

ITS Canada Strategic Plan

The Board of Directors has completed its review and update of ITS Canada's Strategic Plan. Relating directly to the Society's Mission and Objectives, the initial draft of the update was considered at ITS Canada's Board of Directors meeting in February 2005. After a useful discussion and exchange of ideas, a final draft was developed and reviewed at the Board meeting held in May in Quebec City. At the request of the Board, the Strategic Plan was made available on ITS Canada's website in July 2005, and members were encouraged to review it and submit ideas and suggestions.

Factors that the Board considered in preparing the Strategic Plan included:

- overall viability of the Society
- budgetary issues
- developing partnerships with other organizations
- investing in projects that will benefit the Society or the industry as a whole.

Survey responses were presented to the Board at their September meeting. The majority of respondents agree with the plan developed by the Board, with over 80 percent of responses in favour of the Board's directions.

As a result, the Board has now officially adopted the updated Strategic Plan.



Photo courtesy of the Ministry of Transportation of Ontario

Be sure to visit ITS Canada's online photo library. Thanks to the generous support of members, the photo library now includes a large number of images. This photo is of the **Smart Card system in Burlington, Ontario.**

ITS Canada Photo Library:

www.itscanada.ca/english/photolibrary.htm

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be e-mailed to
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Visit ITS Canada's website at
www.itscanada.ca

ITS Canada Mission to 12th World Congress on ITS

The 12th World Congress on ITS, held in San Francisco, California, on November 6 to 10, 2005, was an outstanding success, with over 7,000 in attendance, including a mix of government representatives, academic researchers, and private sector industry participants from 57 countries. The Congress included sessions, tours, social events, networking opportunities, and a large exhibit area. ITS Canada was represented by Chairman Joseph Lam.

A key feature of the event was the Innovative Mobility Showcase, with real-world demonstrations and displays of leading-edge technology, including driverless buses on magnetized streets, cars able to text-message each other about dangerous road conditions ahead, cars able to self-park into tight parallel parking spots, and eyeglasses that monitor weary drivers. Many of the innovations are not yet available in North America but have been introduced in other countries.

Sessions included presentations on about 20 topics, with over 750 speakers and international experts who provided information on the latest ITS research and deployments. The exhibit area, 50,000 square feet of space with about 200 organizations participating, included private enterprise, universities, and ITS organizations.



Exhibit Floor
Brian Taylor – International Road Dynamics



Exhibit Floor – EIS Electronic Integrated Systems Inc.
From left: David Qian, Mike Ouellette, Dan Manor, Michael De Santis (Vice Chair, ITS Canada), Sini Stojicic and Robert Fairburn

The Congress also included tours to view deployed technology in California with regard to transportation management, Smart Corridors, 511 traveller information systems, real time transit data collection, smart card fare collection systems, electronic toll collection, and much more.

On the evenings of November 7 and 8, ITS Canada and Transport Canada hosted a reception for approximately 300 invited guests. The event provided an opportunity to network with industry participants from the United States, Europe, South America and Asia. Chairman Joseph Lam and Susan Spencer of Transport Canada were on hand to welcome guests. Several members, including DMTI Spatial, EIS and Daktronics Canada, used the opportunity to display some of their products and services.

ITS Canada has organized and co-hosted a social event at World Congresses each year since the 6th World Congress in Toronto in 1999, and it has become a valuable means of outreach to partners and friends in other countries. The event raises the profile of Canada among many delegates to the World Congress, and is a successful means of projecting member interests to a very targeted audience.

Transportation Funding Announcements

On November 7, 2005, federal Transport Minister Jean-C. Lapierre announced a \$1 million second call for proposals was announced for projects that **advance transportation planning and enhance integration and connections between modes of transportation**. The exact amount awarded will depend on the quality and dollar value of proposals received.

