



ITS Canada News

ITS Canada's Annual Conference

Calgary, Alberta – May 9 to 11, 2004

Register now to attend this important industry event!

The registration package has been published for ITS Canada's Annual Conference, being held in Calgary this May. All industry participants are invited to confirm their participation by sending in their registration. Payment may be made by cheque as in previous years and, as a service to members, ITS Canada has also arranged for payment by VISA. Details are available in the registration package on the website at www.itscanada.ca/alberta2004.

Also included in the registration package is information on:

- **Registration deadlines** – register and pay by **March 12** to receive early registration discounts
- **Hotel reservations** - the event is being held at the Hyatt Regency Hotel in downtown Calgary
- **Airline reservations** – book with Jetsgo by **February 27** in order to qualify for the ITS Canada discounted airfare
- **Technical tours** – delegates can visit Calgary Transit's Operation Control Centre, CP Rail's Control Centre, and the University of Calgary's Driving Simulator (all tours are on Sunday, May 9)
- **Social program** – exciting events included with your registration include the Calgary Stampede-style Brunch on Mother's Day, a welcome reception on Sunday evening, and a banquet on Monday evening being held at Heritage Park, which is sure to provide a true western experience
- **Spousal program** – new this year, we encourage delegates to bring along their spouse to enjoy all that Calgary has to offer, including a day trip to Banff and choices of many other local attractions.

The exhibit area has been very popular and additional booths have been made available. The exhibits are expected to be open on Sunday evening during the reception, as well as during Conference hours on Monday and Tuesday.

Sponsorships are still available, and you are encouraged to sponsor now to obtain full advantage of this opportunity. We would like to thank those who have already agreed to sponsor – their logos have been added to the Conference website.

The preliminary technical program is expected to be made available very soon, and the entire Conference organizing team is looking forward to bringing you an exciting, entertaining and informative event. Register now, and we'll see you in Calgary!

*Doug Morgan – City of Calgary
Chair, Local Organizing Committee*

Inside This Issue

Articles

- Come to Calgary in May! ...page 1
- Transport Canada's R&D Plan ... p2
- ITS Updates from Across Canada Ontario ... p3
- Traffic and Travel Information Via Radio ... p3
- Opportunities in Dubai ... p4

Events

- Upcoming Events ... p4

Newsletter published by
ITS Canada.
Submissions or comments can
be e-mailed to
itscanada@itscanada.ca.





ITS Canada News

Innovation Through Partnership



Transport
Canada

Transports
Canada

Transport Canada's ITS Research and Development Plan

*Transport Canada provides support for strategic ITS deployment and integration model applications. In January 2004, Transport Canada announced the winning projects that will be awarded contracts under **Innovation Through Partnership**, Transport Canada's ITS Research and Development Plan. One million dollars of SHIP funding has been allocated for research and development contracts, with a maximum of \$100,000 awarded per project. The complete list of the approved projects is available at <http://www.tc.gc.ca/mediaroom/releases/nat/2004/04-h001e.htm>.*

Reported by Ron Lake, Galdos Systems Inc.

Transport Canada Funding: \$99,980

ITS applications form a class of complex systems that often depend on geographical information from many domains, such as real time sensor data, geometry and topology for road networks. This information is also of interest in many other non-ITS systems including land management, tourism, and property valuation.

Sharing of geographical information on a broad basis is absent in the current environment, where information exchange standards for geographic and location information are not widely supported. This situation is about to change with the emergence of [Geography Markup Language](#) (GML) for all forms of geographic content expression.

GML is rapidly emerging as the world standard for encoding geographic information, and has been submitted for consideration as an ISO standard. GML is being applied to a wide range of geographic applications including homeland security and critical infrastructure protection, integrated land and resource management, location-based services, telematics and intelligent transportation systems, and oceanography. GML touches on GIS data interoperability and the application of web service technology for GIS.

GML can be deployed for a wide variety of applications including land management, integrated resource management, location-based services, infrastructure planning and protection, and Intelligent Transportation Systems. Using GML, users can create languages for specific application domains that make use of spatial and location information for static and dynamic features, geometry, reference systems, topology, units of measure and sensor data, while at the same time allowing ITS-specific vocabulary.

GML-friendly software can display ITS objects on maps and other types of displays, and can allow immediate update of ITS objects on the Internet from a wide variety of devices and systems. GML is currently being deployed in ITS and road network applications in a variety of locales including Korea (Korea Highway Corporation), Japan, and in the U.S. DOT/BTS Geo-spatial OneStop Transportation Pilot. Many other applications of GML to ITS are anticipated.

GML is also the foundation for the Geo-Web, the World Wide Web for Geographic Information, a basis of networks of geographic information web services. With the emergence of the Geo-Web, GML became the mechanism for all geographic data description and transport. Using GML, all geographic databases are interconnected, enabling organizations to make informed decisions based on access to locally managed and globally accessible geographic information.

