Proposed Pilot Study to Address Climate Change and Road Safety

Sponsors are now being sought for a TAC pilot project on micro-mapping climate change and identifying which road collision types could be affected by climate change and where the collisions would take place in the future.

The project was recommended by TAC’s Road Safety Standing Committee, following the work of the Climate Change Task Force to raise awareness about the need to address climate change issues in all TAC council and committee work.

Impacts of climate change on the frequency and severity of collisions need to be understood in order to identify areas where the safety committee’s future initiatives could have an influence on this phenomenon.

A key objective of the pilot project will be to establish a good understanding of the problem in the current context through a detailed literature review and rigorous statistical analysis of collision data from six urban areas for the most recent 10 to 25 years. The data will be combined with Environment Canada’s climatological records from major observing stations.

The areas to be studied include the Golden Horseshoe area in Ontario, Greater Montreal and as yet undetermined cities.

It is important to study a long time period in order to guarantee a robust analysis. In a climate change impact analysis, it is also critical to distinguish between natural climate variability and climate change signals.

A second key objective of the pilot project will be to consider the expected problem in the context of future climate conditions, that is, for the periods 2011-2040 and 2041-2070.

The final deliverable will be a detailed report describing the research and findings for application by agencies considering their preparedness for weather-related safety conditions now and in the future. This will form

(cont’d on p. 2)
Climate Change and Road Safety (cont’d from p. 1)

the foundation for possible further work documenting treatments and mitigation measures to be considered in preventing the negative impacts of climate change on road safety.

More information about the project, including information that would likely be included in the report, is available on TAC’s website, under sponsored projects in development.

If your organization is interested in funding this project, contact Sarah Wells at the TAC secretariat.

---

**Canadian Transportation Awards Program**

*Nominate the Transportation Industry's Best Players!*

The Canadian Transportation Awards Program is intended to recognize leadership, excellence and achievement in all modes and segments of the transport sector. If you know someone who has made an outstanding contribution to transportation in Canada, this is your opportunity to ensure that this individual is considered for the industry’s most prestigious awards!

Nominations are solicited for the following four award categories in 2010:

- Transportation Person of the Year;
- Award of Excellence (up to two awards); and
- Award of Academic Merit (up to two awards).

Supported by Transport Canada, the Canadian Transportation Awards Program is administered by TAC. For more information on the program and to submit a nomination, visit TAC’s website at [www.tac-atc.ca](http://www.tac-atc.ca).

Nominations for the 2010 awards must be received online no later than May 14.

Canada’s Minister of Transport, Infrastructure and Communities or the Minister’s alternate will confer the awards during the closing banquet of TAC’s 2010 Annual Conference and Exhibition to be held in Halifax, September 26-29.

---

2010 TAC Annual Conference and Exhibition

*Adjusting to New Realities*

September 26-29

Halifax, Nova Scotia

---

DELEGATES — Early registration information will be posted on the web. Check out TAC’s site in late April.

EXHIBITORS — To book your exhibit space, visit the association’s website in early April.

SPONSORS — For sponsorship opportunities, consult the material already posted on the website.

[www.tac-atc.ca](http://www.tac-atc.ca)

---

A quarterly publication of the
Transportation Association of Canada
ISSN 0317-1280 – Publications Mail
Commercial Sales Agreement No.1708201
2223 St. Laurent Boulevard, Ottawa K1G 4J8
Tel. (613) 736-1350 – Fax (613) 736-1395
[www.tac-atc.ca](http://www.tac-atc.ca)

Editor: Gilbert Morier (gmorier@tac-atc.ca)
Assistant Editor: Lynne Parisien
Contributors: Asim Baluch, Katarina Cvetkovic, Peter Dzikowski, Martin Rochon and Sarah Wells
Designer: Debi Woods
news@tac-atc.ca

TAC is a national association with a mission to promote the provision of safe, secure, efficient, effective and environmentally and financially sustainable transportation services in support of Canada’s social and economic goals.

The Association is a neutral forum for gathering or exchanging ideas, information and knowledge on technical guidelines and best practices.

