



# ROAD MANAGEMENT PLAN

(Adopted - 22 September 2015)



# ROAD MANAGEMENT PLAN

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## 1.0 Introduction

Council's road infrastructure represents a significant investment by the community and is vital to its health and well-being. Mount Alexander Shire provides a road network covering 1431 kilometres with a replacement value of approximately \$184 million, 229 bridges with a replacement value of \$49 million, and 39 kilometres of footpaths with a replacement value of \$3.4 million.

Responsible road management and maintenance involves consideration of expected service delivery, management of public risk, optimising asset life and efficient use of available resources.

Benefits of this approach are the provision of accountable service delivery and the management of public risk in a cost effective manner.

In accordance with the **Road Management Act 2004**, all road authorities are required to document road maintenance service targets and to prepare a register of public roads for which the road authority is responsible as part of a Road Management Plan.

The assets addressed in this Plan relate to Council's Road and Transport infrastructure which includes road pavements, road surfaces, kerb and channel, bridges and major culverts, street furniture, road drainage, and footpaths.

The Road Management Plan sets out the service targets Council intends to achieve for the various classes of roads detailed in its hierarchy.

## 2.0 Responsibilities

For a comprehensive listing of municipal roads and associated assets that Mount Alexander Shire Council has accepted responsibility for, reference should be made to the Mount Alexander Shire Register of Public Roads. In general the category of roads that Council is not responsible for and accepts no liability for include:

- Freeways, e.g. Calder Freeway;
- State Highways, Midland and Pyrenees Highways;
- Arterial Roads;
- State Forest Roads and Tracks; and
- Private roads.

Arterial roads within Mount Alexander Shire for which Council is not responsible include:

|                                |      |
|--------------------------------|------|
| Midland Highway                | A100 |
| Pyrenees Highway               | B180 |
| Castlemaine Maldon Road        | C282 |
| Maldon Newstead Road           | C283 |
| Maldon Bendigo Road            | C283 |
| Maldon Bridgewater Road        | C282 |
| Creswick Newstead Road         | C283 |
| Daylesford Newstead Road       | C285 |
| Calder Highway (South of B180) | C794 |

### 3.0 Key Stakeholders

This plan is intended to demonstrate to stakeholders that Council is managing its assets responsibly.

The key stakeholders include:

**Figure 1**

| Stakeholders                 | Responsibility  |
|------------------------------|---|
| State and Federal Government | To measure Asset Management performance<br>Ensure compliance with various legislation<br>Generally being responsible for Local Government |
| Community                    | To have identified targets for services for which they rely on  |
| Insurers                     | Evidence of risk management strategies  |

### 4.0 Road Management Plan Overview

This Road Management Plan is intended to support Council to provide a safe and efficient road and transport network for use by all members of the public and good road and transport asset management practices focussed on achieving desired outcomes considering financial restrictions, available resources and various policies, priorities and strategies of governments and Council.

According to the **Road Management Act 2004** the making of a road management plan is voluntary. **Section 50** of the Act identifies the purpose of the Road Management Plan as to:

- establish a Management System for the Road Management functions of a road authority which is based on policy and
- enables operational objectives and available resources, and
- to set the relevant standard in relation to the discharge of duties in the performance of those Road Management functions.

The Council Plan 2013-2017 sets the basis for budget formulation within the capability of Council to resource. The Plan will not be static and will be continually reshaped as the impact of changes in community expectation, funding opportunities and other influences take effect.

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## 5.0 Description of the Road Infrastructure

Mount Alexander Shire Council is responsible for maintenance activities on approximately 1431 kilometres of road pavement and associated infrastructure together with 229 bridge and major culvert structures and 39 kilometres of footpath.

Generally, the types or class of road infrastructure for which Council is the responsible road authority are:

**a) Roadways**

Roadways are deemed to be either sealed or gravel surface and include the area within the road reserve developed for the purposes of driving of motor vehicles. These may include formal parking areas on roadways for which the Council is not the responsible road authority as detailed in the Register of Public Roads.