The OpenGIS Consortium (OGC), comprised of business organizations, government agencies and universities, is an international industry consortium working together to provide improved access to geographic information. The OGC is a world-wide group of 260+ vendors, academic bodies and government agencies focused on the creation and utilization of standards for the international use of geographic information.

Transport Canada's R&D Program funding will be used to develop a traffic system spatial infrastructure (i.e., the means by which geographic or locational information may be integrated with transportation management systems). Galdos will partner with Translink (the Greater Vancouver Transit Authority), InComKorea, and an advisor from the University of Toronto. This will provide a GML "vocabulary" for Intelligent Transportation Systems.



ITS Canada News

Regional Update

ONTARIO

*Reported by Ataur Bacchus,
Ministry of Transportation of Ontario*

Planning for a GTA Integrated Ticketing System is underway. The overall objectives are to devise a seamless trip for transit riders using multiple transit systems, and a cost-effective fare collection system that meets the needs of transit operators.

MTO owns 82 Advanced Road Weather Information Systems (ARWIS) stations and has access to information from an additional 18 sites. The addition of 30 new stations is well underway. MTO uses this information as a key tool to schedule winter maintenance operations and eliminate unnecessary salt applications.

Discussions on a Bilateral Agreement for an ITS Strategic Highway Infrastructure Program (SHIP) are underway between MTO and Transport Canada.

In partnership with the ENTERPRISE initiative, MTO recently embarked on four projects. One was initiated by Delcan Corporation's consultants to explore the feasibility of using Wireless Personal Communication Service technology for ITS applications. The second was proposed by the University of Toronto and involved setting up a test bed to evaluate traffic incident detection algorithms and to explore new traffic probes as a source of data. The third project was initiated by McCormick Rankin Corporation to study an automated carpool occupancy detection system for High Occupancy Vehicle (HOV) Lane enforcement. Also a joint project between ENTERPRISE and Aurora is aimed at standardizing the display of weather information across websites in use across North America.

European Standards

Now available from ITS UK: "Primer on Standards - Uncovering the Mysteries of Standardization in Europe", published by the European committee responsible for standards relevant to the ITS sector. Please e-mail Jennie Martin at ITS UK: mailbox@its-uk.org.uk.

Traffic and Travel Information via Radio

TMC, the Traffic Message Channel, is a fully mature technology for delivering traffic and travel information to drivers via a "silent" data broadcast channel (such as FM or DAB). TMC traffic message services are now operational in many European countries. Some European services are free and supply alerts of incidents, traffic congestion and bad weather. A growing number of commercial TMC services are also available, which offer a wider range of information for specific user groups. More and more new cars, both here and abroad, include an optional TMC-enabled navigation system.

TMC messages are delivered directly to the driver moments after an incident occurs. A TMC-enabled navigation system offers dynamic route guidance – finding the driver an alternative route to avoid traffic problems. The on-board unit in a vehicle can use data for dynamic route guidance or just to inform the driver via visual or audio output in the driver's language, whatever the broadcast language.

Benefits include:

- Up-to-the-minute travel information in real time
- Instant awareness of accidents, road work or road closures, traffic jams and dangerous weather conditions
- Less congestion
- Reduced environmental impact
- Messages filtered for driver's immediate route
- Presentation in driver's preferred language.

TMC is a fully accepted international standard. Delivering a TMC service requires putting all of the elements of the chain into place. This includes creating a national database of TMC locations, ensuring that TMC receivers are available in the marketplace, and building the links to sources of real-time traffic information. Delivery also requires setting up a service centre to validate, integrate and encode the traffic data, furnishing the data to a broadcaster, and finally, transmitting the TMC messages.



ITS Canada News

Upcoming Events

ITS Canada Members Invited to IMSA BC Event

The IMSA BC Section will be holding its annual AGM/Technical Sessions and Trade Show on March 31, 2004, in Coquitlam, B.C. (a suburb of Vancouver). ITS Canada members are cordially invited to participate. Admission is complimentary (no charge).

Hong Kong and Shanghai Symposium on Science and Technology

The Hong Kong Institution of Engineers and the Shanghai Association for Science and Technology are jointly organizing this Symposium which will be held in Hong Kong on May 17 and 18, 2004. It aims to foster collaboration in contributing to the exchange of technical knowledge and information between Hong Kong and Shanghai. The audience will include business leaders, engineering professionals, government officials and academia from Hong Kong and Shanghai.

The symposium, entitled "**IT, Transport & Management**", will discuss innovation in organization and processes to harness the opportunities of the information revolution, technologies to enable transformation to an information society, and transport and intelligent systems to advance physical movement.