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The types of proposals eligible for funding include:

- planning and feasibility studies or projects (except for urban transit)
- infrastructure and technology projects that improve connections between modes or modal integration
- initiatives that facilitate modal partnerships or cross-modal/shipper partnerships
- research studies that provide greater understanding of multimodal transportation
- development and dissemination of information management tools
- innovative approaches to transportation at cross-modal hubs or transfer points along trade corridors for the dispersal of persons or goods at ports, airports, rail stations and other facilities
- development, diffusion and implementation of asset, freight and travel demand management systems
- innovative approaches to the movement of freight and goods in rural and northern areas that make more effective use of available transportation options
- paperless transactions or electronic commerce technology and systems in the transportation environment.

The call for proposals will be open until February 1, 2006. For full details, visit:
www.tc.gc.ca/mediaroom/releases/nat/2005/05-h216e.htm

On October 14, 2005, the governments of Canada and Ontario announced an investment of \$4 million for cameras and electronic message signs to save drivers time and increase driver safety on the **Blue Water Bridge** and **Highway 402** leading to the United States border. Each government will contribute \$2 million toward the project.

The bridge is Ontario's second-busiest border crossing for trucks. About 1.8 million trucks use this crossing annually, carrying about \$51 billion in goods, and over five million cars and trucks use the bridge each year, making it Ontario's fourth busiest border point. A recent Ontario Chamber of Commerce report estimates border delays cost both the United States and Canada over \$13 billion per year (all figures in Canadian dollars).

Commercial traffic at the bridge is predicted to more than double over the next 10 years. To address the increasing traffic volume, technology is now being installed on a 15-kilometre stretch of Highway 402:

- Sensors in the pavement will monitor vehicle speeds and, within 30 seconds, send traffic information to queue-end warning signs and to the Ontario Ministry of Transportation Control Centre. Motorists will know what's ahead and have time to opt for other routes.
- Closed circuit television cameras will allow Ontario ministry staff to detect incidents and dispatch emergency services sooner. Road emergencies and related traffic congestion will be resolved faster.

Displaying traffic information on electronic signs will help local motorists make informed decisions about alternate routes, and provide real time traffic information to motorists bound for the bridge.

For full details, visit:

www.tc.gc.ca/mediaroom/releases/nat/2005/05-h195e.htm



ITS Canada News

Intelligent Transportation Systems Project Funding

In January 2005, a total of \$5 million in funding for twenty-five new projects was announced under Transport Canada's Intelligent Transportation Systems (ITS) Plan. The winning projects will take place in various locations across Canada.

Details on all of the projects are available at www.tc.gc.ca/mediaroom/releases/nat/2005/05-h001e.htm.

Prototype Management System For The Movement Of Oversized Vehicles

Funding awarded: \$100,000

Total cost of proposal: \$276,300

A sustainable transport policy emphasizes the importance, as a guiding principle, that the marginal cost to the economy deriving from transport movements be covered by a diversity of taxes and charges equitably distributed among users. This cost is a composite of government-borne costs of infrastructure deterioration and traffic services, user-borne costs from congestion, stress or accidents, and community-borne costs generated by air pollution, noise, global warming and crash costs, most of which vary with the nature, logistic and travel distance of transport movements. However, the equitable allocation of a user charge is a complex task that was insurmountable until the recent emergence of sophisticated ITS that now offer new management capabilities in bringing to market sensing, localization, real-time communication and information processing technologies. These technologies open the road to the development of intelligent transport management systems that are necessary to solve the different tasks related to the implementation of an equitable allocation of user charges.

The development of such a system is currently under development by **egidd**, a company dedicated to the development of information and communication technologies in support of sustainable development policies. The system encompasses both a user charge simulator and a pricing prototype for transport movements of heavy vehicles. The simulator of user charges is intended to help transportation managers establish the pricing parameters for different classes of vehicles bearing different types of transportation technologies and on-board ITS, and a candidate for specific types of circulation permits. Some of the pricing parameters can be calculated from empirical equations (e.g., the equivalent standard axles versus structural damages to the roads), while others can be established through methodological allocation of charges, deductions and abatements.

Canada

Based on these pricing parameters, the user charges allocation prototype can calculate the user's fee "online" for any type of circulation permit (or heavy vehicle configuration).