**b) Footpaths**

Footpaths are deemed to be the area with the road reserve that has been formally constructed for pedestrian use. It is generally accepted that they are in the urban areas and may be varied in surface type. It includes shared paths in the road reserve, but excluding paths outside of the road reserve (for example, in creek corridors).

**c) Bridges and culverts**

These are major structures located within a roadway to facilitate the crossing of a significant waterway by motor vehicles and pedestrians.

**d) Kerbs and Channels**

These are deemed to be a concrete barrier or a stone drain designed to drain the roadway and adjacent land and protect the integrity of the roadway.

**e) Street Furniture**

This includes all ancillary items along a roadway which may improve safety, aesthetics or community amenity. It includes items such as bollards, guideposts and roadside guardrails.

**f) Underground Drainage**

Significant underground pipe network provided for the discrete passage of rain water and generally provided in urban areas is included in this category. They drain the roadway and surrounding land by placing the water in an underground pipe network to preserve public amenity and provide some protection to adjacent assets and discharging to a designated location.

It should be recognised that the above descriptions are general. For specific details of the roads and road segments for which Mount Alexander Shire Council is responsible, reference should be made to Council's Register of Public Roads.

This register is updated annually and is available for viewing at the Customer Service Counter of the Civic Centre, and on Council's website.

## 5.1 Council's Road Hierarchy

A Road Hierarchy has been established to provide a framework in order to rank each of the roads for maintenance activities. The hierarchy has been prepared according to traffic volumes & type, road function as well as strategic routes and standards so as to best manage inspection regimes, response targets and service level targets (See Figure 2).

**Figure 2**

| Hierarchy Level                      | Description  |
|--------------------------------------|--|
| Link Road (LK)                       | These roads are significant in that they provide a link between townships, communities and highways. These routes are often the most practical or most direct route to a destination. These roads carry significant traffic volumes, which may include high commercial vehicles, and the main function is often transport efficiency.  |
| Collector and Strategic Roads (CS)   | These generally connect smaller communities and industrial areas and act to feed Link roads. They also include roads that provide strategic routes based on length of detour, tourist and transport routes, school bus route etc.<br><br>These roads generally have lower traffic volumes than Link roads.   |
| Minor Roads (MN)<br>ACCESS DWELLINGS | This class of road generally provides vehicular access to abutting property, however will generally consist of rural roads that provide access to sparsely located properties and farm outlets. These roads will generally have an unsealed wearing surface and provide access to higher road class in the rural areas.<br><br>These roads generally have lower traffic volumes than Collector and Strategic roads.                |
| Local Roads (LL)<br>ACCESS PROPERTY  | This class of road also generally provides vehicular access to abutting property. The main interest is local amenity in urban areas and local access and access to higher road class.<br><br>Although functionally similar to Minor roads the service target is likely to be different and will generally consist of a sealed surface.<br><br>These roads generally have lower traffic volumes than Collector and Strategic roads. |
| Unformed Roads (UR)                  | These are unused road reserves or seldom-used tracks such as fire access tracks.   |

## 5.2 Footpath Hierarchy

A Footpath Hierarchy has been established to provide a framework in order to rank each of the footpaths for maintenance activities.

**Figure 3**

| Hierarchy No. | Type/Locality   | Pedestrian Activity Level |
|---------------|---|---------------------------|
| 1.            | Castlemaine and Maldon town/commercial centres (defined in the Mount Alexander Planning Scheme) | High                      |
| 2.            | Residential and other areas   | Low                       |

**Note:** Council is not responsible for unconstructed or foot trodden tracks over roadside land or a path that connects from a roadway or footpath to privately owned land.

## 6.0 Demarcation Issues

### 6.1 Bordering Municipalities

Mount Alexander Shire shares common boundaries with the following municipalities:

- Greater City of Bendigo;
- Loddon Shire Council;
- Central Goldfields Shire Council;
- Hepburn Shire Council;
- Macedon Ranges Shire Council; and
- Mitchell Shire Council.

