## 2015 Interim Traffic Management Manual for Work on Roadways Overview of Changes from Previous Documents

Updated: February 17, 2016

Section	Summary	Sources for Content Material	Changes from Current Documents
Foreword	General introduction to the new manual including language of the phased in implementation of the Interim TMM* over 3-years.	NEW Technical Circular for the implementation of the Interim TMM	Updated from Traffic Control Manual for Work on Roadways, 1999 (TCM) acknowledgements
Section 1: Introduction	Overview of the Interim TMM: purpose and use. Defines the roles and responsibilities of the road authority and contractor. Explains the plan submission and review process.	Traffic Management Guidelines for Work on Roadways, 2001 (TMG)	Same major principles, more clearly defined.
Section 2: Fundamentals of Traffic Management and Control	This section provides the framework of why we have traffic management and the guiding principles behind the guidelines/standards. General information and things to be considered in Traffic Management Plans (TMPs) – for example, greater emphasis on vulnerable road users, accesses/driveways, working near railways, maintenance of devices etc.	TCM, TMG, general traffic engineering principles.	<ul> <li>Increased clarity of the science behind traffic management, including considering various road users and speed management interpretations and techniques.</li> <li>Hierarchy of controls</li> <li>Determining the need for a speed reduction</li> <li>Slow Down Move Over</li> <li>Channelizing traffic</li> </ul>
Section 3: Traffic Management Plans	This section will predominately be used by the road authority to determine the Project Category which outlines the documentation requirements of the TMP. Detailed descriptions of each sub-plan of the TMP.	TMG	<ul> <li>Created a better category assessment as well as a risk assessment tool to determine the Project Category</li> <li>Reduced the number of categories from five to three, where Category 1 is the most basic and Category 3 is the most complex.</li> </ul>

Section	Overview	<b>Sources for Content Material</b>	Changes from Current Documents
Section 4: Temporary Traffic Control Devices	This is a comprehensive section of temporary traffic control devices for use on provincial roadways.	TCM, Provincial Sign Catalogue, Manual of Standard Traffic Signs and Pavement Markings, Current Technical Circulars	<ul> <li>Clarity about various channeling devices i.e. cones, tubes, drums etc.</li> <li>Introduction of automated flagger assistance devices (AFADs)</li> <li>Information regarding the usage of temporary rumble strips.</li> <li>Information on fencing and screens</li> <li>Increased information on the use of pilot cars</li> <li>Enhancement of vehicle rear-mounted crash attenuators</li> <li>Clarity of buffer vs. shadow vehicles – definition and use</li> </ul>
Section 5: Traffic Control Persons (TCPs)	A comprehensive section on TCPs that defines roles and responsibilities and expectations.	TCM, t-circular on reflectivity requirements and extensive consultation with the BCCSA, practicing TCPs, and WorkSafeBC.	<ul> <li>Overall section is new but not new to how industry has evolved over time.</li> <li>Some specific requirements have been identified i.e. TCP prohibitions, speeds which TCPs can be on the roadway controlling traffic, stopping traffic from the shoulder and no TCP within active signals.</li> <li>New maximum distance between TCP ahead sign and TCP</li> <li>New requirement that TCPs can only be used in speedzones of 70km/h or less (higher speed areas will need a speed reduction to use TCPs)</li> </ul>

Section	Overview	Sources for Content Material	Changes from Current Documents
Section 6: Traffic Control Layouts – General Instructions	The majority of the TMM focuses on traffic control layouts. This section is a general "how to" and information on the layouts in Sections 7 to 19. Also includes general information like:  - Work zone components - Set-up/removal information - Queue management techniques - Treatment of drop-offs and travel lane excavations - Clarity of the taper length and device spacing tables - Info of how to lay out a taper	TCM, user feedback and other jurisdictional formats.	<ul> <li>Format has changed to include:         <ul> <li>Full page graphic on the right side</li> <li>Text description on the left side (includes purpose of the layout, minimum standard requirements, guidance information and options if available)</li> <li>Signage for both directions of travel</li> </ul> </li> <li>Additional clarity of how to implement the layouts</li> <li>Sections 7 to 19 have been predominantly categorized by roadway type which is different than the TCM where the layouts were categorized by duration i.e. brief duration, long duration, freeway etc.</li> <li>Updated Tables A &amp; B and device spacing for higher speed roadways.</li> <li>Added Emergent and Brief duration work risk assessment.</li> <li>Updated taper lengths - Leading tapers increased – termination tapers decreased.</li> <li>Use of drums for leading tapers more prominent and selection of channelizing devices based on speed.</li> <li>New is the requirement of 5 devices in all leading tapers</li> </ul>
Section 7 – Traffic Control Layouts – 2-Lane, 2-Way Roadways	Focuses on various set ups for Two Lane Two Way roadways.	TCM, MUTCD & general traffic engineering principles.	Expanded information considering speed of roadway and to include self-regulating traffic control. Updated graphics which include signage for both directions.

