a management process at all levels for effective decision making.

In other words, every employee is, effectively, a 'Risk Manager'.

This strategy outlines the objectives identified in Council's Business Plan for 2003-2006, defines actions and responsibilities for Council and individual employees to guide them toward the achievement of these objectives.

Provision of staff training to raise awareness and understanding of risk management concepts, principles and processes will assist staff in undertaking risk profiling of their activities.

Many departments within Council have commenced the risk profiling of their operations through their respective Best Value reviews. These will form the basis for the commencement of their respective risk profiles. A corporate risk register will be created and maintained by the consolidation of the various departmental registers into a single document. However, this process has not been all encompassing and there are and will continue to be, a large number of risks occurring that have not been identified in the Best Value program. These will need to be separately assessed for inclusion in the Corporate Risk Register to be created from the Best Value information.
Risk profiling will use the procedures detailed in AS/NZ 4360.

The risk register will list the risks of the organisation and include risk priority rating, treatment, timeline for action and identification of the responsible officer.

The principles and processes detailed in this strategy and supporting documentation are developed from the ***Australia Standard for Risk Management (AS/NZS 4360:1999.)*** *This standard will also be the primary guide for Council's ongoing risk management processes for strategic and operational management.* ***Refer to Attachment A.***

4. OBJECTIVES AND ACTIONS

Objective 1: Development of a Corporate Risk Register

Develop and implement a corporate risk register

Background:

A risk register is a means to ensure that operational units identify, understand and treat risks to business activities. It identifies priorities and responsibilities for the action arising from risk assessments. Council's liability insurer is now requiring a formal risk register to be produced annually as part of the annual liability audit on Council's operations.

The basis for the corporate risk register has been initiated through the respective Best Value reviews undertaken to date. These will be consolidated and translated to an appropriate software file.

Action:

- identify risks of core business activities
- determine priority rating, treatment, timeline for action and identification of the responsible officers
- consolidate identified risks into corporate register

Responsibilities:

Managers, Risk Management Coordinator

Target:

31 December 2003

OBJECTIVES AND ACTIONS cont.

Objective 2: Risk Management Training

Implement staff training on risk identification and assessment.

Background:

Training and ongoing support from appropriately qualified and experienced practitioners is essential to the effective management of risk in an organisation. The Risk Management Unit is the principal training and support resource for Council operations

Action:

- Establish organisational needs and timetables
- Develop and implement a targeted training program
- **Identify and engage resource requirements**
- **Provide ongoing advise on risk management**

Responsibility:

Risk Management Coordinator

Target:

30 April 2004

Objective 3: Occupational Health and Safety Strategy

Review corporate Occupational Health and Safety Strategy.

Background:

Council's corporate Occupational Health and Safety Strategy is the primary tool for the management of workplace incidents, injuries and WorkCover claims. The strategy was adopted and implemented in April 1997 and subsequently reviewed in 1999 and 2001.

Changing legislation and corporate needs and expectations require continuing review.

OBJECTIVES AND ACTIONS cont.

Objective 3: Occupational Health and Safety Strategy (cont.)

Action:

- Review existing strategy
- Identify issues for amendment
- Consult appropriate employees and external authorities
- Refer amended strategy to corporate Occupational Health and Safety Committee for endorsement

Responsibilities:

Risk Management Coordinator, Corporate Occupational Health and Safety Committee

Target:
31 December 2003

Objective 4: Risk Assessment Software

Implement risk assessment software through the organisation to ensure consistent approach to the identification and assessment of risk.

Background:

The present corporate Risk Management Strategy provides formatted risk assessment documents for the recording of risk identification and treatment. It would greatly assist acceptance and implementation of risk management to install a suitable software program on Council's mainframe for use by all managers.

An MS Access database prepared by Standards Australia has been provided to use on a trial basis. The use of such software also provides a platform for the consolidation of all risk assessments.

Action:

- Determine corporate needs
- Select appropriate software
- Implement chosen software
- Provide targeted training on application

OBJECTIVES AND ACTIONS cont.

Objective 4: Risk Assessment Software (cont.)

Responsibility:

Risk Management Coordinator

Target:

30 April 2004

Objective 5: Risk Management Reporting

Ensure that relevant information about risk issues and events is circulated to appropriate officers in a timely manner.

Background:

Timely reporting is the cornerstone of effective management of risk issues. At the present time, a range of reports to various areas of the organisation are provided on either a regular or needs basis.

A review is required to determine if existing reporting activities are suitable and effective.

Action:

- Review format of current risk and OH&S reports
- Develop annual timetable for future reports
- Determine appropriate recipients of reports and seek feedback on contents

Responsibility:

Risk Management Coordinator

Target:

31 January 2004

5. RESOURCES

The following publications will be used as resource tools for the implementation of the objectives and actions outlined in Section 4.

Risk Management : Australian / New Zealand Standard 4360, 1999, Standards Australia

A basic introduction to managing risk: Handbook 142, 1999, Standards Australia

Guidelines for managing risk in the Australian and New Zealand public sector :Handbook 143, 1999, Standards Australia

Risk Management Access Database: Standards Australia

City of Monash Risk Management Strategy, July 2001

City of Monash Occupational Health and Safety Strategy, 1997

6. RISK STRATEGY REVIEW

The Risk Management Coordinator will be responsible to the Director Human Resources and Administration for the biannual review of this strategy.