In Canada as a whole, TAC has a primary focus on roadways and their strategic linkages and inter-relationships with other components of the transportation system.

In urban areas, TAC’s primary focus is on the movement of people, goods and services and its relationship with land use patterns.
TAC’s Spring Meetings Just around the Corner

Preparations for TAC’s Spring 2010 Technical Meetings are proceeding apace. Scheduled for April 8-12, the meetings will be held at the downtown Ottawa Crowne Plaza Hotel.

Almost all of TAC’s councils and committees will convene in Ottawa. Aside from individual meetings, an all-participant event is also planned for Saturday, April 10. It will include very brief introductory remarks by TAC’s president, followed by a reception.

The spring technical meetings are the association’s second largest annual event and offer excellent technical information exchange and networking opportunities. The majority of the meetings are also open to TAC members in general. No registration fees apply.

Two other TAC events will be held in conjunction with the spring 2010 technical meetings. The first is a luncheon jointly organized by the association and the National Capital Section of the Canadian Institute of Transportation Engineers. It will feature a presentation on the bus rapid transit – Rapibus – project undertaken by the City of Gatineau, Quebec. The second event is a seminar that will serve as an introduction to TAC’s upcoming Guide to Practices for Median Design. As well, the association’s Board of Directors will meet on April 12.

Anyone interested in attending the spring meetings or related events should visit TAC’s website for further information, including a meeting schedule and a seminar registration form.

A TAC publication clearance sale is also scheduled to take place during the spring meetings. It will run from April 8 to 10 (see enclosed flyer for more information).

The Cement Association of Canada and Ourston Roundabouts Canada are sponsoring the April meetings.
Transport Lane Conspicuity Guidelines Coming Soon

TAC will soon be releasing guidelines to enhance transit lane conspicuity through surface treatment.

The new guidelines were developed using four key principles. These were the use of strict conditions for implementation instead of widespread implementation, a focus on restricted areas versus conflicting areas, partial and full-length application, as well as compatibility with other transit lane design elements.

There are, however, cost-effective approaches to enhance visibility and increase transit lane compliance. These methods include the application of colour, raising transit lanes relative to adjacent mixed flow lanes, the application of different surface materials, texture or pattern, and the use of pavement text.

The new TAC guidelines recommend that red should be used for the coloured surface treatment of transit lanes because of the traditional association between the colour red and prohibition. The intended message of the red lane to motorists is: “Do Not Use This Lane.”

Coloured surface treatment does not substitute any of the currently required pavement markings or signage. Road agencies designing transit lanes should follow existing guidelines or standards for transit lane markings and signage. The coloured surface treatment is an additional and optional tool to increase the conspicuity of transit lanes.

During the preparation of the guidelines, comprehensive research on surface treatments of transit lanes was conducted in North America, Europe, the Middle East, Australia and New Zealand.

Initially proposed by TAC’s Traffic Operations and Management Standing Committee, the assignment was conducted by HDR | ITRANS under the supervision of a project steering committee.

A notice will be posted on TAC’s website when the new publication is made available in the spring.

A background document entitled “Transit Lane Conspicuity through Surface Treatments: Knowledge Base” can now be consulted online via the TAC library.

Changes at TAC’s Helm

John Law will be stepping down as president of TAC after having recently assumed a new position with the Saskatchewan government.

Mr. Law was named president and CEO of the Global Transportation Hub Authority. He has been succeeded by Rob Penny in his previous position of deputy highways and infrastructure minister for Saskatchewan.

First elected president of TAC in September 2008, Mr. Law was re-elected for a second one-year term at the association’s October 2009 annual conference. Among his many contributions to TAC, he has overseen the development and implementation of the organization’s current three-year business plan, which was launched in April of last year.