Details of these agreed areas of responsibility are provided in agreements with each bordering municipality and noted in Council's Register of Public Roads.

### 6.2 Arterial Roads

VicRoads is the Coordinating Road Authority for arterial urban roads. Hard copy sketches of the line of demarcation between Council and VicRoads have been developed based on the *Operational Responsibility for Public Roads Code of Practice*.

A State Road may be a Freeway, a Declared Arterial Road or a Non-Declared Arterial State Road.

In rural areas, VicRoads is responsible for the full width of the road reserve, from property line to property line, with the exception of formal foot or shared paths where they exist on the verge of these roads.

## 6.3 Crown Land

A number of roads are located on crown land managed by the Department of Environment, Land, Water and Planning (DELWP) and Parks Victoria. Where these roads do not service a Council asset or ratepayer, the road may be the responsibility of the relevant Department. In some instances a road may pass through Crown land and Council may remain the responsible authority.

## 6.4 Rail

The relevant rail authority is responsible for the maintenance of the road and infrastructure in the immediate vicinity of a rail crossing and some bridge structures. The *Rail Safety Act 2006* requires Safety Interface Agreements.

## 6.5 Utility Services

The relevant service provider including water, gas, sewer, phone or power is responsible for the maintenance of its infrastructure located within a road reserve.

## 6.6 Private Streets

A private street is a formed road on private title, built by a developer, private company or resident. Sometimes these are named and may have street name signs. These roads are not on a road reserve, nor are they a council asset. They are not maintained by, or the responsibility of, Council. As a result they will not be listed on the Public Road register and are not covered by this plan.

# 7.0 Obligations of Road Users and Individuals

The Road Management Act sets down specific requirements for individuals, including but not limited to the following:

- Road users are required to drive safely having regard to the road, weather and traffic conditions and to avoid unreasonable risks to other road users.
- Individuals are required to give notice of an incident to a road authority within 30 days where there is an intention to make a claim for property damage.
- Road authorities will not be responsible for private driveways on road reserves that provide access to land adjoining a road.
- Management of private roads is not covered in this legislation and will remain the responsibility of private owners.
- Notify and obtain consent from the coordinating road authority where works will be undertaken in the road reserve, except for mowing nature strips and driveway works.
- Obtain a permit from the coordinating road authority, where a non-road activity will occur in the road reserve such as a street party.

In particular a person who drives a motor vehicle on a public highway must drive in a safe manner having regard to all the relevant factors including the:

- a) standard of construction 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.

## 8.0 Civil Liabilities & Obligations

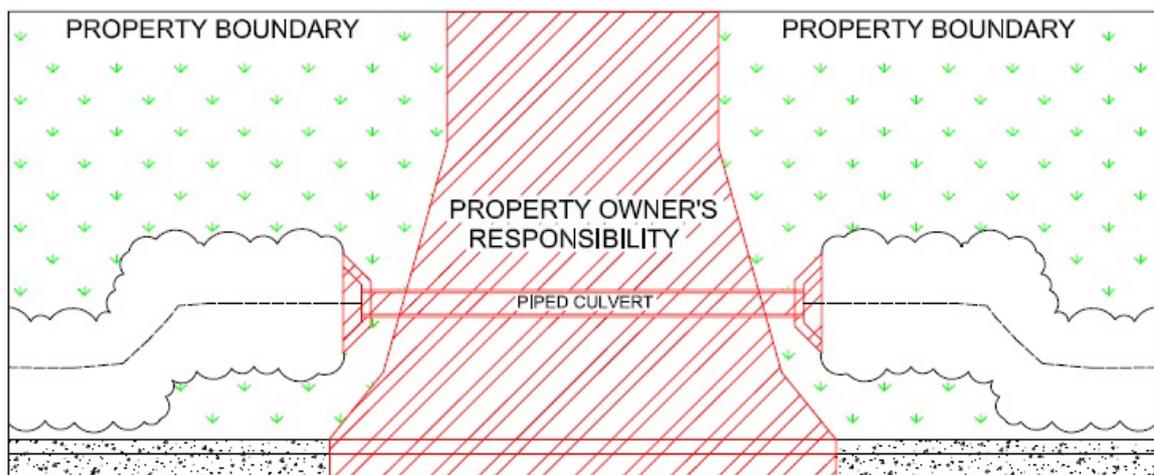
An owner or occupier of land adjoining a public road has a duty of care to the relevant road authority, service providers, works and infrastructure managers and road users, and must not:

