

**Murray River Council**  
**TRANSPORT ASSETS MANAGEMENT POLICY**  
**POL300.V1**

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**CONTENTS**

<b>INTRODUCTION</b> .....	<b>2</b>
<b>Purpose</b> .....	<b>2</b>
<b>Objectives</b> .....	<b>2</b>
<b>Inspections – Road Hazard and Risk Identification</b> .....	<b>2</b>
1. Purpose.....	2
2. Inspection Intervals.....	3
3. Night Inspections.....	3
4. Inspection Staff.....	4
5. Inspection Process.....	4
<b>Control</b> .....	<b>4</b>
<b>Unavoidable Risk</b> .....	<b>4</b>
<b>Document Control</b> .....	<b>5</b>
<b>APPENDIX 1 : INSPECTION PROCEDURES &amp; INTERVENTION LEVELS</b> .....	<b>6</b>
Roads.....	6
1. Inspection Frequency.....	6
2. Procedure.....	6
3. Defects (Inspect For).....	7
4. Intervention Levels.....	8
Footpaths, Bike Paths and Shared Paths.....	9
1. Inspection Frequency.....	9
2. Procedure.....	9
3. Defects (Inspect For).....	10
4. Intervention Levels.....	10

## INTRODUCTION

This Transport Assets Management Policy forms a part of the corporate Risk Management Policy.

The development of a Road Risk Management procedure for the road asset type is a specific requirement of the corporate Policy. For the purpose of this procedure, "road" shall be defined as the total constructed width of a carriageway or formation including sealed and unsealed pavements, tabledrains, structures across roads, delineation and signage, and includes streets, footpaths, bike paths, shared paths, street lights, kerb & gutter and bus shelters.

The progressive implementation of Asset Management Plans for various asset types is one of the objectives of Murray River Council ('Council').

## PURPOSE

The Policy demonstrates that Council has a systematic and documented approach for reducing risks associated with the maintenance of roads. This, in turn, reducing Council's exposure to liabilities associated with the maintenance and repair of roads.

## OBJECTIVES

The objectives of the Policy are:

- ▶ To apply the risk management principles of identification, evaluation, and treatment of risks to road maintenance.
- ▶ To implement a formal system of road inspections which record identified risks including defined hazards.
- ▶ To develop and maintain a risk register for roads through inspections and incorporate reports of road hazards received from the public and/or employees.
- ▶ To implement a method of prioritising the risks identified by the various sources.
- ▶ To establish reasonably practicable response times, in which to effect repairs or provide temporary warnings, for the risks identified based on resources available.
- ▶ To establish a system of documenting all important steps of the procedure to allow ongoing review and to provide evidence to defend road related claims against Council.

## INSPECTIONS – ROAD HAZARD AND RISK IDENTIFICATION

### 1. Purpose

Road inspections are undertaken to allow the systematic identification of risks on the road network.

An inspection program has been developed (see **Figure 1**), and the information gathered by this program shall be used as the main method of identifying all the known hazards and risks associated with the road network.

Inspections are a formalised assessment of sections of the road network, looking for hazards that may require repair and maintenance.

There are three (3) major types of inspection:

- ▶ Formal (planned)
- ▶ Requests/Complaints Received from Road Users
- ▶ Service Requests from Council Employees

**Formal (planned):**

The purpose of formal inspections is to identify:

- (a) Those assets that have defects;
- (b) The location of the defect;
- (c) Action required to correct the defect; and
- (d) Severity of defect and hence priority for action.

**Requests/Complaints Received from Road Users:**

Requests or complaints from road users are a valuable source of knowledge about the state of the road network between inspections.

Each request/complaint is registered via a Service Request and then assigned to an Engineering Department staff member who will then arrange an inspection of the request/complaint.

**Service Requests from Council Employees:**

Council's staff regularly travel the road network on the way to and returning from work locations at various points throughout the Council area. During this travel, Council staff are encouraged to report defects encountered within the Maintenance Management Software (Reflect).

**2. Inspection Intervals**

Roads maintained by Council shall be inspected generally in accordance with the intervals listed in **Figure 1** below.