Preliminary results obtained by running the simulator show that this pricing method and user charge allocation prototype can become, in the near future, a powerful tool for the implementation of sustainable transport policies. It increases significantly the equity of the charge allocation system. It could help increase road safety, reduce the damage to public roads, diminish congestion, and reduce noise and fuel consumption. Developed in collaboration with the transportation industry, future applications of the system may help optimize transport efficiency by dealing in a more efficient manner with environmental and social constraints. On the distributive side, the user fee approach has the capability, through a proper abatements strategy, to maintain an efficient transportation system in low population areas.

To be applicable in a way that can reduce the transportation cost to a transport company, the user charge system needs to be supported by an efficient surveillance system that can enforce the specific conditions limiting the use of the public road system to the price paid by the carrier. This is an area where ITS has a fundamental contribution: sensing and information processing technologies have the ability to ensure that the price paid for a heavy vehicle circulation permit reflects correctly the cost to the economy of its use on public roads.

The prototype is being developed in collaboration with the Ministère des Transports du Québec and is configured to be easily incorporated into technological orientations. The project is supported by Transport Canada's Intelligent Transportation Systems Program, through funding made available under the Strategic Highway Infrastructure Program.



ITS Canada News

511 News in the U.S.

The 511 Deployment Coalition has released Version 3.0 of the *Implementation and Operational Guidelines for 511 Services*, which includes frequently asked questions about 511 and key operational lessons learned.

Recent statistics:

- Almost 40 million calls nationwide since inception
- 13 consecutive months with over 1 million calls
- 511 was available to over 83 million Americans (28 percent)
- Systems deployed for one year saw an 11.65 percent decrease in September 2005 call volumes compared to September 2004
- Peak usage was experienced due to Labor Day travel, weather conditions, AMBER alerts, state fairs and incidents
- The Washington State service set a daily call record.

Active 511 Systems as of September 30, 2005: Cincinnati / Northern Kentucky, Nebraska, Utah, Virginia, Arizona, Orlando, Minnesota, Southeast Florida, Washington State, Iowa, South Dakota, Kentucky Statewide, San Francisco Bay Area, Montana, Vermont, North Dakota, Alaska, Maine, New Hampshire, Oregon, Kansas, North Carolina, Sacramento / Northern California, Tampa, Colorado, Rhode Island.

Active co-branded 511 websites include:

Alaska – 511.alaska.gov
Arizona – www.az511.com
Idaho – 511.idaho.gov
Iowa – www.dot.state.ia.us/511
Kansas – 511.ksdot.org
Kentucky Statewide – www.511.ky.gov
Maine – www.511Maine.gov
Minnesota – www.511mn.org
Montana – www.mdt511.com
New Hampshire – www.nh.gov/dot/511
North Carolina – www.ncsmartlink.org/511/default.html
North Dakota – www.state.nd.us/dot/divisions/maintenance/511_nd.html
Sacramento / Northern California – www.sacregion511.org
San Francisco Bay Area – www.511.org
South Dakota – www.sddot.com/511.asp
Southeast Florida – www.511southflorida.com
Tampa – www.511tampabay.com
Vermont – www.511vt.org
Virginia – www.511virginia.org
Washington State – www.wsdot.wa.gov/traffic/511

IMSA Fall Traffic Expo

By Chris Philp, Director - IMSA

In the last ITS Canada newsletter, I highlighted the many common interests between members of ITS Canada and IMSA. The recent IMSA Traffic Expo was another good example of these shared interests.

Each year, the Ontario Section of the International Municipal Signals Association (IMSA) holds a Traffic Expo to allow vendors to showcase new and established technologies and products, many involving technical elements of ITS. The Traffic Expo takes place each fall. This year, the Expo was held on October 27th in beautiful downtown Kingston, Ontario.

Many thanks to all the attendees (many from the province and municipalities within Eastern Ontario) who came out to take in the high-quality displays, enjoy the free coffee, drinks and snacks, enter draws for prizes, and participate in discussions with vendor representatives. All were treated to a free lunch.

