

# MEMORANDUM

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TO: ALL MEMBERS  
TRAFFIC OPERATIONS AND MANAGEMENT  
STANDING COMMITTEE (TOMSC)

FROM: CHRIS BRINKMANN, Secretary

DATE: February 23, 2011

RE: MINUTES OF MEETING # 39

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Enclosed are the minutes of TOMSC Meeting # 39 held on September 25 - 26, 2010 in Halifax, Nova Scotia.

Please note that the next meeting will be held during the Spring 2011 meetings, April 15 - 16 in Ottawa, Ontario.

Chris Brinkmann  
Secretary, TOMSC

# MINUTES

## TRAFFIC OPERATIONS AND MANAGEMENT STANDING COMMITTEE 39th MEETING Halifax, Nova Scotia September 25 - 26, 2010

Voting Members present: Sat – 38; Sun – 36  
Guests/Observers - Yes

### **1. Opening Remarks (C. Robertson)**

- a. Members introduced themselves
- b. New members – no new members
- c. Departures – Dave Banks to receive Distinguished Service Award; Jim Inch and Luis Escobar both leaving TOMSC
- d. Review of Agenda
- e. Additional Agenda items

### **2. Minutes of Meeting # 38**

- **Motion** (Chow /Stewart) – to adopt the minutes. **Approved.**

### **3. Chair's Report (C. Robertson)**

- a. TOMSC Executive meeting – Currently one “city” vacancy and one TAC appointee vacancy for TOMSC. Chair to be following up with some jurisdictions as to their attendance for future meetings. Majkic indicated TAC Secretariat never formally recognized TAC appointees (as opposed to Chair's appointees). It was decided to carry this item forward to Spring 2011 meetings for further discussion.
- b. Chief Engineers' Council – Number of TOMSC projects approved including #254 (Vertical Visibility Constraint Sign), #260 (Identification of Left Turn Signals Sign), and #295 (Passing/Climbing Lane Length Sign). Project #217 (All-Way Stop Control Tab) was not approved.

### c. Status of Projects Seeking Funding

- Please note that this table was put together following the TOMSC meeting (Nov 2010) and provides an updated status.

Status	#	Project Title	Chair	Comments
Pending Letter Ballot Approval	288	Signs and Markings for Multilane Roundabouts	Belluz	
	293	Appropriate use of LED Border Signs	Chow	
	294	Guidelines for the Posting of Off-Ramp and On-Ramp Speed Limit Signs	Chow	
		Canadian Capacity Guide	Skene	
Ongoing Funded Projects	261	Driver Comprehension Testing	McCusker	PSC –September 2010 Estimated completion – Spring 2011
	291	Review of Sign Sheeting Considering the Ageing Driver	Beal	PSC –September 2010 Estimated completion – Spring 2011
	305	Guidelines for Planning and Implementation of Transit Priority Measures in Urban Areas	R. Zarzosa	PSC –September 2010 Estimated completion – Fall 2011
	307	Warrant for Adding Pedestrian Signals to Existing Signalized Intersections	D. Beaulieu	Project launched October 2010
	308	Pedestrian Crossing Control Manual Update	Chow	PSC –September 2010 Estimated completion – Spring 2011
Projects Seeking Funding	309	Update to Canadian Model Rules of the Road	TBD	Have \$3K of required \$115K
	311	Use of Wider Pavement Markings for Standard Applications	TBD	Have \$18K of required \$60K
	312	Guidelines for Pedestrian Walking Speed at Signalized Intersections	TBD	Have \$66K of required \$105K
	313	Scoping Study for Potential Update to the MUTCDC	TBD	Have \$23K of required \$120K
	315	Light Level Reduction and Power efficiency guide for roadways and Walkways – A Supplemental Guide for the Design of Roadway Light	TBD	Budget with TAC admin to be determined

- d. Project Procedure Guidelines – changes made including defining “Funded” versus “Non Funded” projects.