TAC vice-president Bob Smart, deputy minister of transportation and works for Newfoundland and Labrador, is slated to assume the presidency of the association following the Board of Directors’ next meeting in mid-April.
Historical Climate Data No Longer Good Enough for Transportation Infrastructure

Editor’s Note: In this contribution to TAC News, Peter Dzikowski, senior policy advisor for environmental issues at Alberta Transportation, writes about how the implications of a changing climate are creating a need to look carefully at the use of climate data for transportation infrastructure construction and maintenance. Published on behalf of TAC’s Climate Change Task Force, this feature is one in a series of articles to profile climate change initiatives. TAC member organizations are encouraged to contact the newsletter editor with a view to submitting articles or briefs highlighting their own projects in this area.

Talking about weather and climate is a national pastime in Canada. For many TAC members, however, weather and climate are more than a curiosity or a topic of casual conversation, and have serious implications for the safety of the travelling public and for the cost of designing, building and maintaining the country’s transportation infrastructure.

This article is based on a review of climate data needs for the transportation sector, an activity carried out by the TAC’s Climate Change Task Force to help association members better understand how climate change might affect the sector. TAC members have noted that changes in regional climates are already impacting the transportation industry.

The changing climate has the potential to impact the safety and longevity of existing transportation structures...

The transportation system has been designed and built to provide decades of service and withstand the impacts of climate extremes and day-to-day weather far into the future. Climate data has always been and will continue to be an important part of the design process for Canadian roads and other transportation system components.

The transportation industry uses the data and analysis products from Canada’s climate observation network in design processes and in setting national transportation design standards that support public safety.

Gaps in the climate data record and declining numbers of long-term stations may compromise the ability to track changes in regional climates.

The current infrastructure has been designed using climatic design values calculated from historical climate data. The assumption was that the average and extreme conditions of the recent past were the best estimate of conditions expected to occur over the future lifespan of structures.

However, that assumption is no longer valid given the changing composition of greenhouse gases in the atmosphere and the effect this has on the global climate. The growing awareness of the implications of climate change has introduced a new element of uncertainty and has led to concerns that recent past climate data and its use may not be adequate.

The changing climate has the potential to impact the safety and longevity of existing transportation structures, to regionally accelerate premature weathering of structures and to necessitate revisions to climatic design criteria for codes and standards. A changing climate will require developing new approaches for the use of climate data for design, engineering, maintenance and operations.

Canada now faces the dual challenge of how to acquire and apply the most recent climate data available and also how to adjust it in the expectation that the country’s climate will be different in the future.

TAC’s Climate Change Task Force is working to ensure that the climate design values used in standards are regularly updated to reflect the most recent data available and a potentially changing climate. For example, the CSA’s Canadian Highway Bridge Design Standard (CAN-CSA-S6-06 CSA Standard) contains climatic design information dating from the 1960s. The goal is to provide transportation professionals with not only the most recent data but also information on how a future climate might differ from historical data.

(continues on p. 6)
(cont’d from p. 5)

In addition to mitigating climate change and reducing greenhouse gas emissions, TAC’s task force realizes that adaptation solutions need to be developed and implemented in many regions of Canada and that the North has its own unique adaptation needs.

There is a need to find new tools and approaches, such as using results obtained from global climate models and trend analysis, to better understand the climate risks that inform infrastructure-related decision processes. The transportation sector also needs scientific expertise to support its potential application of results generated by the latest climate change models.

In the end, all those working in the field of climate change have a role to play in dealing with the infrastructure issues that Canada must confront.

Major Donors Renew Multi-year Commitments to TAC Foundation

The 2010-11 TAC Foundation funding program is well underway.

EBA Engineering Consultants Ltd. and MMM Group Limited have renewed their multi-year commitments as major donors starting in 2010, in addition to those who have previously committed. As well, LEA Consulting Ltd. has recently joined the major donor list to help support the next generation of transportation professionals.

Thanks to the generous support of these donors and others, the TAC Foundation continues to address the issue of shortages of skilled personnel in the transportation industry and to foster the education and development of transportation professionals.

The TAC Foundation, a registered charitable organization, was established by the association in 2003 to support and encourage a sustainable transportation sector.

