



ITS Canada News

ITS Canada Plans Architecture Training in Malaysia

ITS Canada and the Road and Engineering Association of Malaysia (REAM) signed a Memorandum of Understanding (MOU) on August 4, 1998, to facilitate the exchange of information related to the development of ITS. Since that time, the spirit of cooperation between ITS Canada and REAM has steadily improved, with a major milestone being reached in 2001 when the ITS Strategic Plan for Malaysia was released with much publicity. Appreciation was expressed to ITS Canada who assisted in the development of the Strategic Plan.

To further our cooperation, ITS Canada has agreed, with the enthusiastic support of the Canadian High Commission in Kuala Lumpur, to provide training on ITS architecture in Kuala Lumpur on August 20 and 21, 2002, with potential funding assistance to be provided through the Canadian International Development Agency (CIDA).

The National ITS Plan for Canada, released in November 1999, outlined a series of potential benefits associated with the deployment of ITS in Canada. The ITS Architecture for Canada provides a tool which can be used to ensure that these benefits are realized and maximized. The same tool can be applied in other countries, so that they may also benefit from the deployment of ITS.

In order to ensure that ITS is considered for new transportation initiatives in developing countries, such as Malaysia, the public and private sectors, as well as the general public, must be made aware of both the benefits of ITS and the existence and uses of the ITS Architecture. The proposed training program will provide awareness and education with regard to the benefits of the ITS architecture and standards, including interoperability and reduced deployment costs, as well as reduced deployment risks. This, in turn, will contribute to broader deployment and integration of ITS, which results in higher benefits on a region-wide scale.

The objective is to provide professionals within the Malaysian transportation community with a working knowledge of ITS architecture and its development, using the Canadian architecture as an example. Once these professionals are made aware of the ITS Architecture, as well as the Canadian products and services and how they are applied in the delivery of projects, it is expected that specifications for ITS projects in Malaysia would provide opportunities for Canadian consultants, suppliers and contractors.

This project is expected to enhance relations with the ITS community in Malaysia, while increasing awareness of Canadian ITS products and services and the potential of contracts for ITS systems in Malaysia. Pursuing ITS architecture will ensure Malaysia benefits from reduced costs and technological risks for ITS system deployment, better integration of transportation system components, and improved safety and efficiency for users of the Malaysian transportation system.

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Newsletter published by
ITS Canada.

Submissions or comments can be
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ITS Canada News

Transport Canada Funding for ITS Projects



Transport Canada provides support for strategic ITS deployment and integration model applications. In June 11, 2001, proposals for cost-shared funding were solicited. Fifty-one proposals were received and, in March 2002, seventeen were approved for funding in the amount of \$3.7 million. The complete list of the approved projects is available at www.its-sti.gc.ca/en/menu_e.htm. Below is a synopsis of two of the approved projects.

British Columbia Ministry of Transportation By Joyce Chang, Regional Project Manager

Transport Canada Funding: \$250,000
Total Project Cost: \$1.746 million estimated

An Advanced Traveler Information System proposal has been developed through a partnership between the BC Ministry of Transportation, Washington State Department of Transportation, Transport Canada, and Canada Customs and Revenue Agency through the International Mobility and Trade Corridor projects.

Peace Arch (Highway 99) and Pacific (Highway 15) are the two busiest BC/U.S. border crossings, with a significant variation in traffic demand by time of day and day of week. Although these facilities are only 1.6 kilometres apart, there can be congestion and delays at one crossing while minimal delays at the other, as motorists approach these facilities uninformed as to which has the shorter wait-time in order to divert to the less-congested facility.

Real-time traffic and delay information from the Advanced Traveller Information System (ATIS) will provide travellers with information for trip planning and route diversion in order to minimize delay and the overloading of facilities.

This project will enhance mobility of people and efficient movement of commercial goods between the U.S. and Canada. ATIS will estimate southbound delay, queue length, volumes, and travel time at each crossing. Travel time will be estimated by detection loops and CCTV cameras to provide a "real time" measure of border crossing delays that can be disseminated to travellers via dynamic message signs (DMS), Internet web sites, and pre-recorded telephone messages.

City of Edmonton By Audra Jones

Transport Canada Funding: \$250,000
Total Project Cost: \$655,000 estimated

The City of Edmonton is the hub of the largest metropolitan region in the Province of Alberta, with a total population of 900,000. The City's Transportation and Streets Department is currently responsible for almost 3,000 kilometres of paved roadways, over 100 bridge structures, and over 1,000 signalized traffic control devices; the City's public transit system accommodates almost 40 million transit rides annually on a network of bus routes and a 12-kilometre light rail transit system. The City is committed to the deployment of ITS systems and, as such, has currently budgeted \$500,000 per annum over the next five years.