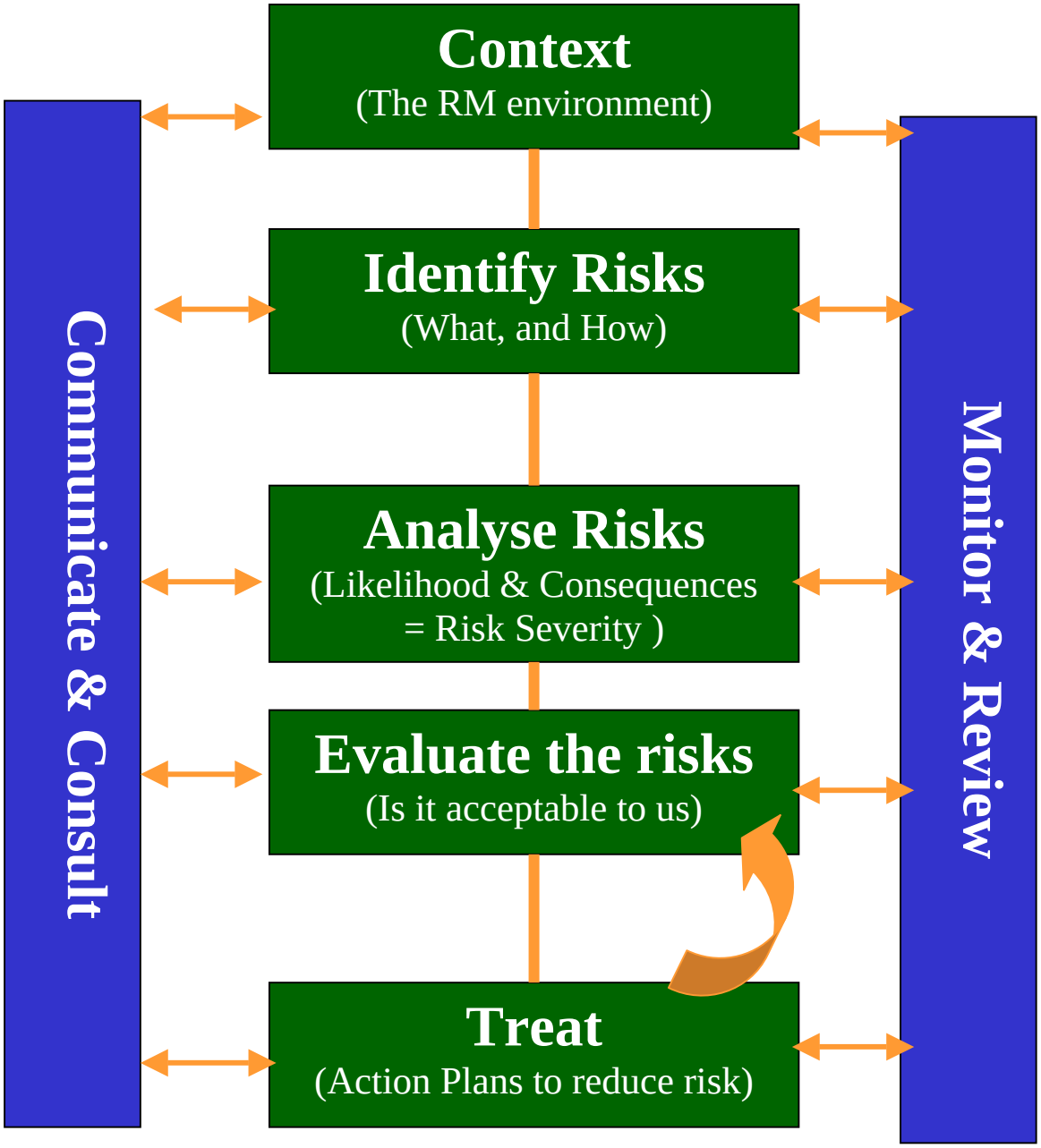
The review process will include consultation with Directors and Managers prior to any recommendations being made to the Director.

Reporting on progress towards achieving the outcomes stated in this strategy will be the responsibility of the Risk Management Coordinator in conjunction with the Manager Corporate Administration.

ATTACHMENT A

Steps in Risk Management

The Risk Process Flowchart– adapted from AS4360



3.5.2 Identified Risks

Issues	Likelihood of Occurrence	Consequence	Overall Risk Rating	Context/ Action Taken to Reduce Risk
Resources				
Staff sickness	Possible	Moderate	High	Having a significant number of staff away to the extent that it seriously impacts on service delivery.
Staff skill & experience	Possible	Moderate	High	Not having staff with the range of skills required to cover positions. Eg, Trades people.
Flexibility to change	Likely	Minor	High	Capacity of staff to adjust to change.
Fuel shortages	Possible	Moderate	High	Major fuel strike.
Operations				
Emergency events	Unlikely	Major	High	Significant municipal emergency requiring the opening of the MECC
Changing technology	Likely	Minor	High	Capacity of staff to change
Failure of communication networks	Likely	Insignificant	Moderate	Failure of communication systems such as phones, computer system or two-way radio.

Issues	Likelihood of Occurrence	Consequence	Overall Risk Rating	Context/ Action Taken to Reduce Risk
Loss of site	Rare	Major	High	Total loss of the depot due to fire, explosion, etc
Knowledge				
Inappropriate systems in place	Likely	Minor	High	Staff reliance on alternate systems to corporate systems.
Lack of data & information	Likely	Minor	High	Knowledge of assets we own or agreements in place to maintain other organisations assets.
Legislation/ Standards				
Changing OH&S legislation	Likely	Minor	High	Accommodating changes to OH&S legislation.
Asset creation process	Likely	Insignificant	Moderate	Not being advised of the creation of new assets or inadequate information provided at hand over. Assets being handed over that can not be maintained.
Expectations				
Changing community needs/ expectations	Possible	Minor	Moderate	Pressure to change service delivery standards due to ageing population, changes in trading hours, new development or general changes in expectation.