There are a variety of direct donation and planned giving opportunities to support the Foundation. For additional information on its activities or to become a donor or volunteer, contact the Foundation at foundation@tac-atc.ca.
Roadway Median Design Practices Guide to Be Released

TAC will soon publish a comprehensive guide to the design of medians for urban and rural roadways in Canada.

As well, a special one-day seminar providing an introduction to the guide will be held in Ottawa, on April 12, in conjunction with the association’s Spring Technical Meetings (consult TAC website for more information).

On higher speed arterial roadways or highways, opposing traffic is usually separated by a centre median. This applies to both urban and rural road cross-sections but has more significant implications in urban areas where pedestrians at controlled and uncontrolled crossings often use medians as a refuge halfway across an arterial road or highway.

Adjacent landowners are increasingly concerned by the effects medians might have on their business and property values. Efficient design of a median therefore needs to address not only vehicular safety and efficiency but also the safety of vulnerable road users and other users.

Bridge Hydraulics Learning Material to Be Prepared in Partnership with CSA

TAC and CSA, through its municipal infrastructure solutions program, will partner to develop learning material about bridge hydraulics.

Floods and erosion continue to be important causes of bridge damage and failures worldwide and are key considerations in bridge design, construction and maintenance. In some jurisdictions, concern over the security of bridges against the action of water has led to extensive re-evaluation of existing foundations.

The second edition of TAC’s Guide to Bridge Hydraulics, published in 2001, aims to assist bridge designers by outlining the factors to be considered in the location, layout and hydraulic design or re-evaluation of bridges and by suggesting criteria and procedures to do so.

As there has been no training provided to date based on the Guide to Bridge Hydraulics, the association’s Structures Standing Committee recommended this gap be addressed.

With TAC’s support, CSA will lead the development of a training product directed at civil engineers and other professionals responsible for bridge design, construction and maintenance.

Specific course content remains to be developed. However, it is expected to include some information about basic hydraulic considerations and hydrologic estimates, and focus on waterway design, scour protection and channel control, as well as hydraulic aspects of construction, inspection and maintenance.

Upon completion of the training product, further work will be planned to organize sessions and deliver the material to practitioners in various Canadian cities.

TAC members sponsoring this work are Alberta Transportation, the British Columbia Ministry of Transportation and Infrastructure, Manitoba Infrastructure and Transportation, the Ministry of Transport of Quebec and Saskatchewan Highways and Infrastructure.
Early-bird Annual Conference Sponsors

The call for national sponsors has been launched for the 2010 TAC annual conference, Adjusting to New Realities, which will take place in Halifax, September 26-29.

The following sponsors have committed their ongoing support to Canada’s preeminent transportation event and will raise their corporate profile among delegates from a broad range of select organizations at the 2010 conference.

**PLATINUM**
- 3M Canada Company
- AECOM
- AMEC
- CH2M HILL Canada Limited
- Delcan Corporation
- Golder Associates Ltd.
- Hatch Mott MacDonald Ltd.
- ISL Engineering and Land Services Ltd.
- MMM Group Limited
- Ontario Goods Roads Association
- Wardrop Engineering Inc.

**GOLD**
- Autodesk
- Cement Association of Canada
- HDR ITRANS
- IBI Group

**SILVER**
- Morrison Hershfield Limited
- Stantec Consulting Ltd.

**BRONZE**
- Alberta Traffic Supply Ltd.
- McCormick Rankin Corporation
- Thurber Engineering Ltd.

To obtain additional information on conference sponsorship opportunities and key benefits, visit www.tac-atc.ca or contact Deb Cross (dcross@tac-atc.ca) at the TAC secretariat.

MEMBERSHIP HAPPENINGS

International Road Dynamics (IRD) Inc., a leading world-wide provider of weigh-in-motion and intelligent transportation systems (ITS), had strong results for the year ended November 30, 2009. Revenues were up more than 26 per cent to a record $49 million. Offshore sales grew 43 per cent on strength in Asia and Latin America while U.S. sales rose 23 per cent thanks to product, weigh station, and maintenance and data collection revenues.