Section	Overview	Sources for Content Material	Changes from Current Documents
Section 8 - Traffic Control Layouts – Multilane Undivided Roadways	Focuses on various set ups for Multilane Undivided roadways.	TCM, MUTCD & general traffic engineering principles.	Expanded previous information and included passing/climbing lanes and work near runaway lanes. Updated graphics which include signage for both directions.
Section 9 - Traffic Control Layouts – Multilane Divided Roadways	Focuses on various set ups for Multilane Divided roadways.	TCM, MUTCD & general traffic engineering principles.	Expanded information to include on ramp/off ramp and work near runaway lanes. Also includes multiple lane configurations, such as centre lane closures. Updated graphics, where applicable signage is shown in both directions.
Section 10 - Traffic Control Layouts – Mobile Work	Focuses on Mobile Work operations and various options for mobile work.	TCM, MUTCD & general traffic engineering principles.	Clarified Slow Moving and Intermittent Moving work. Shadow vehicle added for mobile work on higher speed roadways and options to implement speed reductions. Added Rolling Slow Down information.
Section 11 - Traffic Control Layouts – Intersections	Includes information for working in and around intersections including turn lanes and sidewalks.	TCM, City of Vancouver, MUTCD & general traffic engineering principles.	Expanded this section to include a variety of intersection scenarios for drivers and pedestrians. Updated graphics, so applicable signage is shown for various approaches.
Section 12 - Traffic Control Layouts – Roundabouts	Includes information and layouts for various Roundabout scenarios.	MUTCD and industry practice.	New information.
Section 13 - Traffic Control Layouts – Milling, Paving, Seal Coating	Consolidated similar work items in one area. Also includes Benkleman Beam and Falling Weight Deflectometer.	TCM, MUTCD & general traffic engineering principles.	Graphics updated for clarity.
Section 14 - Traffic Control Layouts – Pavement Marking	Includes information regarding long line and transverse pavement marking.	TCM & Pavement Marking T- Circular & general traffic engineering principles.	Consolidated pavement marking layouts and combined into one section.
Section 15 - Traffic Control Layouts – Surveying		TCM & general traffic engineering principles.	Graphics updated for clarity. Old survey on centreline graphic removed due to issues with clarity. As surveying work becomes more complex, other layouts in the manual shall be considered.

Section	Overview	Sources for Content Material	Changes from Current Documents
Section 16 - Traffic Control Layouts – Avalanche Control		TCM & general traffic engineering principles.	Layouts for planned avalanche closures for day and night work.
Section 17 - Traffic Control Layouts – Utility Work	Focuses on Highway electrical applications.	TCM & general traffic engineering principles.	Graphics updated for clarity
Section 18 - Traffic Control Layouts –Bicycle Lanes	Information intended to assist with accommodating cyclists through construction.	New information based on MUTCD and industry practice.	New
Section 19 - Traffic Control Layouts – Other Scenarios	Information intended to assist tow truck recovery operations. Vehicle removal which takes longer than fifteen minutes requires additional traffic control.	New information based on MUTCD and industry practice.	New
Appendix A – Glossary	Complete listing of terms used throughout the manual	TCM, TMG, many new ones not previously defined	Expanded
Appendix B – Standard Construction Signs	Complete listing of commonly used construction signs and commonly used regulatory signs used through work zones	TCM and Provincial Sign Catalogue	Updated list of all signs with more robust definitions of use; approx. 25 NEW signs and definitions
Appendix C – Templates for Traffic Management Plans	Three templates:  - Template for Category 1 Traffic Management Plans  - Daily Sign Check Form  - Template for Category 2 and 3 Traffic Management Plans	TMG and internal documents that were thought to be helpful to the contractors	<ul> <li>Template for Category 1 – updated version of the one in the TMG</li> <li>Daily Sign Check Form – NEW</li> <li>Template for Category 2 and 3 TMP – NEW: a version was internally used by ministry staff</li> </ul>
Appendix D – Traffic Management Plan Audit Forms	Two Forms: - TMP Documentation Audit Form - TMP Field Audit Form	NEW; created by internal ministry staff	Both forms are NEW for the purpose of providing a consistent means of evaluating Traffic Management Plans and implementation.
Appendix E – Lane Closure Request Form	Form H1080	TMG	Updated to current wording.

Section	Overview	Sources for Content Material	Changes from Current Documents
Appendix F – Tables A to D	Table A: Taper Lengths Table B: Device Spacing Lengths Table C: Risk Evaluation for Emergent and Brief Duration Work Table D: Minimum Distance for Mobile Work	<ul> <li>Tables are used throughout the Interim TMM; Appendix is a central location for easy referral</li> <li>Device table similar to one in TCM</li> <li>T-Circular for mobile and emergent work</li> </ul>	<ul> <li>All tables adjusted for increased max speed limit on BC highways (120 km/h)</li> <li>Table A: new and detailed depending on the type of taper; lengths developed to address night work, additional response time for road users.</li> <li>Table B: Device spacing as increased as speed increases</li> <li>Table C: consistent with 2013 T-Circular</li> <li>Table D: increased clarity of what is mobile work</li> </ul>