

# Review of Road Management Plan 2021

# 1 Purpose

The purpose of this document is to summarise the outcomes of the 2021 review of Council's Road Management Plan 2017 (RMP). It is a requirement of the Road Management (General) Regulations 2016, that Council conduct and complete a review of its RMP during the same period as it is completing its Council Plan, and make publicly available a written report summarising the findings and conclusions of the review.

# 2 Scope

The Road Management (General) Regulations 2016 states that:

In conducting a review of its road management plan, a road authority must ensure that the standards in relation to, and the priorities to be given to, the inspection, maintenance and repair of the roads and classes of road to which the plan applies are appropriate.

The Code of Practice for Road Management Plans<sup>1</sup> requires that standards set in the plan take into consideration: infrastructure type, community expectations; risk; available resources; the use of temporary measures and warning systems; potential impacts on utilities; and environmental and cultural factors. The RMP has been reviewed in this context.

Council has also undertaken a complete review of the structure of the plan to align with Council's current standard policy structure. Changes have also been made to meet recommendations in the Guidelines for Road Management Plans prepared by Municipal Association Victoria Insurance.

In conjunction with our review Council has also prepared a draft Road Management Plan, addressing the outcomes of this review. Subject to adopting the review, Council is required to give public notice of its intention to amend the Road Management Plan and allow 28 days for submissions to be made on the proposed plan. Council may then consider any submissions and adopt an amended RMP.

# 3 Background

Council's RMP was developed in accordance with the Road Management Act (2004) and supporting regulations and codes of practice. It was last reviewed in June 2017.

<sup>&</sup>lt;sup>1</sup> Code of Practice for Road Management Plans: http://www.gazette.vic.gov.au/gazette/Gazettes2004/GG2004S201.pdf





The purpose of a Road Management Plan as set out in the Road Management Act is to:

- a) establish a management system for the road management functions of a road authority which is based on policy and operational objectives and available resources; and
- b) set the relevant standard in relation to the discharge of duties in the performance of those road management functions.

#### 4 Outline of Review Process

The review process commenced with an initial assessment of the current RMP against the Code of Practice for Road Management Plans<sup>2</sup>. The following plan improvements that could be incorporated into the review were identified:

- Improvements to the identification of assets included in the RMP and clarity around demarcation of responsibilities between authorities
- The inclusion of more detail on the management system used by Council to discharge its duty to inspect, maintain and repair the assets for which it is responsible, including identifying hazards, assessing condition, prioritising work, and delivering and auditing work programs
- The inclusion of more detail on the type and nature of inspections and who will carry them out
- The inclusion of a broader range of defects to more fully reflect the maintenance activities required to keep the roads in an appropriate condition and identification of the standard to be achieved during maintenance or repair.

Because the required changes are substantial and Council's policy document framework has changed significantly since the current RMP structure was developed in 2013, a proposed revised RMP was completely rewritten as part of the review. The proposed RMP follows Council's current standard policy format with appendices addressing each of the four sections identified in the Code of Practice for Road Management Plans: a description of assets covered; details of the management system to manage those assets; a description of required inspections; and details of the maintenance and repair standards.

In determining the content of the proposed RMP we considered the following:

- LMI Road Management Plan Guidance Document (MAV Insurance, v4, Aug 2021)
- Content of Plans of other Metropolitan Councils
- Benchmark data on inspection frequencies, intervention levels and response times
- Active engagement with internal stakeholders from Maintenance, Capital Works, and Risk & Assurance teams.

<sup>&</sup>lt;sup>2</sup> Code of Practice for Road Management Plans: <u>Victoria Government Gazette No. S 201 Thursday 16</u> September 2004



# 5 Summary of Key Changes

Appendix 1 of this review outlines the key proposed changes to the structure and content of the RMP. Appendix 2 includes the intervention levels proposed for the 2021 RMP compared to the current RMP. The proposed draft Road Management Plan 2021 is presented as a separate document.

The main changes proposed are discussed in following the sections:

#### **5.1 Asset Hierarchy**

Unmade laneways are currently included as a separate classification in the road hierarchy and are not routinely inspected. To meet Council's obligations to inspect all assets for which Council is responsible, it is proposed that the 15 km of unmade lanes be reclassified as Secondary Laneways and inspected annually.