- a) do anything on, or in relation, to the land, or
- b) allow the land to be in a condition

which affects the safety or condition of the public road or any road related infrastructure. As detailed in the Local Government Act Schedule 10.12, the property owner is responsible for the construction, maintenance and repair of a bridge or crossing over a footpath or channel to enable a person to have access to land on the other side of the footpath or channel.

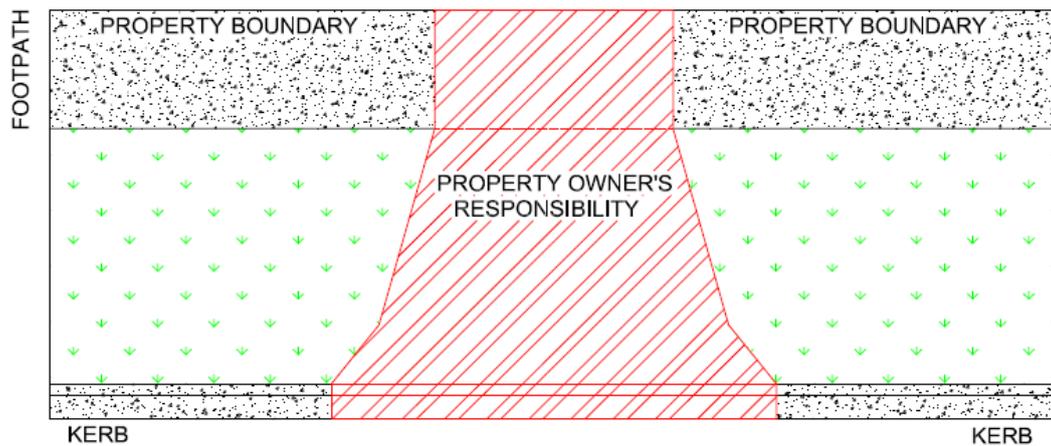
Property owners are responsible to ensure these crossings are constructed and maintained in a safe and operational condition at all times and to the satisfaction of Council.

**Figure 4 - Rural Type Piped Driveway Crossing**



Property owner is responsible for area shaded red.

**Figure 5 - Urban kerb and Channel Layback Driveway Crossing**



Property owner is responsible for area shaded red.

## 9.0 Target Service Levels

The target service levels are used:

- to inform customers of the proposed type and level of service to be offered;
- to identify the costs and benefits of the services offered;
- to enable customers to assess suitability, affordability and equity of the services offered; and
- as a focus for the Asset Management strategies developed to deliver the required level of service.

Current service level targets are developed with consideration of:

- community expectations via the elected Council representative;
- current and historic service provisions and resource levels;
- level of risk, considering the road hierarchy;
- 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; and
- service levels of similar sized Councils.

## 10.0 Inspection /Surveillance Frequencies

The inspection cycles identified in the following table (figure 6) outline inspection frequency targets. The due date shall be taken as the last day of the month that the inspection falls due, plus or minus one week. Hazard inspection frequencies shall commence from the due date of the previous inspection (i.e. the actual date of inspections does not affect the inspection cycle).

The purpose of hazard inspections is to identify defects or hazards to road users. They are used to ensure a prioritised and timely intervention in removing the hazard as part of Council's road and bridge assets maintenance program.