- **MOTION:** (Robertson/Stewart) “That TOMSC approve the revised Project Procedure Guidelines” **CARRIED**

#### **4. Vice-Chair’s Report (L. Belluz)**

Belluz briefed the committee on the current conference. Two sessions will be held: “Innovative Ways to Increase Traffic Safety and Efficiency” and “Traffic Control Measures that Cause a Shift in Travel Modes”.

#### **5. Nominations for 2011/2012 Executive (R. Chow)**

Chow presented the list of possible nominees for the next term of the Executive. Asked members to submit any additional names before noon Sunday.

- Chair – Leanna Belluz
- Vice Chair – Simon Trépanier
- Secretary – Alf Guebert
- Editing and Publication – Ed Miska
- Application and Practice – Troy McLeod
- Development and Devices – Rob Hird
- Rules of the Road – Mike Skene
- Emerging Technologies – Ron Stewart
- Past Chair – Cathy Robertson

#### **6. Editing and Publication Sub-Committee Report (E. Miska)**

Miska reviewed E & P mandate. Stressed to project Chairs the requirement to address comments from Chief Engineers. The following summarizes completed projects and where they stand:

- Editing and Publications – 10
- Secretariat - 4
- TAC - 6
- Total – 20 projects

Expected schedule for E & P revisions to TAC are December 2010 with revision to MUTCD expected by April 2011. Aitken from Prince Edward Island also volunteered to participate on this sub-committee.

## **7. Report on U.S. NCUTCD (J. Logan)**

Logan made brief verbal presentation:

- Commented on use of language in manual: “Must”, “Shall”, and “May”
- Discussion on new section on Toll Stations
- “Hawk” traffic signal: rests in dark display and then goes to flash. Originated in Tucson.
- Concerns with new walking speeds and affects on traffic signal progression
- “Automated Assisted Flagging Device”
- New requirement that all new traffic signals in the U.S. must have pedestrian countdown timers “Certification for working on traffic signals”

Thamer asked for update on retroreflectivity for pavement markings. Logan replied that final rule to be published in about one year; likely to be similar to traffic signing table.

## **8. Report From TAC Program Manager (S. Majkic)**

Majkic reported on the TAC Board, Councils and Secretariat.

- a. Board of Directors:
  - Adopted new vision and positioning statement
  - **Vision:** Canada to be a world leader in transportation knowledge; TAC to be recognized as a leader in creating technical expertise and exchange of information
  - **Positioning Statement:** TAC- Connecting Knowledge and People
- b. Chief Engineers’ Council:
  - Technical, environmental and administrative priorities
  - Benchmarking club
  - Future of infrastructure after recent investments
- c. Education and Human Resources Development Council:
  - Student participation at TAC conferences

- Reviewing knowledge management primer
- d. Environment Council:
  - Focus-environmental avoidance and mitigation legislation and regulation
- e. Urban Transportation Council:
  - Approved strategic work plan
  - Renewing Finance SC
  - Collaboration agreement with the Canadian Institute of Planners
- f. Climate Change Task Force:
  - Checklist for TAC committees
  - Input sought on climate change issues, barriers, tools and assistance
- g. Sponsored Projects:
  - Twenty two (22) funded projects are currently in progress
  - Eleven(11) projects are in development (sponsors being sought)
  - Information on projects can be found at TAC's website
- h. TAC Secretariat:
  - Enhancement of the new website
  - Sponsored project process
  - Primers
  - Annual Awards Luncheon streamlined
  - Conference content through electronic means
  - Training

## **9. Applications & Practices Sub-Committee Report (A. Guebert)**

### Project #217 (Multi-way Stop Control Tabs)

McCusker updated the committee. Most recent vote on sign tab was lost at Chief Engineers' Council. Would like to go back to TOMSC and request alternative word tab/text.

Robertson indicated TOMSC needs a new formal report to be brought back.

