Traffic Operations and Management Standing Committee

PROJECT PROCEDURE GUIDELINES

(September 2010)

Introduction

Section 2.1 of the Governing Rules 2009 establishes the following primary goals of the Traffic Operations and Management Standing Committee (TOMSC);

1. develop standards for traffic control devices and practices for use in Canada,
2. propose for publication: manuals, reports, guidelines and diagrams of recommended traffic control devices and practices for use in Canada and such revisions to these manuals, etc. as may be considered advisable,
3. encourage the implementation of the recommended standards for traffic control devices and practiced in all provinces and territories of Canada,
4. develop educational and public information material respecting new and existing traffic control devices, and their correct application and use.

These guidelines are intended to establish a format and procedure to be followed by study groups created by TOMSC to carry out projects in support of the goals, and to ensure that TAC's Environmental Policy, Climate Change Impact and Code of Ethics are considered when initiating and carrying out these projects. TOMSC is made up of five subcommittees, each headed by a Vice-Chairperson. These are:

1. Development and Devices Subcommittee
2. Applications and Practices Subcommittee
3. Editing and Publication Subcommittee
4. Rules of the Road Subcommittee
5. Emerging Technologies Subcommittee

Each subcommittee may have a number of steering committees, each of which is established to study and report on specific traffic control related issues.

Project Procedure

1. IDENTIFY AND DEFINE THE PROBLEM

TOMSC shall determine if issues brought to its attention warrant creation of a project. TOMSC will require that a Project Initiation Form (see Appendix A) be completed prior to considering the issue. If the issue falls within the goal, responsibilities and duties of TOMSC, is of interest to the members of TOMSC, and if further study is warranted, a project will be created and a project number assigned.

2. FORMATION OF A PROJECT STEERING COMMITTEE

Funded Projects

Funded projects require approval of the Chief Engineers' Council (CEC). Once approved, funds are solicited from TAC members. The Project Steering Committee will be comprised of contributing members, from which a Project Chairperson will also be selected.

Volunteer Projects

For volunteer projects, a Project Chairperson is selected from TOMSC. The Chairperson shall begin by calling for volunteers to establish a Project Steering Committee of 6 to 12 members (the size will depend on the complexity of the topic), who are interested in the subject, and have skills and/or knowledge relevant to the issue. In addition to TOMSC members, representatives of professions and/or disciplines who can provide professional expertise or who represent specific stakeholder groups may also be invited to participate on the Steering Committee.

3. INITIAL ACTION

The Steering Committee shall begin by thoroughly reviewing the Project Initiation Form in order to fully understand the project scope, tasks and deliverables.

4. WORK PLAN

The work plan should begin with a "state of the art" review of the problem to determine current practice, experience, techniques and devices in use. The review should cover a representative number of Canadian jurisdictions, and be extended to include jurisdictions in the U.S.A. and other countries. Users and affected groups should also be surveyed for input by means of questionnaires, library searches and personal contact. All members of the Steering Committee should be involved, and participate to the maximum extent possible.

The work plan should also include a review of TAC's Environmental Policy, Climate Change Impact and Code of Ethics to ensure that they are adhered to during the course of the project.

5. EVALUATION OF OPTIONS

The results of the "state of the art" review, and through consultations with user groups, should permit the study group to identify one or more possible solutions to the issue.

In the case of projects relating to Development and Devices, Applications and Practices and/or Emerging Technologies, the Steering Committee should develop possible solutions for testing and

evaluation. In the case of projects relating to Rules of the Road or Editing and Publication, the Steering Committee may wish to proceed directly to the Impact Assessment and final reporting phases.

The Steering Committee must determine the classification of the device(s), and confirm that each option for the device(s) conforms to the standards for the classification (e.g. colour, shape, message, etc.), and is consistent with other similar devices in the Manual of Uniform Traffic Control Devices for Canada (MUTCDC).