**Figure 6**

| Inspection Type       | Hazard Inspection Frequency |                               |          |          |          |  |
|-----------------------|-----------------------------|-------------------------------|----------|----------|----------|--|
|                       | Link                        | Collector and Strategic Route | Minor    | Local    | Unformed | Footpaths                                    |
| Day time inspection   | 2 months                    | 6 months                      | 8 months | Annually | Reactive | Category 1- 6 months<br>Category 2- Annually |
| Night time Inspection | 6 months                    | Annually                      | 2 yearly | 2 yearly | N/A      | N/A  |

## 11.0 Condition/Maintenance Targets

The response time to a hazard is based on consideration of the hazard type/severity and the hierarchy of the asset. Response time is measured from the time the hazard is inspected by Council to the time that the hazard has been rectified.

### 11.1 Emergency Response

Emergency response in all circumstances is a maximum of 24 hours and does not include major capital works.

An appropriate emergency response could include undertaking maintenance works to repair the hazard and/or making the hazard safe utilising one or more of the following:

- Provision of warning signs;
- Provision of safety barriers;
- Traffic control action;
- Diverting traffic around the site;
- Install temporary speed limit;
- Lane closure or road closure;
- Closure of the road to certain vehicles (e.g. load limiting); and
- Spray painting footpath lips.

The requirement for an emergency response will be determined on a case-by-case basis, based on a risk assessment.

## 11.2 Intervention and Response Times

The following is a tabulated list of nominated response times for the repair of identified hazards.

**Figure 7**

| Description   | Hierarchy |                              |            |            |               |
|---|-----------|------------------------------|------------|------------|---------------|
|   | Link (LK) | Collector and Strategic (CS) | Local (LL) | Minor (MN) | Unformed (UR) |
| <b>Sealed Road Hazards</b>  |           |                              |            |            |               |
| Potholes in the traffic lane of a sealed pavement, greater than 50 mm in depth or 300 mm diameter   | 2w        | 1m                           | 2m         | P          | N/A           |
| Deformations in the traffic lane of a sealed pavement greater than 100 mm under a three metre straight edge   | 1m        | 1m                           | 3m         | P          | N/A           |
| Edge drops onto an unsealed shoulder greater than 100 mm depth  | 1m        | 1m                           | 3m         | P          | N/A           |
| Debris on a sealed road posing a possible danger to motorists, cyclists or pedestrians  | 1w        | 2w                           | 3w         | 3m         | N/A           |
| Significantly damaged or missing drainage pit lids, surrounds or grates in the traffic lane of a sealed pavement  | 2w        | 1m                           | 1m         | 1m         | N/A           |
| <b>Unsealed Road Hazards</b>  |           |                              |            |            |               |
| Wheel ruts, shoves and potholes in an unsealed road, greater than 150mm depth   | N/A       | N/A                          | 2m         | P          | N/A           |
| Surface or formation degraded such that safe travelling speed is less than 60% of the safe operating speed for the road in good condition over more than 200m | N/A       | N/A                          | 2m         | P          | N/A           |
| Debris on an unsealed road posing a possible danger to motorists, cyclists or pedestrians   | N/A       | N/A                          | 2m         | 3m         | N/A           |
| <b>Traffic Control Hazards</b>  |           |                              |            |            |               |
| Traffic Control signs missing, damaged, faded or illegible  | 2w        | 1m                           | 1m         | 1m         | N/A           |
| Greater than 5% of guide posts missing or damaged at critical locations   | 1m        | 3m                           | 3m         | P          |               |
| Safety barriers missing or damaged at critical locations  | 1m        | 3m                           | 6m         | 6m         |               |
| Pavement markings which are missing or faded at critical locations  | 1m        | 3m                           | 3m         | P          | N/A           |
| <b>Roadside Vegetation Hazards</b>  |           |                              |            |            |               |
| Vegetation that is obstructing visibility at intersections and critical road signs  | 1m        | 3m                           | 3m         | P          | N/A           |
| <b>Bridges and Major Culverts Hazards</b>   |           |                              |            |            |               |
| Bridge or major culverts creating a possible safety hazard to motorists, cyclists or pedestrians  | 2w        | 1m                           | 3m         | P          | P             |
| <b>Footpath and Shared Path Hazards</b>   |           |                              |            |            |               |
|   | High      | Low                          |            |            |               |
| Sealed or concrete paths with a lip/step greater than 25 mm in height   | 3m        | P                            |            |            |               |
| Sealed or concrete paths with mounding or depressions which are greater than 100 mm under a one metre straight edge   | 3m        | P                            |            |            |               |