Stewart questioned whether this is the new way Chief Engineers Council was considering TOMSC projects i.e. word alternatives.

Nothing wrong with existing tab and second group of comments from CEC was that tab was too obtrusive (takes away from octagonal stop sign).

McCusker explained in this case the tab appears to be problematic.

Chow did informal survey with Alberta Transportation which resulted in lack of support due to the complexity the tab adds to the sign. Comments included “why are we (TOMSC) even considering something like this?” Comment that some signs are simply best depicted as a word message versus a pictogram.

Miska indicated British Columbia also feels tab is overwhelming and agrees with Alberta in that word message in this case is preferred.

Trépanier reminded the committee that drivers are coming to a stop and therefore don't need to see the tab sign from a greater distance. They can assimilate the message easily when they are stopped.

#### Project #261 (Driver Comprehension Testing)

McCusker indicated that the project is progressing well. A final report is expected for the next meeting.

#### Project #272 (Integrated Road Safety into the MUTCD)

Guebert discussed briefly. Suggested that this project be rolled into possible MUTCD update/scoping (Project #313). Belluz volunteered to co-chair this project with Gerry Forbes.

#### Project #276 (Review of Transport Canada report on Passing Sight Distances)

Belluz reported this project is ongoing. She has received some information from the Geometric Design Standing Committee (GDSC). The GDSC proposes to incorporate some of TOMSC (MUTCDC information into their manual.

#### Project #288 (Signs and Pavement Markings for Multilane Roundabouts)

Belluz reported this project is complete. She introduced Phil Weber who provided a final report presentation.

- a. Literature Review
- b. Web-based Survey

- c. Comprehension Testing
  - d. Recommendations:
    - New Chapter in the MUTCD Part A7
    - All new signs to be placed here
    - Example applications (A7 1-12)
    - Further study should include mini-roundabouts
    - Lane arrow style
    - Guide sign layout
- **Motion** (Belluz /Skene) – to accept the final report.
  - **Approved (34-0)**

#### Project # 293 (Appropriate use of Blinking LED Border Signs)

Chow indicated that this is the final report for this project. He introduced Gerry Forbes who provided a final report presentation.

- a. Appropriate to outline sign shape
- b. Appropriate to increase conspicuity
- c. Red colour should be ITE standard
- d. Appropriate for Stop and Yield signs
- e. Should have consistent intensity
- f. Pixel spacing is based on previous research
- g. Can be continuous flash or traffic actuated
- h. Will cause a revision to the MUTCD in Section B5.8

- **Motion** (Chow /Cuthbertson) – to accept the final report.

Discussion:

- should keep door open for other research
- need a section on maintenance

Amendment:

- visibility is not limited to just night time

- **Amendment Approved (31-2)**
- **Motion Approved (31-2)**

#### Project # 294 (Guidelines for the Posting of Off-Ramp and On-Ramp Speed Limit Signing)

Chow indicated that this is the final report for this project. He introduced Gerry Forbes who provided the final report presentation.

- **Motion** (Chow /Edens) – to accept the final report.

Discussion:

- Montufar – should give consideration for trucks
- Tam – should have consistent use of delineators / chevrons
- Solomon – speed is a reference for drivers, should be discussed more in the text. Sign shape (diamond vs. rectangle) needs further consideration
- Solomon – may trigger a new sign with curve warning sign showing ramp speed

- **Approved**

Project #305 (Guidelines to Planning and Implementation of Transit Priority Measures in Urban Areas)

No update.

Project #306 (Traffic Signal Spacing Requirements)

Daniel Beaulieu volunteered to continue as Chair of project. Original volunteers were: Solomon, Escobar, Beal, Trépanier, Schlegl, Green, Chow, Blackwood, and Brinkmann.

Project #307 (Warrant for Adding Pedestrian Signals to Existing Signalized Intersections)

This project is awaiting Funding

Project #308 (Pedestrian Crossing Manual Update)

Chow indicated that this is an interim report for this project. He introduced Jeannette Montufar who provided a project update presentation.