IRD president and CEO Terry Bergan said that 2009 was a record year on a number of fronts for his Saskatoon-based company. “We achieved our highest sales levels ever as a result of our decision seven years ago to leverage our strong reputation and installed base to enter new overseas markets... Most importantly, we generated record earnings for the company, and we expect to build on this progress in 2010 and beyond,” Mr. Bergan added.

The Ready Mixed Concrete Association of Ontario and the Cement Association of Canada recently announced the launch of CANPav™ – an online software modeling tool that quickly determines the cost advantages of using concrete as a paving material for municipal streets and roads and commercial parking lots. CANPav is unique because the user has complete control over the concrete and asphalt cross-sections and the material cost inputs used to arrive at the street or parking lot estimates. The tool has been created for use throughout Canada and currently includes default cost values for Ontario and Quebec. These values can be replaced for other municipalities across Canada. Users may access the program at www.canpav.com.
New Traffic Signs Approved

Five new signs will be added to TAC’s Manual of Uniform Traffic Control Devices for Canada as part of the next manual update planned for the coming months.

The signs resulted from volunteer projects conducted under the auspices of TAC’s Traffic Operations and Management Standing Committee.

“Cross Other Side” Sign

This sign is used when it is determined that crossing one leg of an intersection should be prohibited for safety or intersection operation reasons. It is typically installed on the near side of the crossing, facing pedestrians, and normally on a signal pole or on a rail barrier blocking the normal access point to the crossing. If used on the far side of the crossing, the sign size may be increased to improve visibility. The intersection leg where crossing is prohibited should have no crosswalk lines. The lines should instead be placed at the crossing location where pedestrians are being directed. The “Cross Other Side” sign would typically be installed for the benefit of pedestrians only.

Engine Brake Signs

Two signs are recommended to indicate proper use of supplementary braking systems that are often installed on heavy vehicles. One sign, prohibitive in nature, is for use in jurisdictions that have local laws governing the use of engine brakes. The other sign, non-prohibitive in nature, is intended for jurisdictions that do not have these laws.

The “Engine Brake Prohibited” sign is a regulatory sign that can be installed to indicate to drivers that the use of an engine brake is not allowed under normal circumstances. The “Avoid Engine Brake” sign is a non-prohibitive regulatory sign. It can be used to indicate to drivers that they are in an area where the use of an engine brake is not normally required and where its use may be disruptive to area residents. Tabs have also been recommended for use with each sign in order to identify an area or zone to which the sign applies.

Tipping Truck Sign

This sign warns truck drivers of the rollover potential so they can negotiate a ramp or horizontal curve at an appropriate speed. The right or left version of the warning sign indicates the direction in which trucks may tip. An advisory speed tab sign may be used in conjunction with the sign. A supplementary tab sign – “Truck Speed” – may also be installed.

Wind Gust Sign

The purpose of this sign is to warn truck drivers of strong winds or wind gusts that may cause a driver to lose control of a vehicle. The left and right versions of the warning sign indicate which direction the truck may tip due to wind gusts. An educational tab sign – “Wind Gusts” – may also be used.

Road Network Performance Measures

Project Sponsors

The last issue of TAC News carried an article on a recently launched association project aimed at developing performance measurement guidelines for road networks. As the list of sponsors of this project has since been substantially updated, a new list is being published: Alberta Transportation, Manitoba Infrastructure and Transportation, Northwest Territories Department of Transportation, Nova Scotia Department of Transportation and Infrastructure Renewal, Ministry of Transportation of Ontario, Saskatchewan Highways and Infrastructure, Transport Canada and City of Montreal.
PEOPLE IN THE NEWS

Hon. Steve Ashton has been appointed minister of infrastructure and transportation for Manitoba.

Hon. Ron MacKinley is now minister of the new Department of Transportation and Infrastructure Renewal of Prince Edward Island.

Rob Penny is Saskatchewan’s new deputy minister of highways and infrastructure. He was previously assistant deputy minister of environmental management for Alberta Environment.

At Alberta Transportation, Bruno Zutautas has been appointed to the position of assistant deputy minister responsible for transportation and civil engineering.

