



Photo: Department of Tourism & Parks, New Brunswick

## Call for Papers - PROSPECTUS

### SUBMISSION CRITERIA

Please follow the following instructions when submitting your abstract online.

To access the abstract submission software [click here](#).

When entering the online submission portal, you will be required to provide the following mandatory fields of information:

- **Paper title**
- **Category**
- **Topic**
- **Paper proposals (maximum abstract length of 200-400 words) must be submitted online**
- **Author's name**
  - (All correspondence will be sent to the principal author only.)
- **Full contact information** (including email address)
  - Co-authored papers should indicate which author(s) will be presenting the paper at the conference. Affiliations including position titles should also be provided.
- **Short biography (50 words or less)**
- **AV requirements** (All sessions are equipped with LCD data projector, laser pointer, screen, laptop and microphone and 1 floor microphone)
- **Indication if session will be delivered in the French language**
- **Indication of eligibility for student paper awards**

**Please note the changes in terminology in the Image-House software:**

<b>Old Terminology</b>	<b>New Terminology</b>
Abstract Title	Presentation Title
Abstract Description	Presentation Description
Category	Track
Session	Topic
Identify if you are submitting a paper	Audience
Language Presentation	Presenter Type

**ABSTRACTS RECEIVED AFTER DECEMBER 9 WILL NOT BE CONSIDERED.**

For more information, contact Sylvie Rozon, Coordinator, Conferences, Meetings and Awards at [srozon@tac-atc.ca](mailto:srozon@tac-atc.ca)

## **DEFINING EDUCATIONAL TERMS**

### **Technical Paper Sessions**

- These sessions are a direct result of the acceptance of full papers by the Organizing Committee, comprised of TAC volunteer members currently sitting on committee or councils.
- The papers are listed in the conference proceedings and authors are expected to present at the conference.
- A maximum of six presentations are provided in each session that run in sequence in a certain time frame.

### **Panel Discussions**

- Largely informal events that usually begin with presentation(s) and are followed by exchanges and debate among panel members and members of the audience.
- ***No papers are solicited for panel discussions. However, speakers invited by Council Chairs to participate in panel discussions will be given the opportunity to submit a written paper to include in the conference proceedings.***

## Workshops

- Workshops are held on Wednesday morning and average three to five per year. This type of forum provides an opportunity for in-depth discussion on topics of major importance to TAC members.
- They usually include opening presentations or remarks; invited speakers or keynote presentations; roundtable discussions; roundtable summary reports and closing remarks.
- ***No papers are solicited for workshops. However, speakers invited by Council Chairs to participate in workshops will be given the opportunity to submit a written paper to include in the conference proceedings.***

## Poster Sessions

- After review of the full paper, authors may be asked to provide a poster instead of presenting at an educational session at the conference.
- Poster sessions are held on Tuesday. Upon acceptance of a poster session, authors will be provided with sizing requirements.

## Student Papers

- Awards are given for the best papers whose principal author is registered full-time at a recognized academic institution. Student papers must be identified as such when the abstract is submitted in order to qualify for one of up to three cash prizes. These awards are presented at the Monday Awards Luncheon.
- The student papers follow the same peer review process as all other abstract/paper submissions.

## CATEGORIES

When submitting your document you will be asked to identify the subject area of your abstract. This will assist delegates in the selection of sessions, panel discussions and workshops.

The following legend has been developed to allow you to select the educational category of your abstract. You may select more than one category. It is intended to be used as a general guide as only key subject areas reflecting the overall content of an event are flagged.

THEME	Transportation: Innovations and Opportunities
PLANNING	Planning
DESIGN	Geometric Design
ENV	Environment
SOILS/MAT	Soils & Materials
MTN/CONST	Maintenance & Construction

<b>PAVE</b>	Pavements
<b>STRUCTURE</b>	Structures
<b>TRAFFIC</b>	Road Traffic Operations & Management
<b>SAFETY</b>	Road Safety
<b>R&amp;D</b>	Research & Development
<b>SUST DEV</b>	Sustainable Development
<b>ITS</b>	Intelligent Transportation Systems
<b>INFO MGT</b>	Information Management
<b>MUNICIPAL</b>	Municipalities/Urban Areas (incl. transit)
<b>EDUC/HR</b>	Education & Human Resources

## TECHNICAL PAPER SESSIONS

N.B.: Prospective authors are invited to submit abstracts for technical paper sessions.