- a. Literature review
- b. Jurisdictional survey
- c. Report Table of Contents
- d. Proposed modifications to the MUTCD:
  - Guiding principles
  - New devices and technologies
  - Decision support tool

Project #309 (Update to the Canadian Model Rules of the Road)

This project is awaiting funding

Project #310 (Use of Wider Pavement Markings for Standard Applications)

This project is awaiting funding

It was noted that this could possibly be changed to a hybrid sponsor/volunteer project to help get it underway. This is to be discussed at the next Executive Committee meeting.

Project #312 (Guidelines for Pedestrian Walking Speeds at Signalized Intersections)

This project is awaiting funding

Project #313 (Scoping Study for Potential Update to the Manual of Uniform Traffic Control Devices)

This project is awaiting funding

**10. Development & Devices Subcommittee (S. Trépanier)**Project # 234 (Loading Zone Sign)

Beaulieu provided brief update on the initial requirement for this sign. Reviewed some of the survey results on various sign samples. Trépanier volunteered; would welcome more.

Project # 242 (Advance Yielding at Crosswalks)

McCusker was not present. McLeod indicated that Calgary doing some field testing and agreed to take over as Chair of this project.

Project # 243 (Redesign of Graphics of WC-8, WC-12, WC-17)

Cuthbertson indicated that sample signs need to be sent for comprehension testing.

Project # 255 (Transit Priority Signal Sign)

No report.

Project # 271 (Signing for Non-Hospital Emergency Health Facilities)

Chow provided update. Intends to conduct new survey to be distributed shortly after conference with a report to follow in April 2011. Volunteers are Phil Edens (Ottawa), Trépanier, Hird, Aitken, McLeod, Cuthbertson, Hunt, A. Beal.

Project # 280 (Advance Merge Warning Sign)

S. Beale indicated she is waiting for driver comprehension testing. Reminded membership that this sign was originally intended for signalized intersections.

Project # 290 (End School Zone and End Playground Zone Signs)

Schlegl had no report.

Project # 291 (Review of Sign Sheeting Considering the Aging Driver)

Beal reported that the second time this project went out for quotes there were 4 bids. Opus International was the successful consultant.

Project # 296 (Water Flooding the Roadway sign)

Luis Escobar agreed to be the Chair of this project, Volunteers to help him with the project included:

- Brian McKinney
- Paul Hunt
- Mike Skene
- Phil Edens
- Jim Keefe

Project # 299 (Animal Warning Sign)

Miska did not have report.

Project # 300 (Low Clearance Warning Sign)

Trépanier did not have report.

Project # 302 (Permanent Grooved Pavement Warning sign)

Cuthbertson indicated he would be doing a survey shortly.

Project # 303 (Multi-Use Trail Crossing Sign)

Beaulieu made power point presentation. Of note is that both the WC-46 and WC-48 are not in the MUTCD but are in the Bikeway Guidelines document. Discussed some of the signs in this category that are in the Quebec Manual as well as those in use in Ontario, Nova Scotia, and the U.S. At this time he is proposing that TOMSC adopt Quebec family of signs for crossing of Multi-Use Trails.

Hird asked how Quebec determines what signs to use. Trépanier replied that in order to avoid using too many pictograms, Quebec uses multiple signs. Hird suggested TOMSC should be advocating use of one sign to identify all potential crossings. He indicated that currently Nova Scotia uses the ATV symbol versus the snowmobile because the ATV is used all year round.

McDonald discussed Edmonton experience with Segways. All these types of vehicles are classified as “miniature” and therefore not allowed on the roads including bike paths which are defined as roadways.

Additional volunteers for this project: Edens (Ottawa), Aitken, Koutroulakis, Solomon, S. Beale

Project # 304 (Logging Trucks Warning Sign)

No report.