### 5.2 Inspection Frequencies

The following changes to inspection frequencies are proposed:

- Bridge Risk inspection intervals are to be reduced from 12 months to 6 months
- Condition inspection intervals for bridges are to be increased to a maximum of 5 years (3 years in existing plan), but with intermediate follow-up inspections for bridges where components are identified in the previous inspections as approaching the end of their life.

These proposed frequencies are consistent with VicRoads bridge inspection guidelines.

#### 5.3 Intervention Levels

Intervention levels identified in the current RMP are focussed on the following defect types:

- potholes and displacements in paths, kerbs, or the road surface: two or three severity levels are identified for each defect, with a faster response time for more severe defects.
- Damaged or illegible signs, flooded roads and missing or broken stormwater covers are identified for a 14 day response.

There is currently no detail of what tasks would be undertaken in response to each of these defects.

The current inspection regime requires two asset inspectors, who inspect all low priority activity paths and roads on a 12 monthly program and all high priority activity paths and Link (Secondary) and Collector roads on a 6 monthly program. The inspectors do pick up defects not specifically identified in the RMP, and it is recommended the RMP more fully documents the range of maintenance and repair activities undertaken to keep the road and path network in good condition.

The proposed changes identify several additional interventions: Table 1 lists the new interventions along with explanations as to why they should be included in the RMP.



Table 1: Additional Proposed Interventions

	Table 1. Additional F10posed interve		
Task	New intervention	Response time	Reason to include
Sealed roads –	Pavement shows distress in the form	42 days	Improves ride
isolated pavement	of shoving, rutting or depressions of	,	and reduces
failures (up to 5sq.m of	the surface exceeding 50mm at any		further
pavement surface	location under a 1.2m straight edge		pavement
area)	loodion ander a 1.2m of digit edge		deterioration
Sealed roads -	When a depression holds water, or	42 days	Improves ride
regulation of wheel	exceeds 50mm in depth under a	42 days	and reduces
			further
ruts and depressions	1.2m straight edge transversely or		
	under a 3m straight edge		pavement
	longitudinally	40 "	deterioration
Crack sealing	Cracking on over 10% to 20% of road	12 months	reduces
	length provided otherwise sound		further
			pavement
			deterioration
Concrete Footpath	Crack >20mm wide over 0.5m length	28 (High) or 42	Path user
slab repair	or multiple cracking over most of slab	days (Low)	safety and
Footpath edge drop	Edge drop-off > 75 mm	Activity paths	amenity
Asphalt path cracking	Cracking exceeds 2m in length and	28 (High	Reduce further
	10mm in width	Activity) or 42	deterioration
Asphalt path failure	significant concentrated levels of	days (Low	
	distress	Activity) paths	
Tactile repairs	Missing tactile or damage so that it	3,,	Safety
·	causes a trip hazard or does not fulfil	42 days	ĺ
	function.	,	
Gravel path	When pavement shows significant		Safety,
maintenance	concentrated levels of distress.		amenity and
	When scours of depth greater than	42 days	reduce further
	50mm occur at any location.		deterioration
Clearance envelope to	Whenever vertical clearance (e.g. tree		Cyclist safety
shared paths	branches, etc.) is less than 2.5m above		Cyonor surery
Shared patris	the ground or horizontal clearance	70 days	
	from the edge of the path is less than	10 days	
	1.0m to a potential hazard.		
Gravel lane re-sheeting	Loss of gravel material and extensive		Safety and
Graver larie re-sileeting		42 days	
	depressions exceeding 75mm or	42 days	amenity
Dedectries and	drop-offs exceeding 50mm	7 dove	Cofoty
Pedestrian and	Timber posts to be replaced when	7 days	Safety
school crossing	damaged or greater than 50% wood		
maintenance	rot is evident	00 1	
Guard rail	Guard rails in damaged condition	28 days	0.5.5.
maintenance	(other than immediate safety		Safety
	hazards)		
Sealed Roads line	When line marking is faded, eroded,	Annual	Safety
marking	worn or non-reflective.	Program	
Bridge maintenance	Visible damage on components	28 days	Safety
	likely to affect users or public safety		Caroty

#### 5.4 Response times

To accommodate these additional interventions and to ensure a consistent approach, it is also recommended that the current system of having varying response times based on two or three measures of displacement be simplified, using a single intervention for each defect with response times based on the asset hierarchy only. This approach is consistent with other road authorities.



