Background Paper 1

Traffic Management Plan Requirements and Approval Process





Department of Transport

Contents

1. Introduction	3
2. Identification and Evaluation of Risks	3
3. Treatment, Control and Mitigation of Risks	4
4. Development of a Tailored TMP	5
5. Road Safety (Traffic Management) Regulation 2019 [Part 4]	5
6. Conclusion	7
7. References	7

Other elements of the project can be found at: <u>https://www.vicroads.vic.gov.au/safety-and-road-rules/vehicle-safety/construction-trucks-and-community-safety</u>

Any photos, figures or illustrations where a source is not provided should be assumed to be produced by the combined authors and organisations acknowledged below.

Produced in 2020 as part of the Construction Truck and Vulnerable Road User project, Department of Transport, Victoria. The first iteration of the main document was commissioned by Melbourne Metro Rail Authority (now Rail Projects Victoria) and developed by the Aurecon Jacobs Mott MacDonald joint venture.

1. Introduction

This paper forms one of a series of background papers relating to issues around the safety and provision for pedestrians and cyclists at roadworks. It provides additional details and information for use by practitioners.

The Road Management Act 2004 Code of Practice Worksite safety - Traffic Management (2010) references the Road Safety Regulations (2009) which states that:

"Section 99A(3)(a) of the Road Safety Act 1986 requires any person conducting works on a road to 'have in operation a traffic management plan', while section 99A(4)(a) requires that a traffic management plan 'comply with the prescribed requirements' of any relevant Regulations, being the Road Safety Regulations 2009."

To help ensure TMPs are in accordance with regulatory requirements, the guidelines provide specific references to standards and guidelines on areas to be considered as part of the development of TMPs. In addition, best practice advice and things to avoid is given to enhance TMPs for Pedestrians and Cyclists.

This document was developed to support the "Safety Essentials: Accommodating Pedestrians and Bicycle Riders at Temporary Road Works" summary document. This project was undertaken for the Construction Truck and Vulnerable Road Safety project.

2. Identification and Evaluation of Risks

Code of Practice Worksite Safety – Traffic Management (2010) under the Road Management Act 2004 identifies the following as the major risks for worksite traffic management:

- Road Type and speed limit
- Clearance between moving traffic, workers and roadworks plant and equipment
- Traffic volume and vehicle composition
- Geometry of the worksite, and approach to the worksite
- Duration of the works

Here, and in general risks associated with works on roads largely focus on the safety of workers and not necessarily on the road users. A more tailored approach to pedestrians and cyclists is therefore required to adequately ensure their safety.

For works on roads, clearance to traffic, permanent speed limit and road type are the main factors used for assessing the hazard rating of a worksite. Here, the higher the traffic speeds and the lower the clearance between traffic and workers, the higher the risk rating.

For pedestrians and cyclists, a three-dimensional approach considering the relationship between moving traffic, worksite activities and the user group is required. Further, every individual worksite needs to be assessed to determine its own 'worksite hazard rating', based on the main risk factors present at the worksite. Once this is established, the required level of planning for the preparation of a TMP at a worksite to eliminate or reduce risk levels can be determined.

When identifying and evaluating hazards and risks, consideration should be given to what situations might cause these hazards to occur.

AGRD Part 3 Section 2.2.4 (Austroads, Guide to Road Design Part 3: Geometric Design, 2020) points to sections where possible hazards to pedestrians and cyclists, and their possible causes and consequences. Understanding the possible causes of these risks can help determine appropriate mitigation measures

3. Treatment, Control and Mitigation of Risks

Code of Practice Worksite Safety – Traffic Management (2010) under the Road Management Act 2004 sets out that when exploring how to best manage risks or hazards, so far as reasonably practicable, consideration should be given to:

- The severity of the hazard or risk;
- The state of knowledge about that hazard or risk;
- The nature of the works (e.g. long term or short term);
- The availability and practicability of control measures (hierarchy of safety controls);
- The cost of removing or mitigating that hazard or risk.

Overall, the Occupational Health and Safety Act (2004) states the following with regards to the responsibilities of risk reduction to individuals:

"to avoid doubt, a duty imposed on a person by this Part or the regulations to ensure, so far as is reasonably practicable, health and safety requires the person to eliminate risks to health and safety so far as is reasonably practicable; and if it is not reasonably practicable to eliminate risks to health and safety, to reduce those risks so far as is reasonably practicable."

Figure 1 provides a Hierarchy of Safety Controls, which is to be applied around worksites in order reduce risks to individuals. summarises some safety hazards and risks that pedestrians and cyclists are commonly subjected to around worksites and provides suggested hazard control selection methods. In determining necessary safety control measures to eliminate or reduce the hazard, the Hierarchy of Safety Controls should be considered. It should be noted that more than one control can be applied. Further, the table provides examples of risk management, but is not exhaustive to the risks potentially encountered by pedestrians and cyclists around construction sites.



FIGURE 1: HIERARCHY OF SAFETY CONTROLS

It should be noted that whilst elimination and substitution of hazards lies at the top of the treatment hierarchy, this is not intended to encourage the closure of pedestrian and cyclist facilities around construction sites as a priority if suitable safe measures can be put in place to keep these facilities operational. For example, where works are being carried out on a footpath, posing risks to path users, closing the footpath should not be the first point of call to manage the risks. Instead, options such as closing an adjacent traffic lane and diverting path users into the road reserve through the provision of safe barrier and containment methods should be explored. Pedestrians and cyclists are less inclined to divert from existing routes and this needs to be considered where provisions are changed. Failure to adequately consider this ability to divert often leads to poor and "less safe" behaviour that places those users at greater risk.