Scope of Topics:

- Management and Organization in Information Age
- Towards Information Society
- Transport and Intelligent Transport Systems.

For information, visit:

<http://www.hkie.org.hk/hk-shanghai>.

Opportunities in Dubai

The Middle East is home to some of the world's largest infrastructure projects. Millions of dollars are being poured into a host of exciting commercial and public buildings, sports facilities and parks, making the region one of the world's most lucrative potential exports markets. Ground has been broken on the world's biggest mall and the world's tallest tower in Dubai, while Qatar has given approval for expansion of the Doha International Airport. There are also new hotels, an art gallery, water amusement park, a huge new zoo and a complex of sports stadiums all in the planning or early building phase, helping create a huge demand for infrastructure capability.

To capitalize on these unique export opportunities, you are invited to join a trade mission to Abu Dhabi, Dubai, Doha and Kuwait in April. Ontario Exports Inc., the export development agency of the Ontario government, in conjunction with the Canada-Arab Business Council, Canadian Manufacturers and Exporters, Canadian embassies, the Department of Foreign Affairs and International Trade, and Export Development Canada are jointly hosting this mission.

The program has been developed for CEOs and Export Development Managers, Project Managers, Engineers and Consultants from the following sectors: construction, engineering, design and architecture, urban planning and building materials. Mission highlights include a ten-day business program in four key Middle East markets showcasing Ontario's world-class infrastructure expertise, onsite exposure to unique project opportunities for Ontario exporters including potential new suppliers to the region, business partnering and networking events, briefings and site visits. Your firm may also be eligible for financial assistance to participate (PEMD).

For information, please contact Barbara Vink, OEI, at (416) 325-6514, e-mail barbara.vink@edt.gov.on.ca



ITS Canada's Annual Conference

Registration and technical tour details are now available

Visit the website for information: www.itscanada.ca/alberta2004

- **ITS Safety and Security Conference**
March 24 to 25, 2004 – Miami, Florida
www.cisr.gwu.edu
- **2nd Annual GTA Transportation Summit**
March 25 to 26, 2004 – Toronto, Ontario
- **Intertraffic Amsterdam 2004**
March 30 to April 2, 2004 – Amsterdam, NL
www.intertraffic.com
- **IMSA BC AGM/Technical Sessions and Trade Show**
March 31, 2004 – Coquitlam, BC
jquan@cnv.org
- **12th International Conference on Road Transport Information and Control**
April 20 to 22, 2004 - London, UK
www.iee.org/oncomms/pn/auto/RTIC.cfm
- **2004 ITS America Annual Meeting**
April 26 to 29, 2004 - San Antonio, Texas
www.itsa.org/annualmeeting.html
- **ITS Canada Annual Conference and General Meeting**
May 9 to 11, 2004 – Calgary, Alberta
www.itscanada.ca/alberta2004
- **Hong Kong and Shanghai Symposium on Science and Technology**
May 17 and 18, 2004 – Hong Kong
<http://www.hkie.org.hk/hk-shanghai>
- **7th China Beijing International High-Tech Expo**
May 22 to 26, 2004 – Beijing, China
- **Telematics Expo**
May 25 and 26, 2004, Detroit, MI
www.telematicsupdate.com/detroit2004



Upcoming Events

- **SURF 2004 - The PIARC 5th International Symposium on Pavement Surface Characteristics - Roads and Airfields**
June 6 to 10, 2004 – Toronto, Ontario
www.jegel.com/surf/
- **14th Canadian Multidisciplinary Road Safety Conference**
June 27 to 30, 2004 – Ottawa, Ontario
www.cmrsc.ca
- **GML Days 2004 Conference**
July 25 to 29, 2004 - Vancouver, B.C.
www.gmldev.org
- **III Chilean Congress of Intelligent Transport Systems and 2nd International Exhibition**
September 1 to 3, 2004 – Santiago, Chile
www.itschile.cl
- **TRANSTEC 2004**
September 1 to 5, 2004 – Athens, Greece
www.transtec.gr
- **TAC Annual Conference**
Transportation Innovation - Accelerating the Pace
September 19 to 22, 2004 - Québec, Québec
www.tac-atc.ca
- **XIII Pan-American Conference of Traffic and Transportation Engineering**
September 26 to 29, 2004 – Albany, New York
www.eng.rpi.edu/panam/
- **Upcoming World Congresses**
 - **Nagoya, Japan** October 18 to 22, 2004
"Second Announcement" and "Call for Papers" now available – e-mail your request for copies of these documents to itscanada@itscanada.ca, or visit www.itsworldcongress.org for event information
 - **San Francisco** November 6 to 10, 2005

ITS Canada Members Upgrading to the Sustaining Corporate Level

ITS Canada would like to acknowledge with gratitude the following member who has upgraded to the Sustaining Corporate level:

GO Transit