A definite highlight of the day was a series of four presentations held during the lunch hour. Jim Keefe presented his listeners with some great pictures of unique signs and current advances in signing materials. Chris Brinkmann from the City of Ottawa presented the status of two TAC projects: Accessible Pedestrian Signals and Bicycle Signals. Andrew Beal from the Ministry of Transportation of Ontario provided an overview of the updates currently being integrated into the Ontario Traffic Manual for Traffic Signals (Book 12).

Many vendors of ITS equipment and services were on hand to answer questions and mingle with the Expo attendees. All in all, it was a great day!

Future IMSA Events

IMSA is holding a Fall Technical Session on Thursday, December 8, 2005, at the Deerfield Golf and Country Club in Oakville, Ontario. Please check the IMSA website for more details at:

<http://www.ontario.imsasafety.org>

News *bITS*

PUBLICATIONS NOW AVAILABLE

ITS Handbook – Second Edition

Provides information on the implementation of ITS technologies through 33 country profiles and 39 detailed case studies. Visit www.itshandbook.com.

Road Safety Manual

Interactive state-of-the-art information and guidance for the design and operation of road infrastructure in order to increase road safety. Visit www.piarc.org/library/en/news/3E4571ZQp1En91N83as3.php.

Transit Signal Priority

An Overview and a Handbook for Transit Signal Priority are now available. These documents were created by ITS America with funding from the U.S. Department of Transportation.

[www.itsa.org/resources.nsf/Files/FinalTSPOverviewUpdated/\\$file/FinalTSPOverviewUpdate.pdf](http://www.itsa.org/resources.nsf/Files/FinalTSPOverviewUpdated/$file/FinalTSPOverviewUpdate.pdf)

[www.itsa.org/resources.nsf/Files/Transit_Signal_Priority/\\$file/TSPHandbook10-20-05.pdf](http://www.itsa.org/resources.nsf/Files/Transit_Signal_Priority/$file/TSPHandbook10-20-05.pdf)

RED LIGHT CAMERA EVALUATION

The U.S. Department of Transportation Federal Highways Administration has published a "Safety Evaluation of Red Light Cameras". The objective of the research was to determine the effectiveness of cameras in reducing crashes, and relied on before and after data from seven U.S. jurisdictions with 132 sites. The study showed a modest aggregate crash cost benefit with RLCs. The full report is available at:

www.tfrc.gov/safety/pubs/05049/index.htm



ITS Canada Welcomes New Corporate Members

Manitoba Transportation &
Government Services

LandSonar Inc.



Upcoming Events

- **CUTA 2005 Fall Conference and Trans-Expo**
November 19 to 23, 2005 – Vancouver, BC
November 22 – Trans-Expo, Canada's Transit and Bus Exposition
www.cutaactu.on.ca
-  **ITS Canada Transit Workshop**
November 24, 2005 – Vancouver, BC
www.itscanada.ca/vancouver2005
- **Highway-Railway Grade Crossing Workshop**
November 21 and 22, 2005 – Montreal, QC
www.tc.gc.ca/tdc/events/7workshop.htm
- **Gulf Traffic**
December 12 to 14, 2005 – Dubai, UAE
www.gulftraffic.com
- **2nd Abu Dhabi International Road Exhibition & Conference (ROADX 2006)**
March 12 to 15, 2006 - Abu Dhabi, UAE
www.roadex-uae.com
- **4th Annual GTA Transportation Summit**
March 21 and 22, 2006 – Toronto, Ontario
www.strategyinstitute.com
- **Intertraffic Amsterdam**
April 4 to 7, 2006 – Amsterdam, The Netherlands
www.intertraffic.com
- **ITS America's 2006 Annual Meeting & Expo**
May 7 to 9, 2006 – Philadelphia, PA
www.itsa.org/annualmeeting.html
- **Traffic and Road Safety Third International Congress and Exhibition**
May 17 to 19, 2006 / Ankara Turkey
www.trodsa.org
-  **ITS Canada's Annual Conference**
June 4 to 6, 2006 - Whistler, BC
www.itscanada.ca/whistler2006
- **World Roads Conference**
September 27 to 29, 2006 – Singapore
www.worldroads2006.com