### CLIMATE CHANGE

#### Session: Case Studies on Adaptation of Transportation Infrastructure to Climate Change

- Issues such as coastal erosion and flooding
- Design Standards
- Operations and Maintenance
- Construction Techniques
- Risk Assessment
- Research and Development
- Design and Build Process

#### Session: Tools for Estimating GHG Emissions from Highway Construction Survey of State of Practice

- Presentation of tools and models used to estimate GHG emissions from highway construction or maintenance

### EDUCATION

#### Session: Fostering Innovation in the Workplace

- Elements to be considered when developing operational policies for trucks and other vehicles

## **ENVIRONMENT**

### **Session: 2012 TAC Environmental Achievement Award Nominations**

This session will feature a paper by the winner of TAC's 2012 Environmental Achievement Award, as well as presentations by all of the other award nominees.

(The [Call for Nominations](#) for the 2012 award is posted on the Association's website. Abstracts are required by January 18 and, if accepted, submissions are due by March 1<sup>st</sup>.)

## **GEOMETRIC DESIGN**

### **Session: How much is Enough? – Optimizing Right-of-Way Use**

- Comprising innovative solutions and the exploration of opportunities when balancing the various demands on transportation corridors

### **Session: Human Factors: Improved Intersection Design based on Driver Preferences**

- Review of findings from comprehensive global positioning system (GPS) field study involving over 300 runs of “free” left and right turning maneuvers for varying lane widths, start of turn, and end of turn position
- Compare preferred drive paths for passenger vehicles buses and semi-trailers
- Evaluate speed profiles for left and right turns
- Evaluate new design geometry to best accommodate preferred turn paths
- Recommend further study and interim design improvements for consideration into future Geometric Design Guide updates

### **Session: Innovative Design through Value Engineering**

- Successful value engineering studies that have resulted in innovative geometric design solutions to increase the overall value of a project

## **MAINTENANCE AND CONSTRUCTION**

### **Session: Innovations and Opportunities in Construction Methods and Practices**

Road authorities, engineering firms, contractors and product suppliers are continually finding new means, methods, techniques and products to deliver and construct highway projects across North America and the world. New innovations and approaches for contract tendering, quality control/quality assurance, performance specifications, construction staging techniques, pre-fabricated products, emerging equipment for construction, GPS controlled equipment and construction site safety enhancements are a few of the many areas where successful advancements are being made.

Innovations and opportunities are building blocks for continuous improvement in the transportation and highway sector. This session will offer an opportunity to share these experiences through case studies providing transportation practitioners with information to help shape their future business processes.

- Papers should present a case study that demonstrates lessons learned to reduce the administrative burden and project costs, accelerate the project schedule, manage project schedules or improve project quality
- Papers should also explain the objective of the approach, benefits, lessons learned and future applications
- Contractors who have been involved in the development of the innovation are encouraged to present as part of the team

### **Session: Innovations and Opportunities in Maintenance Methods and Practices**

Road authorities, engineering firms, contractors and product suppliers are continually finding new means, methods, techniques and products to deliver and maintain highways. New methods and approaches for maintenance contract tendering, quality control/quality assurance, performance specifications, maintenance staging techniques, pre-fabricated products, emerging equipment for maintenance, GPS applications, salt management and maintenance work site safety are a few of the many areas where innovative advancements are being made.

New innovations are the building blocks for continuous improvement in the transportation and highway sector. This session will offer an opportunity to share these experiences through case studies providing transportation practitioners with information to help shape their future business processes.