The proposed treatment for sealed road potholes is for Council staff to fill the hole with cold mix within 7 days, for Secondary or Collector roads and 14 days, for Local Access roads, and for contractor to complete the repair in 42 days. The response in the current RMP is to respond in 28 days for Secondary/Collector roads and 42 days for Local Access Roads, but the treatment is not identified. The proposed response allows 42 days for a contractor to action regardless of road hierarchy, because this time frames are necessary to program the contractors work and safety issues have previously been addressed by filling the depression.

The treatment of footpath vertical displacements greater than 30mm are also considered in two stages. The trip hazard is addressed temporarily by repairing with asphalt within 7 days for high activity paths and 14 days for other paths and then programmed for replacement of the slab within 42 days. There is no change in the response to lower severity displacements (between 20 and 30mm), which are treated by grinding or slab replacement within 42 days.

### 5.5 Overall changes to standards

The standards proposed in this review are higher than in the current plan and a broader range of interventions have been identified and these are comparable to those of other inner metropolitan councils. Demonstrated compliance with each of the standards is required, so targets have been set on the basis that they are achievable rather than aspirational. Work completion will be monitored and used to adjust response times in future reviews.

#### 6 Conclusion

While the standards set out in the current RMP are generally appropriate, it is proposed that additional standards also be included to reflect the broader range activities required to ensure a safe and well maintained network.

The draft Road Management Plan 2021 incorporates these additional standards and more detail for inspections and road management practices, and the assets for which Council is responsible. The additional detail will support Council staff in carrying out activities specified in the plan and provide clarity to stakeholders.

#### 7 Recommendations

That a notice be given to amend the road Management Plan as in the attached revision, in accordance with Regulation 10 of the Road Management (General) Regulations 2016.



# **Appendix A: Proposed Changes to Road Management Plan**

Section # in RMP 2017	Road Management Plan 2017	Section # in proposed Plan	Issues	Changes in proposed Plan
1	Executive Summary	N/A	Not required under new policy structure	Plan has been restructured with a short overarching policy statement, with the legislated contents addressed in separate appendices.
2	Introduction			
2.1	Purpose	1.1,1.2		Focus on legislated requirements of the RMP.
2.2	Key Stakeholders	Appendix D		
2.3	Definitions	5.2		Reviewed, with minor changes
3	Rights and Responsibilities			
3.1	Register of Public Roads	2.1		Additional details and contents of a Road Register are defined.
3.2	Coordinating Road Authority	2.1		
3.3	Council's Assets on the Road Reserve	Appendix A		Greater detail provided on what Council is responsible for managing.
3.4	Non Council Assets	Appendix A		
3.5	Road Users	2.3		Include reference to s.17A of Road Safety Act <sup>3</sup>
4	Levels of Service			
4.1	Current Levels of Service	Appendix D		Information provided on how standards are determined

<sup>&</sup>lt;sup>3</sup> Identified in LMI Road Management Plan Guidance Document (MAV Insurance, v4, Aug 2021)



4.2	Asset Hierarchies	Appendix A	3 categories of laneways: primary, secondary, and unmade	Amalgamate Unmade Laneways into Secondary Laneways and treat "unmade" as a surface type.
4.3	Financial Resources	N/A	Advises that remediation of defects may be deferred due to insufficient resources	Delete clause, as this is covered by Exceptional Circumstances Clause and process below.
4.4	Exceptional Circumstances	Appendix B		Clause changed to align with LMI Guidance Document.
5	Management Systems			
5.1	Customer Requests	Appendix B	Little detail provided on	Includes how asset information is managed,
5.2	Asset Management System	Appendix B	asset activities are work is managed	hazards identified and condition assessed, and how work is prioritised and programs delivered
5.3	Inspections	Appendix C	Brief description of inspection types	Detail of inspections and who caries them out are documented
6	Audit and Review	Appendix B		Includes additional section on auditing maintenance programs
7	References	5.1		Includes reference to other Council road- related policies and documents.
Attachment 1	Road Hierarchy	Appendix A		Road Hierarchy description amended
Attachment 2	Levels of Service	Appendix D	Defects limited to potholes and kerb and path displacements. Standards to which defects are repaired are not identified.	Additional interventions added to include other tasks performed on road infrastructure. Details of comparison with current interventions in separate table
Attachment	Inspection	Appendix C		More detailed tables on the type and nature
3	Frequencies			on inspections and who they are done by.