Project # 311 (Stop Sign Usage in Conjunction with Railway Crossing Sign)

Chow reported that the literature review has been completed. Expects to table report for April meetings.

## **11. Rules of the Road Subcommittee (M. Skene)**

Nothing to report.

## **12. Emerging Technologies (R. Stewart)**

Discussion with respect to ongoing support for 5-1-1 Traveler Information. Stewart will keep TOMSC posted.

## **13. Standing Committee Reports**

- a. Road Safety (Cam Nelson)
  - o AASHTO is now publishing the Highway Safety Manual
  - o Transport Canada is looking into standards for Safety Rest Areas
  - o The RSSC is requesting funding for various projects
  - o The RSSC is considering development of “Guidelines for Network Screening” as a major project

Dave Banks indicated that he is stepping down from the committee and appreciated the ongoing support of the TOMS Committee

- b) Geometric Design (Keith Boddy)
  - o Scoping study project in progress to re-write the Geometric Design Guide
  - o Initiating a project to write a Roundabout Design Guide which will include input from the GDSC, RSSC and TOMSC

## **14. Task Forces and Subcommittee Reports**

- a) Asset Management (Guebert) – Group met on Friday. Chair is Kim Daley. Survey to be distributed to jurisdictions seeking feedback on status of respective asset management programs. Guebert trying to ensure traffic control devices will be included. Solomon also suggested street lighting be included.
- b) Work Zone Safety (Hunt) – Group met in Halifax. Process for training, work zone planning etc.

- c) Canadian Capacity Guide – Skene indicated that CEC ballot is pending. TOMSC representation on this task force is low. Currently Suzanne Beale, Troy McLeod volunteer; Don MacDonald indicated he may volunteer on behalf of Edmonton.
- d) Green Task Force – Hillier was not present. Robertson summarized recent survey.

## **15. Correspondence (Chris Brinkmann)**

Brinkmann reported 10 inquiries received since last fall.

## **16. New Business**

a) Submission of New projects:

- **MOTION:** (Hunt/Bardeau) “Review of Signing Colors for Off-Road Facilities”. **CARRIED.** Project will be **#314.**

This is a volunteer project. Chair: Hunt. Volunteers: Edens, Bardeau, Marlo, Tam, O’Connell.

- **MOTION:** (Tam/MacDonald) “Light Level Reduction and Power Efficiency Guide for Roadways and Walkways – A supplemental Guide for the Design of Roadway Lighting”. **CARRIED.** Project will be number **#315.** This will be a funded project.

Guebert suggested group contact police as they are questioning reduced light levels.

Koutroulakis indicated Halifax ready to begin installation of 2200 LED street lights.

b) Presentations:

- Active Transportation; Amy Schwartz from Nova Scotia Department of Health Promotion and Protection made a presentation
- Paul Boase from Transport Canada made a presentation on increasing property damage threshold for reportable collisions. Most police organizations support an increase. Since 1998 the

Property Damage Only value has been \$1,000. Options include increasing to \$2,000 or just let jurisdictions select their own levels. Conclusion was that the Board approved an increase to \$2,000 reporting level for PDO collisions to Transport Canada. This will have an effect on jurisdictions with PDO collision reporting.

## **17. Election of 2011 – 2012 TOMSC Executive (R. Chow)**

- **MOTION:** (Logan/ Hunt) “To suspend Roberts Rules of Order”. **CARRIED.**

Chow indicated that there have been no further nominations, therefore the slate of candidates for the 2010 - 2012 term of the Executive includes:

- Chair – Leanna Belluz
- Vice Chair – Simon Trépanier
- Secretary – Alf Guebert
- Editing and Publication – Ed Miska
- Application and Practice – Troy McLeod
- Development and Devices – Rob Hird
- Rules of the Road – Mike Skene
- Emerging Technologies – Ron Stewart
- Past Chair – Cathy Robertson
- **MOTION:** (Logan/ Koutroulakis) “To accept the slate of candidates”. **CARRIED** (unanimously).
- **MOTION:** (Miska/ Logan) “To reinstate Roberts Rules of Order”. **CARRIED.**

## **18. Other Business**

(a) Compliance Survey - Trépanier indicated he did not receive any “volunteers” or any internal resources to keep this project going.