**Figure 1 – Inspection Intervals**

<b>Road Category</b>	<b>Inspection Timeframe</b>
Regional	Monthly
Arterial/Collector	6 monthly
Local	
▪ L1/L2	Annual
▪ L3	Biennial
Urban	Annual
Path (Low Risk)	Biennial
Path (Medium Risk)	Annual
Path (High Risk)	6 monthly
Kerb & Gutter	Annual
Bus Shelters	Annual

**3. Night Inspections**

All bitumen roads and streets shall be inspected in each direction for sign, pavement and guide post reflectivity and street light functionality every two (2) years.

#### **4. Inspection Staff**

The inspections will be undertaken by appropriately trained and experienced personnel who have an understanding of road-related hazards and defects. These may be the Works Foreman, Engineers, Gangers, Soil Technicians, Road Safety Officer or other staff members considered suitable to undertake inspections and accredited by the Director Engineering.

All inspectors will be trained in the systems, hazard analysis, and recording methods which support this procedure.

#### **5. Inspection Process**

Inspectors shall record risks/defects using the Maintenance Management Software (Reflect).

Where works are required to remove the risk/defect, a report will be generated and given to the appropriate staff detailing the action required and the action date in accordance with the Council's procedures and intervention levels (**Appendix 1**).

The program shall be maintained and monitored to ensure risks/defects are actioned within specified timeframes.

### **CONTROL**

Control of risk exposure requires control measures to be implemented. Some of the control measures that Council will be able to use to lessen its exposure to risk are as follows:

- ▶ Effecting repair of the damaged or substandard asset.
- ▶ Effecting temporary repairs and hence lowering the priority for future action.
- ▶ Use of warning signs and lights to alert road users of the potential hazard that exists ahead.
- ▶ Erection of temporary barriers or barricades and lights around the area until it can be repaired.
- ▶ Planning and allocating resources for the long term replacement of the road network or structures.

### **UNAVOIDABLE RISK**

Where an identified risk is unable to be eliminated due to the lack of Council resources, a summary report is to be provided to the General Manager detailing the risk and costs associated with eliminating the risk. A detailed risk rating assessment shall be undertaken, which will assist Management to program and prioritise funds to undertake necessary works.

## DOCUMENT CONTROL

Version No.	Details	Date	Resolution No.
1	Initial Issue – <i>On 12 May 2016, the Premier of NSW, The Hon Mike Baird MP, made the Local Government (Council Amalgamations) Proclamation 2016 under the Local Government Act 1993, whereby Murray Shire Council and Wakool Shire Council were amalgamated to constitute the new area to be known as Murray River Council, effective immediately.</i>	13 Dec 2016	271216

*Council reserves the right to review, vary or revoke this policy at any time  
This Policy is scheduled for review in December 2019*



**INSPECTION PROCEDURES & INTERVENTION LEVELS**

**ROADS**

ROAD CATEGORY							
Abbreviation	R	A	C	L1	L2	L3	Urban
Surface Type	Sealed	Sealed	Gravel or Sealed	Gravel	Gravel	Natural	Mixed

**1. INSPECTION FREQUENCY**

Road Category	Inspection Timeframe
Regional	Monthly
Arterial/Collector	6 monthly
Local	
▪ L1/L2	Annual
▪ L3	Biennial
Urban	Annual
Kerb & Gutter	Annual
Bus Shelters	Annual

**2. PROCEDURE**

A roof-mounted flashing amber light shall be operating on the vehicle when Council's staff are undertaking rural road inspections on bitumen roads which require frequent stopping and travel speeds of less than 75km/hr.

Defects are to be recorded via the appropriate medium. Information collected will be uploaded either automatically or manually by Council's staff into the Maintenance Management Software (Reflect).