# **Appendix B: Proposed Road Management Plan 2021 Intervention Levels**

EMERGENCY RESPONSE					
Key Task	Intervention levels	Performance standard	Response times	Difference cf Current	Notes
Response to emergency call outs	<ul> <li>Spill that could potentially create a slippery or other hazardous situation</li> <li>Roadwork controls and signage does not meet requirements</li> <li>Obstacles on roadway, shoulder, or path.</li> <li>Severe pavement subsidence or surface damage (on road or path)</li> <li>Flooding in road reserve</li> <li>Unserviceable guard rail Structural bridge damage reducing capacity or significant bridge surface</li> </ul>	Site inspected and risk reduced appropriately as required  Assess situation and determine remedial treatment	6 hours 48 hours	Higher	Current response is to action within 24 hours, but there is no indication of rectification action. Proposed response clarifies that 24/7 response will be to attend and respond to safety issue within 6 hours, but that addressing the cause and planning the response may take up to 48 hours.
	defect				



ROAD PAVEMENT (excluding lane pavements)			Response	times		
Key Task	Intervention levels	Performance standard	Secondary & Collector	Local Access	Difference cf Current	Notes
Sealed roads pot-hole patching	Potholes greater than 300mm diameter and 50mm depth	Initial repair with cold mix to remove hazard	7 days	14 days	Faster initial response	Current response is to attend to 50mm potholes in 28/42
		Hole is to be repaired (by contractor) to provide a smooth, safe surface consistent to line and level of surrounding pavement	42 days	42 days		days, but deeper potholes attended to faster (14 days for >100mm) Proposal to initially fill with cold mix followed by contractor repair within 42 days for all potholes is simpler and reflects current practice.
Sealed roads – isolated pavement failures (up to 5sq.m of pavement surface area)	Pavement shows distress in the form of shoving, rutting or depressions of the surface exceeding 50mm at any location under a 1.2m straight edge	Smooth, safe pavement surface consistent with line and level of surrounding pavement	42 days	42 days	New	No current RMP intervention
Sealed roads - regulation of wheel ruts and depressions	When a depression holds water, or exceeds 50mm in depth under a 1.2m straight edge transversely or under a 3m straight edge longitudinally	Return to line, level, safe and trafficable surface, with no ponding of water evident	42 days	42 days	New	No current RMP intervention
Crack sealing	Cracking on over 10% to 20% of road length provided otherwise sound	No visible cracks remaining.	12 months	12 months	New	No current RMP intervention
KERB AND CHANNEL			Response times			
Key Task	Intervention levels	Performance standard	Secondary & Collector	Local Access	Difference cf Current	Notes
Kerb and channel maintenance	Vertical or horizontal displacement <u>&gt;</u> 75mm		42 days	42 days	Slower response for	Currently 42 days for displacements between 75
	Missing kerb sections	Return to line and level	42 days	42 days	some severities	and 100mm but faster response for greater displacements. Proposal is to simplify by making the same for all.