- **MOTION:** (Trépanier/Brinkmann) “To drop this item from TOMSC future agendas”. **CARRIED.**

b) Regional Issues

**Manitoba** – IHEEP conference to be held in Winnipeg in September 2011.

**Alberta** – TAC conference in Edmonton in September 2011.

**Transport Canada** – Study of Rest Areas/Stops ongoing.

**Hamilton** – Design underway for 17 km of Light Rapid Transit. Stadium debate ongoing. Street lighting policy recently completed. Converting more one-way streets to two-way. New bike lanes. Developing new communications protocol for traffic signals.

**Mississauga** – Completed bike master plan. Building BRT; considering LRT. New traffic signal system to be tendered.

**Milton** – Implemented bike lanes. Installed first roundabout.

**Ottawa** – Introducing segregated bike lanes in downtown core. Video for billboards proving to be distracting. Converting major signalized intersection to a roundabout.

**Regina** – one way to two way street conversion has been well received. Mayor has initiated infrastructure summit for 2011 (shortfall in funding).

**Oakville** – Internal review of street lighting.

**Calgary** – Education campaign “My Dad Works Here” and others being well received. “Road Side Memorial” policy moving forward including plaques on poles. Use of roving tow trucks has proven successful although costly (\$630,000/year).

**Whitby** – Expanding urban boundaries. Completed Transportation Master Plan.

**Nova Scotia** – Opened some new roadways. Constructed dual/multilane roundabout.

**CITE** – Updating 1998 Traffic Calming Guide. If approved document will have to be reviewed by TOMSC.

**Quebec** – Will be converting to Clearview lettering for all new guide signs.

**Burlington** – Two bike corridors under review. Installed bike “sharrows”.

**British Columbia** – Installing more “active” signs. Issues with flagger safety. Asked what other jurisdictions are doing with respect to enhanced police presence in work zones.

**U.S. MUTCD** – Still trying to define Traffic Control Device. Recommends reviewing 2009 MUTCD including Roundabout signing/markings. Intend to use some signs from Canadian Manual. Introducing flashing yellow for permissive left turns; currently an option that is being used in 33 states.

**Montreal** – Tendering for new controller. Phase II of the tender failed. Urban Mobility Centre up and running. Experiencing some issues with right turn on red and audible pedestrian signals and that there can be no conflicting movements. Questions regarding pedestrian movements at roundabouts.

**Edmonton** – Increased signing in work zones. Planning rehabilitation of bridge with AADT of 120,000. Controversy regarding closing of old airport and construction of new stadium. Proposal by councilors/citizens to reduce posted speeds from 50 km/hr to 30 km/hr. Translates into over 110 new speed limit signs. Major parking review underway.

**Ontario** – New Book 15 on Pedestrian Crossing Facilities to be completed soon. Also new Book 18 on Bike facilities. Towing contracts for early response. New program called “Steer It and Clear It” for collisions with property damage less than \$2,000.

**ITS Canada** – Also very interested in 5-1-1 discussions.

**York Region** – Funding in place for BRT. Lots of complex design issues however. Piloting LED street lighting. Installed some Bike sharrows. Request for scooters and motorcycles to use HOV lanes.

**New Brunswick** – Converting to LED lighting to reduce costs and energy consumption. Record year for highway construction. Request for Emergency Evacuation signing.

## **19. Time and Place of Next Meeting**

The next meetings are in Ottawa April 15 and 16, 2011.

## **20. Adjournment**

➤ **MOTION:** (Bardeau) – “To Adjourn”. **CARRIED**