The City's proposal includes the deployment of approximately ten CCTV video cameras on key transportation corridors, with the central hardware and software to accommodate the identified requirements for disseminating both live and still images to civic agencies, the media, and the public. The initial deployment will see the replacement of the City's existing six cameras on major river crossings adjacent to the City's downtown core. The project will be undertaken following the ITS Architecture for Canada.

The City anticipates that the project will result in decreased traveller frustration, increased safety, and decreased greenhouse gas emissions, by ensuring incidents are cleared more quickly, and by allowing for pre-trip planning using the City's website and cable television. It is also hoped that this project will raise the level of awareness of ITS and its benefits to local policy-makers and the general public.



ITS Canada News

Dedicated Spectrum Band for ITS

By William Johnson
Chairman, ITS Standards Committee

Industry Canada's public Consultation on Revision to the Spectrum Utilization Policies in the 3-30 GHz Frequency Range closed on April 30, 2002. One of the proposed policy changes is to open up the 5850-5925 MHz spectrum band, known colloquially as the 5.9 Giga-Hertz band, to mobile users of intelligent transportation systems, and specifically a new generation of dedicated short range communications (DSRC) transponders. This would harmonize Canadian spectrum policy with the policy adopted by the Federal Communications Commission (FCC) in the United States in 1999.

In Canada, there is a complication since this band is already used by a number of fixed facility users. However, preliminary discussions between ITS Canada and representatives of one large fixed facility user indicate that harmonious use of the band by fixed and mobile users can be worked out over a suitable phase-in period.

ITS Canada submitted a comment to Industry Canada on behalf of its members concerning the utilization policy for the 5.9 GHz band. A number of ITS Canada members also stepped forward to express their views on the proposed policy, including Transport Canada, Mark IV Industries, International Road Dynamics, 407 ETR, and Signaflex. Industry Canada has posted all submissions received on its Strategis website and has informed ITS Canada that "new policies should start emerging by late fall ...".

For further information, visit
<http://strategis.ic.gc.ca/SSG/sf05653e.html>.



ITS Standards Workshop Scheduled for Toronto

ITS Canada's Standards Committee will convene and host a workshop on Thursday, August 8, 2002, at the offices of IBI Group in Toronto. Members of ITS Canada and interested professionals are invited to participate in this workshop, either in person in Toronto or via a teleconference service.

The purpose of the workshop is to review preliminary plans for ITS standards development and deployment activities in Canada from 2002 to 2005, and to recommend priorities and program enhancements. Prior to the workshop, all registered delegates will receive advance documentation for their review and consideration. The output of the workshop will be used to seek funding support from partners to the ITS Standards Framework for Canada.

The agenda is posted on the ITS Canada website and is also available on request from ITS Canada. Briefly:

- At the Opening Plenary, Grant Zammit from the Federal Highway Administration, Southern Resource Center, Atlanta, will inform delegates about ITS standards development and deployment activities in the United States.
- A speaker from the Standards Council of Canada will inform members of the Canadian Standards Strategy.
- A panel of speakers from prominent Canadian public and private organizations will inform delegates from their perspectives on ITS standards.
- Delegates will get an opportunity to contribute their views in breakout group discussions.
- At the Closing Plenary, a summary of the discussions will reflect on the priorities, issues and opportunities for moving forward with an ITS standards program for Canada.

There will be no registration fee. For those unable to attend in person, a special cross-Canada dial-up teleconferencing link is planned. To register, access ITS Canada's web site at www.itscanada.ca.



U.S. Traffic Congestion Study Published

Traffic congestion continues to grow, according to an annual congestion report by the Texas Transportation Institute. As rush-hour delays lengthen, the rush hour itself lasts longer, and a higher percentage of roads experience congestion. Researchers predict the trend will continue to affect the way most of us work and live.

The trends are illustrated in a study by the Texas Transportation Institute at Texas A&M University. TTI conducts research in all modes of transportation, and is the largest university-based transportation research agency in the United States. Sponsored by the Texas Department of Transportation, the study measured traffic congestion in 50 urban areas across the U.S., and reflects data from 1992 onwards.

This year's report introduces a new measure: delay per peak period traveller (in place of delay per capita) as the primary measure of congestion, providing a better indication of delay experiences according to researchers. Researchers also rank areas using a roadway congestion index (RCI) which considers miles of vehicle travel per lane-mile of freeways and principal street systems. For the seventh year in a row, Los Angeles topped the list.