Robert Pratt will be named national manager of transportation and marine structures at Public Works and Government Services Canada, following the retirement in April of Donaldson MacLeod, manager of highways and bridges, whose responsibilities will be included in Mr. Pratt’s new role.

Mike Labrecque has been promoted to the position of deputy chief administrative officer, corporate services, at Halifax Regional Municipality. He was previously director, transportation and public works.

Brian Wood has replaced Kenn Rosin as manager of transportation for Stantec Consulting Ltd. in Winnipeg. Mr. Rosin has returned to the City of Winnipeg to oversee the development of its new transportation plan.

Peter Leung is retiring from the City of Edmonton as general supervisor, neighbourhood renewal design, and will join the Focus Corporation as manager of urban transportation in the company’s Edmonton office.

Glen Furtado has accepted a new challenge as transportation practice leader, Alberta, with Urban Systems Ltd.

At Transport Canada, Katherine Forster has been named senior analyst, freight environmental initiatives.

Bob Margison, a long-time supporter of TAC, passed away in December. A member of TAC’s Traffic Operations and Management Standing Committee, he worked for the 3M Canada Company for more than 36 years before retiring at the start of 2008.

NEW MEMBERS

TAC is pleased to welcome the following new members:

Beau-Bay Consulting Ltd.
Winnipeg, MB
Andrew Horosko

Can-Traffic Services Ltd.
Sherwood Park, AB
Joel Storey

Clifton Associates Ltd.
Calgary, AB
Craig Clifton

Municipality of North Grenville
Kemptville, ON
Karen Dunlop

STV Canada Consulting Inc.
Toronto, ON
Dave Roberts, Director of Transportation and Infrastructure

Transroute International Canada Services Inc.
Pitt Meadows, BC
Rosa Clausell Rountree, CEO and General Manager

Philippe Brisson
St. Lambert, QC

Urban Goods Movement Data Report Available Online

A report entitled Framework for High-quality Data Collection of Urban Goods Movement – Phase 2 is now available as a free download in the association’s online resource centre.

An article on the report, which was prepared under the auspices of TAC’s Transportation Planning and Research Standing Committee, appeared in the last issue of TAC News.

Translation of the report is in progress and the French version will be posted on TAC’s website in the near future.
Pedestrian Crossing Control Manual Update in the Works

TAC has launched a new project aimed at updating its current Pedestrian Crossing Control Manual, originally published in 1998.

New pedestrian crossing control devices have been introduced since publication of the TAC manual. Information gaps and areas in need of improvement have also been identified. Revisions are therefore required to ensure that transportation practitioners have an accurate and practical guide to carry out their work.

Key updates to the manual will cover:

- pedestrian crossing requirements in urban and rural settings
- appropriate crossing treatments for young, old and vulnerable road users
- pedestrian crossings at roundabouts and railway crossings
- pedestrian walking speeds considered for signal timing
- issues relevant to the disabled community and related accessibility issues and aids
- crossing treatments for high speed, low pedestrian-volume crossings
- most effective means of implementing pedestrian crossing control

As transportation agencies face these challenges, innovative approaches are needed to address retention of core competencies and develop succession strategies.

The intent of a primer is to provide the basics on a major subject, including the definition, importance, benefits, key strategic elements, how-to processes, challenges, corporate responsibilities and costs, implementation aspects and long-term sustainability. Essentially, a primer gives agency management a summarized information foundation to understand the scope of a subject and to undertake further initiatives in their organization.

The project was recommended by TAC’s Education and Human Resources Development Council, which formed a working group to develop the knowledge management primer.

The working group has chosen NEXT Solutions as the consultant to conduct this assignment. The primer is expected to be released by the fall of 2010.

TAC Developing Knowledge Management Primer

TAC has launched a technical project to develop a primer on knowledge management within transportation agencies and knowledge-sharing across the transport sector.