- Papers should present a case study that demonstrates lessons learned to reduce the administrative burden and project costs, accelerate the project schedule, manage project schedules or improve project quality
- Papers should also explain the objective of the approach, benefits, lessons learned and future applications
- Contractors or suppliers essential to the development or effectiveness of the innovation are encouraged to present as part of the team

## **PAVEMENTS**

### **Session: Advances in Pavement Evaluation and Instrumentation**

- Advances in pavement evaluation – accelerated test methods, long-term testing results, non-destructive testing and asset management
- Advances in pavement instrumentation – innovations in instrumentation and case studies

## **Session: Effects of Specialty Vehicles on Pavement Network Operation**

- Effect of heavy axle loading on pavement distresses
- Impact of specialty vehicles configurations, axle spacing and type and size of tires on pavement performance

## **Session: Innovations in Pavement Preservation**

- Innovations that reduce the need and frequency of reconstruction and heavy rehabilitation
- Life extending benefits of pavement preservation treatments
- Network evaluation techniques
- Innovative pavement preservation techniques
- Case studies

## **ROAD SAFETY**

### **Session: Commercial Vehicle Type and Related Collisions: How Alternate Vehicle Configurations Affect Road Network Operations and Safety**

- Vehicle classification and their involvement in collisions at different road categories/classes
- Regulations related to commercial vehicles and transportation routes and their safety effects
- Road network alternative routing of commercial vehicles of different sizes and the operational impact
- Elements to be considered when developing operational policies for trucks and other vehicles

### **Session: Implementation of Safety Prediction Methods in the Processes and Procedures of a Transportation Agency**

- Use of highway safety manual methods
- Development or calibration of safety performance functions
- Modifications on existing policies and guidance for inclusion of safety analysis
- Safety impacts of explicit safety in environmental studies and value engineering studies
- Safety impact studies and selection of countermeasures

### **Session: Giving the Edge to Pedestrians**

- Innovations and new technologies that improve pedestrians' conditions in the transportation equation
- Innovative devices, designs or approaches that increase conspicuity and safety at crosswalks
- Walkable communities – engineering and re-engineering streets for pedestrians
- Research on behaviour characteristics or human factors relating to pedestrians
- Pedestrian-friendly treatments at traffic signals

## **Session: Speed Management**

- Recent activities in speed management technologies, best practices and applications

## **Session: 2012 TAC Road Safety Engineering Award Nominations**

This session will feature a paper by the winner of TAC's 2012 Road Safety Engineering Award, as well as presentations by all of the other award nominees.

(The [Call for Nominations](#) for the 2012 award is posted on the Association's website. Submissions are due by March 1<sup>st</sup>.)

## **SMALL MUNICIPALITIES**

### **Session: Transportation Innovations and Opportunities in Small Municipalities**

In this session, participants will have the opportunity to present successes in small municipalities and discuss opportunities for improvements in a small municipal context.

## **SOILS AND MATERIALS**

### **Session: Characterization of Granular and Stabilized Materials**

- Types of testing
- Differences between granular and stabilized materials
- In-situ versus laboratory characterization comparison
- Required information for new design programs
- Specification of test procedures and requirements

### **Session: Innovative Line Marking Materials**

- Requirements based on new VOC legislation
- Specification of new materials
- Issues with respect to new materials

## **STRUCTURES**

### **Session (2): Bridges - Innovations**

This session will feature innovative engineering and construction of bridge structures, and innovative use of materials in a bridge structure.

## **SUSTAINABLE URBAN TRANSPORTATION**

### **Session: Parking Management**

This session will present various topics including parking governance, parking as a TDM tool, parking incentives and disincentives, parking pricing and parking technologies.

### **Session: 2012 TAC Sustainable Urban Transportation Award Nominations**

This session will feature a paper by the winner of TAC's 2012 Sustainable Urban Transportation Award, as well as presentations by all of the other award nominees.

(The [Call for Nominations](#) for the 2012 award is posted on the Association's website. Submissions are due by March 1<sup>st</sup>.)