Visit this internet site ...

TrafficLinq

www.trafficling.com/industry.htm

An extensive online directory of links covering issues regarding road traffic and transportation. TrafficLinq covers about 1,000 web sites world wide. A team of editors selects the best sites on ITS, public transport, transportation planning, traffic engineering, sustainable mobility, congestion pricing, traffic information, parking, traffic safety, bicycling, commuting, software, organizations, automotive, and traffic industry. There is also a large section on books on traffic and transportation. The site is aimed at traffic and transportation professionals.

Researchers also measured the financial impact of traffic congestion, analyzing travel delay and excess fuel consumption in the urban areas studied to arrive at a national congestion cost of \$48 billion, 9 percent higher than last year.

Tim Lomax of TTI says researchers now have a decade's worth of traffic statistics, and the information is telling them three things:

First, he says, although congestion is increasing, the overall average travel time to work is not. Lomax says that's because Americans (those who are able to) are reacting to congestion by moving to another job, another home, or both.

Second, while building more roads may be part of the solution, it's not enough. Solutions must include ways to better integrate the highway system with other transportation modes, making it more "multimodal." In addition, more efficient transit, telecommuting and flextime work schedules, better traffic management through intelligent transportation systems, and changing land use patterns to bring jobs, shops and homes closer together are all part of the answer.

Third, these new solutions are going to require better communication. Transportation agencies, businesses and travellers must all share the responsibility of identifying problems, choosing and financing solutions, and making those solutions work.

The study offers some hope, noting that congestion solutions exist, including HOV lanes, ramp metering, better incident management, and new road construction. Controlling congestion requires improving system reliability, according to the study's authors.

"We've got to change the way we address mobility," Lomax says. "Our solutions need to be reliable, and we must be able to measure that reliability -- people need to know that they can count on these solutions from one day to the next."

APTS Mobile Showcase Visits Canada

By William Johnson
Secretary, ITS Canada

In early June, Canadian transit operators were treated to a glimpse into the future when the Advanced Public Transportation Systems (APTS) Mobile Showcase, sponsored by the U.S. Department of Transportation, made stops in Ottawa and Toronto on its first tour to Canada.

The APTS Mobile Showcase is a road show in a trailer that is designed to bring knowledge and information about the latest intelligent transportation systems right to the door of transit decision makers in cities and towns across the United States. Thanks to the initiative and perseverance of Jouko Parviainen, member of ITS Canada and CUTA, the idea of bringing the Showcase to Canada was approved by the Federal Transit Administration (FTA) and private funding was obtained. MTO, CUTA and Transport Canada then agreed to host the Showcase with support from the eight private sector partners: Siemens ILG, Mentor Engineering, GFI Genfare, Orbital TMS, NextBus Systems, Luminator, 3M, and Vansco.

The APTS Mobile Showcase spent the week of June 9-14th on a swing through Canada, with tour stops at the Canadian Urban Transit Association Annual Meeting in Ottawa (see photo below) and at the Ontario Ministry of Transportation in Toronto.



APTS Mobile Showcase at the
CUTA Annual Conference in Ottawa - June 2002

Tours of the exhibits in the Mobile Showcase included a number of "stops" entitled:

- 'At the Bus Stop' – equipped with electronic transit arrival displays
- 'The Intelligent Bus' – where visitors entered a simulated bus entrance equipped with automated fare collection, model driver workstation, (see photo below), security system and passenger seats with a wireless entertainment system
- the 'Control Centre' – where visitors got a peek behind the scenes
- the 'Service Support Centre' – equipped with planning and scheduling aids
- a 'Bus Technologies' display including smart cards, collision avoidance systems, and many other innovations.

US DOT officials were on hand to guide visitors through the "stops" on either a 'fast track' 15-minute tour or the more leisurely 45-minute tour. The Showcase is also used for workshops of longer durations (i.e. a half-day or a full-day).

For Canadians, the brief tour was an opportunity to see what our neighbours to the south think about ITS for transit, and to benchmark our own efforts in this rapidly evolving field of technology applications. For additional information, please access:

www.ornl.gov/fta/showcase.



APTS Mobile Showcase US DOT Tour Guide
points out features of Bus Driver Workstation



ITS Canada News

Publications of Interest

WESTAC has just published a document entitled "Enhancing Prosperity: The Importance of Revitalizing Canada's Transportation Infrastructure" which indicates that a serious gap is appearing between the transportation system Canada has and the system it will need to maintain and enhance our prosperity as a nation. The document highlights the need to continue to revitalize Canada's transportation system. For a copy of this document, please e-mail itscanada@itscanada.ca.