It should be acknowledged that the introduction of control measures may have unintended negative consequences for other implemented controls and these should be monitored and re-evaluated on an ongoing basis.

4. Development of a Tailored TMP

Once a sufficient understanding of the road use and surrounding worksite area has been gained, as well as risks identified and analysed, the TMP for the works should then be developed.

Section 99A of the Road Safety Act 1986 requires any person conducting works on a road to 'have in operation a traffic management plan' (Road Management Act 2004 Code of Practice Worksite safety - Traffic Management, 2010).

Workers should be made aware of both the existence and contents of the traffic management plans that apply to their worksite. The Road Safety (Traffic Management) Regulations 2019 (VicRoads, 2019) Part 4 identifies when a TMP must be made and what is required to be include. (reproduced below)

Further the Occupational Health and Safety Regulations (VIC) (2017) requires Safe Work Method Statement (SWMS) to be developed for high risk construction work, which among other things includes on or adjacent to roadways or railways used by road or rail traffic. An employer must ensure that a SWMS for any high-risk construction work has been developed before work commences and ensure the work is undertaken in accordance with it. Although a SWMS is exclusively about the safety of the workers, this may impact the TMP or vice versa.

It should be noted that the OH&S Regulations (2017) provide the legislative and administrative measures to improve OH&S in Victoria.

5. Road Safety (Traffic Management) Regulation 2019 [Part 4]

The full set of 'Road Safety (Traffic Management) Regulation 2019' can be found on the Victorian Law Today website: <u>https://www.legislation.vic.gov.au/</u>

Part 4—Traffic management plans

35 Traffic management plan

- (1) For the purposes of section 99A(4)(a) of the Act, the prescribed requirements with which a traffic management plan must comply are—
 - (a) that it—
 - (i) depicts a diagram or dimensioned drawing of the specific place where the relevant activity is being, or is to be, conducted; or
 - (ii) depicts a generic diagram or dimensioned drawing of a place that is similar to the place where the relevant activity is being, or is to be, conducted; or

- (iii) sets out standard operating procedures relating to the relevant activity; and
- (b) that, subject to subregulation (2), it includes details of-
 - (i) the nature and expected duration of the relevant activity; and
 - (ii) the worksite or location of the relevant activity; and
 - (iii) the risk assessment undertaken of the relevant activity; and
 - (iv) the arrangement of traffic control devices for the duration of the activity, including for each stage of the activity and during both daytime and night time, where relevant; and
 - (v) any proposed reduction in the speed limit for the road or road related area on which the relevant activity is being, or is to be, conducted; and
 - (vi) any provision for public transport, other vehicular traffic, pedestrians, cyclists, or persons with disabilities; and
 - (vii) any other measures to control identified risks to ensure the safety of all road users and persons engaged in or conducting the relevant activity.
- (2) The details of matters referred to in subregulation (1)(b) are details of matters that, so far as reasonably practicable, are applicable, having regard to the following—
 - (a) the nature of the relevant activity;
 - (b) the type of road or road related area on which the relevant activity is being, or is to be, conducted;
 - (c) the speed-limit for the road or road related area on which the relevant activity is being, or is to be, conducted;
 - (d) any identified delays to traffic on the road or road related area on which the relevant activity is being, or is to be, conducted;
 - (e) the clearance between—
 - (i) traffic on the road or road related area on which the relevant activity is being, or is to be, conducted; and
 - (ii) persons conducting or that will conduct the relevant activity or other road users.
- (3) In this regulation—

road or road related area includes a part or length of a road or road related area.

36 Traffic management plan to be available for inspection

A person conducting or proposing to conduct a relevant activity on a road or road related area must-

- (a) maintain a copy of the traffic management plan at the location or worksite of the relevant activity at all times when workers are present; and
- (b) make the traffic management plan available for inspection on request by a person who is authorised under section 77 of the Act to prosecute for an offence against the Act or these Regulations.

6. Conclusion

This document identifies the traffic management requirements, as they relate to the various regulations in Victoria. To ensure TMPs are in accordance with regulatory requirements, this background document provides specific references to standards and guidelines on areas to be considered during the development of TMPs. Understanding these responsibilities will assist practitioners in ensuring pedestrians and cyclists are accounted for appropriately early in the TMP development lifecycle.

7. References

Road Management Act 2004 Code of Practice Worksite safety - Traffic Management (2010) Austroads, Guide to Road Design Part 3: Geometric Design, 2020 Road Safety (Traffic Management) Regulations 2019 (VicRoads, 2019) Part 4 Occupational Health and Safety Regulations (VIC) (2017) Victorian Law Today website: <u>https://www.legislation.vic.gov.au/</u> Road Safety Act 1986

Department of Transport, 1 Spring Street Melbourne Victoria 3000 © Copyright State of Victoria Department of Transport 2020

Except for any logos, emblems, trademarks, artwork and photography this document is made available under the terms of the Creative Commons Attribution 3.0 Australia license.