## **TRAFFIC OPERATIONS AND MANAGEMENT**

### **Session: Improving Traffic or Transit Flow through Intelligent Transportation Systems or Operational Improvements**

- Innovations and new technologies that help improve traffic and transit flow
- Recent success stories with intelligent transportation systems
- Application of new devices in rural/urban contexts
- New modes of operation of existing transit systems

### **Session: Innovative Active Transportation Facilities and Projects**

- Innovations that help maintain the safe coexistence of different modes of transportation
- New devices and technologies that improve safety of vulnerable users
- Integration of cycling/pedestrian facilities in rural/urban environments
- Recent success stories that promote active transportation

## **URBAN TRANSPORTATION PLANNING AND RESEARCH**

### **Session: Best Practices in Transportation Planning**

- Integrating transportation planning and growth management
- Impact of environmental assessments on transportation master plans
- State-of-art tools for data collection, analysis and demand forecasting
- Integrating transportation planning and sustainable development
- Integrating transportation planning and goods movement
- Impact of access management on transportation planning

## **Session: Meeting Freight Challenges through Maximizing Opportunities and Innovation**

Congestion and the unpredictability of traffic delays are major issues hindering economic competitiveness and impacting the safe and efficient movement of goods. This session will feature the optimization of the use of existing transportation infrastructures and targeted investments. The need to develop innovative solutions by improving current data collection practices, policies and regulations will be presented.

The following topics will also be highlighted:

- Achieving successes through public/private partnerships and innovations
- Effective integration with land use planning and community building initiatives
- Innovative and improved supply chain and logistics practices for better understanding needs of public/private sector in the context of the global economy

## **PANEL DISCUSSIONS**

N.B.: No papers are being solicited for panel discussions. However, speakers invited to take part in panel discussions will be given the opportunity to submit written papers for inclusion in the conference proceedings.

### **ENVIRONMENT**

#### **Environmental Management during Project Implementation – Industry and Owner Perspectives**

- Systems for ensuring contractor compliance
- What works or doesn't work from the contractor's perspective
- Environmental risk transference – striking the right balance

### **GEOMETRIC DESIGN**

#### **Health and Safety in Transportation**

This panel discussion will focus on the demands imposed on various end users, regulatory agencies and practitioners when the fields of health and safety interface with highway design and transportation planning.

### **PAVEMENTS**

#### **Experiences with DARWin-ME**

Agencies currently using DARWin-ME will share their experiences with participants in this panel discussion.

## **ROAD SAFETY**

### **Conversation Circle – Intersection Safety and Roundabouts**

- What is the safety of the different types of intersections in your agency? How are pedestrians accommodated?
- Why has your agency begun to use roundabouts from a safety perspective?
- What data and research have you collected to assess the safety of intersections' countermeasures?

## **SUSTAINABLE URBAN TRANSPORTATION**

### **Reshaping Existing Residential Areas**

Increasing attention is being paid to the decline of mature neighbourhoods and the emptying out of our city cores. This panel discussion will examine best practices and case studies demonstrating innovative initiatives to address these issues.

## **TRANSPORTATION FINANCE**

### **Sustainable Funding for Urban and Regional Transportation in Canada**

This panel discussion will focus on presenting and discussing the new TAC briefing on Sustainable Funding for Urban and Regional Transportation in Canada.

## **TRANSPORTATION PLANNING AND RESEARCH**

### **Public Consultation in Transportation Planning: Success Stories and Challenges**

## **WORKSHOPS**

N.B.: No papers are being solicited for workshops. However, speakers invited to take part in workshops will be given the opportunity to submit written papers for inclusion in the conference proceedings.

## **CLIMATE CHANGE / ENVIRONMENT**

### **Green Guide for Roads**

Based on the proposed TAC *Green Guide for Roads*, this workshop will showcase contents of the guide and provide an opportunity to discuss specific aspects, such as sustainability benefits of an existing or new roadway project. The workshop will consist of at least one keynote presentation, followed by a group discussion.

## **ROAD SAFETY**

### **In-Situ Roundabout Review**

Workshop participants will be introduced to a number of local roundabouts which will be reviewed and discussed by panelists. The locations will be visited and the particulars discussed at each location.

## **SUSTAINABLE URBAN TRANSPORTATION**

### **Access to Transit Hubs**

Many Canadian municipalities are creating transit hubs. This workshop will showcase best practices and case studies and focus on access and mobility.

### **Harnessing Social Networking to Effect Behavioural Change**

Social networking and social media are excellent tools for developing social marketing campaigns. This workshop will explore the opportunities and challenges associated with the use of social media.