Table 12.1

Legend: w = week, m = month, P = Refer to Program.

## 12.0 Constraints on Maintenance Activities

In attempting to deliver service targets Council may be faced with constraints that prevent the service target being met. The following table indicates some of the constraints that may be faced.

Figure 8

|  |   |
|--|---|
| <b>Budget</b>                          | Where the intervention requires significant works or capital works Council will take all reasonable steps to make the hazard safe or warn the public of the hazard. The works will then be referred for consideration in the Council's budget.  |
| <b>Resources and Competing Demands</b> | Where a number of defects require attention at the same time (or if in order to address a defect, another worksite must be left in an unfinished condition due to limited available resources) works will be prioritised to minimise risk across all sites.   |
| <b>Climate</b>                         | Where climate conditions, such as extended drought conditions, limit the reported defect being repaired, all reasonable steps to make the hazard safe or warn of the hazard will be undertaken. The defect will then be placed on a prioritised works program for attention when climatic conditions are optimal for rectifying the repair/s. |
| <b>Material supply</b>                 | Where there is a delay in obtaining required materials for the repair of a defect, such as a missing sign, all reasonable steps will be undertaken to source suitable replacements as quickly as possible.  |

## 13.0 Development and Implementation of Maintenance Program.

Council undertakes a full condition survey on all road infrastructure assets at specified intervals as detailed in the Road Asset Management Plan. Additional data is also gathered from ongoing field inspections and surveillance information.

This information along with surveillance inspections, other knowledge and competing demands on the asset is used by the Infrastructure Unit in order to prepare, review and update short and long term maintenance programs with consideration of competing priorities, available resources and maintenance budgets.

The implementation of the maintenance programs is administered using both internal and external resources. It includes implementing the longer term plan as well as results from surveillance inspections and customer requests.

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## 14.0 Delegations

The Chief Executive Officer has delegated various functions under the Road Management Act and Regulations to respective officers of Council which is detailed in an Instrument of Sub-Delegation. This allows Council, through its various members of staff, to respond quickly to technical and administrative matters under the Plan.

## 15.0 “Force Majeure”

Council will make every endeavour to meet all aspects of its Road Management Plan.

However, in the event of natural disasters and other events including, but not limited to, fires, floods, droughts and similar, together with human factors, such as lack of Council staff or suitably qualified contractors, because of section 83 of the Victorian Wrongs Act 1958, as amended, Council reserves the right to suspend compliance with its Road Management Plan.

In the event that the CEO has to, pursuant to section 83 of the above Act, consider the limited financial resources of the Council and its other conflicting priorities, meaning Council’s Plan cannot be met, they will confirm in writing with Council’s Officer in Charge of its Road Management Plan that some, or all, of the timeframes and response times are to be suspended.

Once the events beyond the control of Council have abated, or if the events have partly abated, the CEO will write to Council Officers responsible for Council’s Road Management Plan and inform them which parts of Council’s Plan are to be reactivated and the timeframes for each part of the Plan to be reactivated.

## 16.0 Review

This Road Management Plan will be reviewed in accordance with sections 303 and 304 of the *Road Management (General) Regulations 2005* every four years, in line with Council elections.

Each review will consider the levels of service for road infrastructure on public roads maintained by this Council. Particular attention will be given to managing the demand for asset maintenance with the level of resources made available through the Council budget.

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