The Welsh Assembly Government's Traffic Information Centre (TIC Cymru) is a focus for traveller information relating to motorways and trunk roads in Wales. The **Mantais Newsletter**, published by Mantais Cymru in South Wales, provides news on the latest ITS deployments in Wales. The Summer 2002 issue advises that Wales launched an **ITS Implementation Strategy** in May, which lays down a five-year program for achieving the Assembly's vision for a fully integrated transport system serving all of Wales, backed up by high quality travel information to help increase road safety and improve efficiency. Review the document at www.wales.gov.uk/subitransport/content/eng_comp.pdf.



Reminder ...



Early registration closes July 31 for the 9th World Congress on Intelligent Transport Systems

Upcoming Events



IRF & ARF Asia Pacific Roads Conference and Exhibition 2002 – Sept. 1 to 5 / Sydney, Australia

This conference will focus on roads as a business, with emphasis on strategy, planning, managing and funding, concentrating on the needs of the customer, the road user. Broad themes will include the use of intelligent transport systems incorporating electronic management, together with the community's growing need for safety. An exhibition will be run in conjunction with the conference featuring the latest and best in equipment, technology and services in roads management. For more information, please see www.tourhosts.com.au/roads.

Mission to Malaysia

In conjunction with the architecture training that will be held in **Kuala Lumpur** on August 20 and 21, 2002 (see Page 1), ITS Canada is planning a mini trade show. Any members interested in seeking project opportunities in Malaysia are invited to participate. Please contact ITS Canada for further information at (905) 471-2970 or e-mail itscanada@itscanada.ca.

Travel Scholarships for 9th World Congress

ITS Canada is pleased to announce the availability of scholarships to members in the public sector, to attend the 9th World Congress on ITS in **Chicago**, Illinois, U.S.A., being held October 14 to 17, 2002. As part of ITS Canada's Awareness Building Program, travel subsidies will be provided for up to three Canadian public sector individuals who are employed by an organization which is a Corporate Member of ITS Canada. For more information, please access our website at www.itscanada.ca.



ITS Canada News

Upcoming Events

- **IRF & ARF Asia Pacific Roads Conference and Exhibition 2002** will be held September 1 to 5 in Sydney, Australia. See previous page for details.
- **Beijing International Exhibition and Seminar - Intelligent Transport Systems** will be held from September 10 to 13, 2002, in Beijing, China. For more information, please visit the web site at www.ITSevent.com.
- **TAC Annual Conference and Exhibition** will be held September 15 to 18, 2002, in Winnipeg, Manitoba. Access their website at www.tac-atc.ca for more information.



- **9th World Congress on Intelligent Transport Systems** will be held in Chicago, Illinois, from October 14 to 18, 2002. Access their website at www.itsa.org for further details.
- Dublin City Council, in association with the Department of Local Government and the Environment, the Department of Public Enterprise, the National Roads Authority, and Trinity College Dublin, is organizing an **ITS Conference** to be held November 5 and 6, 2002, in Dublin, Ireland. Joseph Lam, Chairman of ITS Canada, will provide a keynote address. Exhibition opportunities are available for our members who are interested in the emerging ITS market in Ireland. Contact itscanada@itscanada.ca for further details.

- WESTAC's fourth annual conference on **Innovations for Transportation** will be held on November 19 and 20, 2002, at the Fairmont Hotel at the Vancouver International Airport. For more information, visit WESTAC's website at www.westac.com.



- **4th Annual Workshop on Highway-Railway Grade Crossing Research** will be held November 25-26, 2002, at the Marriott Chateau Champlain in downtown Montreal. The Workshop has been scheduled to precede meetings of the research program's Steering Committee on Tuesday afternoon, November 26, and of the D2006 Executive Committee on Wednesday, November 27. Both of these meetings will be held in the conference rooms of the Transportation Development Centre in Montreal. For more information, see:

www.tc.gc.ca/tdc/events/menu.htm.



- **Intertraffic Latin America** will be held April 2 to 4, 2003, in Mexico City, Mexico, and September 4 to 6, 2003, in Sao Paulo, Brazil. For more information, see www.intertraffic.com.
- **Smart Moving / Traffex 2003** will be held April 7 to 10, 2003, at the National Exhibition Centre near Birmingham, England. For details, contact congress2003@its-focus.org.uk.



Mark your calendar now...

ITS Canada's next Annual Conference and General Meeting will be held in April 2003 in Fredericton, New Brunswick