### 3. DEFECTS (INSPECT FOR)

<b>Pavement</b>	<ul style="list-style-type: none"><li>▪ Edge drop offs (shoulders)</li><li>▪ Shoves</li><li>▪ Rutting</li><li>▪ Edge breaks</li><li>▪ Crocodile cracking</li><li>▪ Pot holes</li><li>▪ Stripping seal</li><li>▪ Seal bleeding</li><li>▪ Cracking</li><li>▪ Oxidation of aggregate</li><li>▪ Corrugations</li></ul>
<b>Vegetation</b>	<ul style="list-style-type: none"><li>▪ Growth causing blockage of visibility</li><li>▪ Overhang growth causing damage to trucks</li></ul>
<b>Regulatory Signs</b>	<ul style="list-style-type: none"><li>▪ Give Way, Stop, Speed that are damaged, faded/non reflective, missing or out of date</li><li>▪ Speed restriction</li><li>▪ Roundabout</li><li>▪ No Stopping</li></ul>
<b>Warning Signs</b>	<ul style="list-style-type: none"><li>▪ Warning Signs (yellow and black) that are damaged, faded/non reflective or missing</li></ul>
<b>Other Signs</b>	<ul style="list-style-type: none"><li>▪ Street/Road signs that are damaged, faded/non reflective or missing</li></ul>
<b>Pavement Line Marking</b>	<ul style="list-style-type: none"><li>▪ Double lines/Single lines</li><li>▪ Stop and Give Way lines</li><li>▪ Raised pavement markers</li><li>▪ Pedestrian Crossing</li></ul>
<b>Drainage</b>	<ul style="list-style-type: none"><li>▪ Drainage structure failure that has potential to cause hazard on road way</li></ul>
<b>Guide Post and Reflectors</b>	<ul style="list-style-type: none"><li>▪ Critical locations such as culverts, crests and curves that are missing or in need of repair</li></ul>
<b>Debris on Carriageway</b>	<ul style="list-style-type: none"><li>▪ Fallen limb, etc. that could cause damage to a vehicle</li></ul>
<b>Kerb and Gutter</b>	<ul style="list-style-type: none"><li>▪ Raised gutter &gt; 30mm @ seal, &gt; 50mm @ back of kerb</li></ul>
<b>Street Lights</b>	<ul style="list-style-type: none"><li>▪ Illumination or flickering</li></ul>
<b>Bus Shelters</b>	<ul style="list-style-type: none"><li>▪ Glass panel damage</li><li>▪ Structural defect</li></ul>

#### 4. INTERVENTION LEVELS

Identified defects are to be rectified/made safe in accordance with the intervention levels shown below:

Intervention Periods	Road Category					
	R	A/C	L1	L2	L3	Urban
Edge Drop Offs/Edge Breaks <ul style="list-style-type: none"> <li>Minor &lt; 200mm</li> <li>Major &gt; 200mm</li> </ul>	30days 14days	60days 30days	6mths 60days			
Shoves (Measured from top to bottom) <ul style="list-style-type: none"> <li>Minor &lt; 250mm</li> <li>Major &gt; 250mm</li> </ul>	30days 14days	60days 30days	6mths 60days			30days 14days
Crocodile Cracking <ul style="list-style-type: none"> <li>Minor &lt; 20m<sup>2</sup>/100 lin.m</li> <li>Major &gt;20m<sup>2</sup>/100 lin.m</li> </ul>	60days 30days	90days 60days	120days 90 days			30days 14days
Pot Holes > 300mm wide and, <ul style="list-style-type: none"> <li>50mm deep</li> <li>75mm deep</li> <li>100mm deep</li> </ul>	10days 5days 5days	20days 10days 5days	30days 20days 10days	6mths 3mths 3mths	12mths 12mths 12mths	20days 10days 5days
Seal Stripping/Bleeding <ul style="list-style-type: none"> <li>&gt; 10m<sup>2</sup>/ lin.m</li> </ul>	6mths	6mths	6mths			12mths
Cracking (longitudinal) <ul style="list-style-type: none"> <li>0-5mm</li> <li>5mm – 10mm</li> </ul>	3mths 1mth	6mths 3mths	12mths 6mths			3mths 1mth
Corrugations <ul style="list-style-type: none"> <li>&lt; 100mm deep (medium)</li> <li>&gt; 100mm deep (large)</li> </ul>		3mths 3mths	3mths 3mths	3mths 3mths	3mths 3mths	3mths 3mths
Debris on Carriageway	1day	1day	2days	5days	5days	1day
Visible Obstruction - Vegetation	1mth	1mth	3mths	3mths	3mths	1mth
Signs <ul style="list-style-type: none"> <li>Regulatory/Warning missing</li> <li>Other missing</li> <li>Regulatory/Warning poor condition</li> <li>Other poor condition</li> </ul>	5days 1mth 1mth 1mth	5days 1mth 1mth 1mth	1mth 1mth 1mth 1mth	2mths 1mth 1mth 1mth	2mths 1mth 1mth 1mth	5days 1mth 1mth 1mth
Line Marking	1mth	3mths	6mths			1mth
Guide Posts	1mth	3mths	6mths	12mths	12mths	
Guard Rail (make safe)	5days	2wks	1mth	2mths	2mths	
Drainage	2mths	3mths	6mths	12mths	12mths	1mth
Kerb & Gutter						12mths
Street Lighting		Reported to Appropriate Authority within 10 days				
Bus Shelters		1mth				1mth