PATHS			Response times			
Key Task	Intervention levels	Performance standard	High Activity	Low Activity	Difference cf Current	Notes
Footpath/shared path - concrete	Displacement ≥ 30mm	Temporary repair to remove hazard using asphalt	7 days	14 days	Faster response to temporarily	Currently 14 day response for all trips ≥ 30mm
		Replace slab	28 days	42 days	repair high activity paths	
	Crack >20mm wide over 0.5m length or multiple cracking over most of slab	Fill crack or replace bay ensuring surface is even and does not bold water	28 days	42 days	New	No current RMP intervention
	Edge drop-off > 75 mm	Reshape adjacent surface to remove drop-off	28 days	42 days	New	No current RMP intervention
Footpath/ //shared Path - Asphalt	Potholes greater than 200mm diameter and 25mm in depth.	Fill depressions and level.	28 days	42 days	Higher standard, but Slower for some severities	Currently 14 days for 300mm diameter x >75 deep, Proposal is to fix smaller defects at same response time as 300 x 50 potholes
	Cracking exceeds 2m in length and 10mm in width	Fill crack and level, or replace section	28 days	42 days	New	No current RMP intervention
	significant concentrated levels of distress		28 days	42 days	New	No current RMP intervention
Tactile repairs	Missing tactile or damage so that it causes a trip hazard or does not fulfil function.		42 days	42 days	New	No current RMP intervention
Gravel path maintenance	When pavement shows significant concentrated levels of distress. When scours of depth greater than 50mm occur at any location.	Prepare surface and reinstate with compacted gravel to match	N/A	42 days	New	No current RMP intervention



Clearance	Whenever vertical clearance (e.g.	Branches pruned,			New	No current RMP
envelope to shared paths	tree branches, etc.) is less than 2.5m above the ground or horizontal clearance from the edge of the path is less than 1.0m to a potential hazard.	obstruction cleared and Cyclist envelope maintained (where practicable) and hazard mitigated.	N/A	70 days		intervention MAV Guidelines strongly recommend inclusion of interventions on vegetation to ensure safe clearance envelope



LANE PAVEME	NT (primary and secondary)		Response	Difference	
Key Task	Intervention levels	Performance standard	times	cf Current	Notes
Concrete or asphalt	Potholes greater than 300mm diameter and 50mm depth  Vertical Displacement ≥ 75mm	Fill depressions and level.	42 days	Slower response for some severities	Currently 14 days for 150mm deep potholes, and 42 for 50 deep. Propose 42 days for all.
Bluestone	Vertical Displacement ≥ 75mm  Deformation ≥ 75mm over 1m	Fill depressions and level.	42 days	Higher, but slower response for some severities	Currently 14 days or 28 days, but will not intervene until displacement > 100mm or deformation > 200mmm over 1m.
Gravel	≥ 750mm diameter & ≥ 200mm deep ≥ 300mm over 1m	Fill depressions and level.	42 days	Higher	Previously Gravel lanes were treated as unmade
	Loss of gravel material and extensive depressions exceeding 75mm or drop-offs exceeding 50mm	Gravel re-sheet to provided smooth surface	42 days	New	No current RMP intervention
Natural surface	Potholes > 750mm diameter and 200mm deep, or vertical deformation of > 300mm over 1 metre	Fill depressions and level.	42 days	slower	Slower response than current 28 days, to be consistent with above.



<b>ROAD-RELATED</b>	INFRASTRUCTURE				
Key Task	Intervention levels	Performance standard	Response times	Difference cf Current	Notes
Pedestrian and school crossing maintenance	Timber posts to be replaced when damaged or greater than 50% wood rot is evident	All crossings and related furniture to be in good condition and highly visible at all times	7 days	New	
Road regulatory and advisory signage maintenance	50% sign legend illegible at 150m under low beam or in daylight	Clean or replace damaged signs	7 days	Faster	Currently 14 days for damaged or illegible safety sign
Guard rail maintenance	Guard rails in damaged condition (other than immediate safety hazards)	Guard rails restored to provide safety to road users and protection of pedestrians and assets.	28 days	New	
Sealed Roads line marking	When line marking is faded, eroded, worn or non-reflective.	Works programmed for repainting in the next financial year	Program	New	
Drainage maintenance	Broken or missing Pit lid or lintel that renders the item structurally unsound or presents a safety issue to road users.	Replace Pit Lid	14 days	Same	
	Ponding greater than 200mm deep and 3 meters across any direction) caused by blocked pits or drains or culverts	Remove debris and/or blockage	14 days	Same	
Bridge maintenance	components likely to affect	Temporary repair and/or permanent repair/ replacement of the unsafe/ damaged components.  If repair is not applicable, hazard is mitigated and repair is programmed for the next financial year.	28 days	New	