The management of knowledge involves people, information and technology. A key requirement in this process is sustainability, which means that effective knowledge transfer over time is essential. Beyond recruitment and retention of staff, this process for ensuring the orderly planning of renewal, upgrading and continuity of resources has become critical as the workforce ages and retirements occur at increasing rates.

A number of key challenges are faced by Canadian transportation agencies attempting to develop a sustainable policy and practice of knowledge management. Senior staff retirements are leaving experience gaps, information is being lost and technology improvements and updates are not being carried out. In addition, expanded missions, program growth and outsourcing require adequate staffing, as well as in-house expertise to manage outsourcing and workforce training.

As transportation agencies face these challenges, innovative approaches are needed to address retention of core competencies and develop succession strategies.

The intent of a primer is to provide the basics on a major subject, including the definition, importance, benefits, key strategic elements, how-to processes, challenges, corporate responsibilities and costs, implementation aspects and long-term sustainability. Essentially, a primer gives agency management a summarized information foundation to understand the scope of a subject and to undertake further initiatives in their organization.

The project was recommended by TAC’s Education and Human Resources Development Council, which formed a working group to develop the knowledge management primer.

The working group has chosen NEXT Solutions as the consultant to conduct this assignment. The primer is expected to be released by the fall of 2010.
COMING EVENTS ~ 2010

Annual Conference of the Association québécoise du transport et des routes
March 29-31
Quebec City, Quebec
Tel. (514) 523-6444
www.aqtr.qc.ca

TAC Spring Technical Meetings
April 8-12
Ottawa, Ontario
Tel. (613) 736-1350
www.tac-atc.ca

TAC Special Seminar on Roadway Median Design
April 12
Ottawa, Ontario
Tel. (613) 736-1350
www.tac-atc.ca

1st International Conference on Pavement Preservation
April 13-15
Newport Beach, California
Tel. (202) 366-2023
www.pavementpreservation.org/cpp

2010 Design-Build for Transportation Conference
April 21-23
Dallas, Texas
Tel. (202) 686-6614
www.designbuildtransportation.com

Annual Conference of the Canadian Urban Transit Association
May 15-19
Ottawa, Ontario
Tel. (416) 365-9800
www.cutaactu.ca

16th World Road Meeting of the International Road Federation
May 25-28
Lisbon, Portugal
www.irf2010.com

4th Intertraffic China Trade Fair
May 26-28
Beijing, China
www.intertraffic.com

Annual Conference of the Federation of Canadian Municipalities
May 28-31
Toronto, Ontario
Tel. (613) 907-6212
www.fcm.ca/

Annual Conference of the Canadian Transportation Research Forum
May 30-June 2
Toronto, Ontario
Tel. (519) 421-9701
www.ctrf.ca

3rd European Transport Research Arena
June 7-10
Brussels, Belgium
www.traconference.eu

Transports publics 2010
June 8-10
Paris, France
www.transportspublics-expo.com

Annual Conference of the Canadian Society for Civil Engineering
June 9-12
Winnipeg, Manitoba
Tel. (514) 933-2634
www.csce.ca/2010/annual/

Annual Conference of the Intelligent Transportation Systems Society of Canada (ITS Canada)
June 13-16
Ottawa, Ontario
Tel. (905) 471-2970
www.itscanada.ca

5th International Conference on Bridge Maintenance, Safety and Management
July 11-15
Philadelphia, Pennsylvania
Tel. (202) 493-3023
www.iabmas2010.org

Annual Meeting of the Institute of Transportation Engineers and Annual Conference of the Canadian Institute of Transportation Engineers
August 8-11
Vancouver, British Columbia
www.ite.org/meetcon/index.asp

International Conference on Sustainable Concrete Pavements
September 15-17
Sacramento, California

TAC Annual Conference & Exhibition
September 26-29
Halifax, Nova Scotia
Tel. (613) 736-1350
www.tac-atc.ca

Annual Conference of the Canadian Institute of Planners
October 2-5
Montreal, Quebec
Tel. (800) 207-2138
www.cip-icu.ca

8th Malaysian Road Conference
October 10-13
Kuala Lumpur, Malaysia
www.mrc.org.my