## FOOTPATHS, BIKE PATHS AND SHARED PATHS

### 1. INSPECTION FREQUENCY

Road Category	Inspection Timeframe
Path (Low Risk)	Biennial
Path (Medium Risk)	Annual
Path (High Risk)	6 monthly

- ▶ **Low Risk Areas**  
Low volume pedestrian activity; minimal community infrastructure nearby.
- ▶ **Medium Risk Area**  
Frequent volume of pedestrian activity; in close proximity to community infrastructure (playground, community hall, aged care centres, medical facilities, public transport, etc).
- ▶ **High Risk Areas**  
High volume of pedestrian activity; directly adjacent to community infrastructure (CBD area, tourist facility, playground, etc).

### 2. PROCEDURE

A visual survey will be carried out by an appointed Council staff officer to identify defects/risks.

The path defects are to be recorded via the appropriate medium. Information collected will be uploaded, either automatically or manually, by Council's staff into the Maintenance Management Software (Reflect).

Once a path defect has been identified, the path is assessed to determine its risk and potential for causing injury to a path user. This assessment takes into consideration the path location category and the environmental risk (lighting/shadows).

The following **Risk Assessment Criteria** is used to determine the path Risk Rating (defect score) and hence, priority for repair.

Footpath Hierarchy			
Council Location Category	Description	Location Score	Inspection Frequency
<b>LOW</b>	Low volume of pedestrian activity, minimal community infrastructure nearby	2	Biennial
<b>MEDIUM</b>	Frequent volume of pedestrian activity, in close proximity to community infrastructure (playground, community hall, corner shops)	6	Annually
<b>HIGH</b>	High volume of pedestrian activity, directly adjacent to community infrastructure (CBD area, tourist facility, playground, etc)	10	6 Monthly

Physical Description – Environmental Risk (Lighting/Shadow)		Position in Location	Position Score
Physical Description	Score		
Lighting adequate – no shadows	1	On path	1
Lighting excellent – little shadow	2	On path	1
Lighting good – some shadow	3	On path	1
Lighting inadequate – medium shadow	4	On path	1
No artificial lighting – heavy shadow	5	On path	1

**DEFECT SCORE = Position Score + Location Score + Physical Score**

Footpath Risk Rating (from Defect Score above)		
Defect Score	Priority	Response Time (Days)
1	Low	360
2	Low	360
3	Low	360
4	Low	360
5	Low	360
6	Medium	90
7	Medium	90
8	Medium	90
9	Medium	90
10	Medium	90
11	High	30
12	High	30
13	High	30
14	High	30
15	High	30
16	Very High	2
17	Very High	2
18	Very High	2
19	Very High	2
20	Very High	2

### 3. DEFECTS (INSPECT FOR)

- ▶ Trip hazards - pavement drop/lift
- ▶ Uneven surface
- ▶ Cracked surface
- ▶ Vegetation obstruction - branches from shrubs/trees obstructing footpath

### 4. INTERVENTION LEVELS

Determine rating from Defect Score calculated above.

Rating	Control Procedure	Intervention Period
<b>LOW</b>	Consideration should be given whether action should be taken	As resources permit
<b>MEDIUM</b>	Program into Maintenance works	Same year if resources permit, next year if not
<b>HIGH</b>	Make safe (as soon as practicable) Temporary or permanent repairs	Within 1 to 2 months as resources permit
<b>VERY HIGH</b>	Make safe (as soon as possible) Repair or replace	Within same day Within the week