6. TESTING

Laboratory Testing

To carry out the laboratory testing, the Steering Committee should assemble an adequate sample of road users, preferably several hundred, representing both genders, all ages and varying driving experience. In cases where the device will apply to a particular class of road user (e.g. disabled persons, elderly drivers, cyclists, etc.) care should be taken to ensure that these persons or their advocates are represented in the overall sample.

The principle criteria to consider in the evaluation are:

i. **Understandability** – How well will the road user understand what he or she may or must do when seeing the device?
ii. **Legibility distance** – At what distance is the road user able to recognize the device and react to it? ***and***
iii. **Glance Legibility** – How quickly does the road user recognize the device.

Numerous techniques are available for carrying out and recording the results of these tests. The tests should, however, be designed so that each participant records only their own reactions and there is no opportunity for consultation or sharing of opinions between subjects.

Using the results of the tests, the Steering Committee should establish the “best” option. No specific scoring technique is recommended, however, the Steering Committee should consider the type of device and its expected application, in establishing the scoring criteria (i.e. understandability is particularly important for regulatory and warning signs).

Additionally, the “Recommended Guidelines for Traffic Control Device Comprehension Testing” for the Transportation Association of Canada should be considered when comprehension testing of a device is required.

Field Testing

Having completed the laboratory phase of the testing, the “best” options should be tested in “on road” situations, under a variety of the road, weather and lighting conditions. Testing may be done using a similar sample group to the previous evaluation. The test method may include observing driving behaviour, and/or measuring reactions to video or computer generated representations of the on road conditions.

The field evaluation should be based on the same basic criteria applied to the initial tests.

On completion of the field testing, the options should be reduced to a single solution which the Steering Committee agrees on.

7. IMPACT ASSESSMENT

Before completing the project and submitting their recommendation, the Steering Committee is expected to prepare an impact assessment analyzing the benefits and costs of implementing the proposed device. The impact assessment should include: a review of the original reason for the proposed device, a review of the environmental impact of the proposed solution, the costs of implementation, the expected safety benefits, and any other impacts of the device.

8. REPORTING

An interim report(s) shall be prepared and circulated to TOMSC, in advance of each TOMSC meeting. The Project Chairperson will then briefly discuss the contents of the report and answer any questions at the meeting. The report shall include the Progress Report Form (see Appendix B) and any supplemental information of interest to TOMSC. The purpose of the report is to inform TOMSC of project progress and to seek general input. TOMSC must not be used as a substitute for the Steering Committee. The discussion shall not include designing devices or developing solutions.

9. FINAL REPORT

On completion of its work the Chairperson shall prepare and present a final report to TOMSC, comprised of the following:

1. A complete discussion of the subject, including impact assessment.
2. A clear recommendation for adoption, replacement or revision of the specific traffic control device or practice, or a recommendation that no further action be taken on the matter.
3. A proposal for adoption, replacement or revision of the specific text associated with the device or practice, and patterned along the lines of the text now in the MUTCDC or other publication.
4. Scaled drawings in the form required for the appropriate publication.
5. Full size reproductions of the device, if appropriate, for viewing at the TOMSC meeting. Electronic images displaying the full size of the device may be substituted for full size reproductions, where appropriate.
6. Educational and public information material, which may be used by jurisdictions to introduce the device to the public (see Appendix C).
7. A clear recommendation on the timing and phase in strategy for implementing the device.

10. APPROVAL

TOMSC will vote regarding approval the project and any new/modified/deleted traffic control devices.

Approved projects that involve a change to the MUTCDC require approval by CEC. Comments on the project may be received through the balloting process. Comments will be forward to the project Chairperson for review and response, as appropriate. The Project Chairperson will also determine if any revisions are required to the project documentation.

Following incorporation of any revisions resulting from comments from CEC, it is the responsibility of the Project Chairperson to provide the final project report and all original graphics to the TAC Secretariat. Acceptable formats for graphics include: CorelDraw, Adobe Illustrator and Adobe Photoshop. Embedded graphics in Word or Wordperfect documents are not acceptable. All spreadsheets must be created using Microsoft Excel.