



A Message from Chairman Joseph Lam

As many of you know, after 12 years as the Chair of ITS Canada, I am stepping down from that position. This is not, however, indication of a decrease in my passion for the ITS industry! Although the reins are being handed over to a new Chairman, my goal is to maintain my involvement, and I hope to continue to contribute to both the Society and the industry.

During my tenure as Chairman, it has been fascinating to watch ITS Canada develop from its inception as an idea to its position today as a thriving and active association, furthering the interests of well over 200 members. It has not been an easy road to plough – a niche industry in a much broader landscape called ‘transportation’. However, over the years, our members have demonstrated the value of ITS technologies by pioneering, right here in Canada, solutions that are now used around the world.

Of note is the Society’s strong affiliation with Transport Canada. Since 1999 when the federal government launched its ITS initiative, ITS Canada has established a solid partnership with Transport Canada. Canadian provinces have also been actively engaged, along with the major cities and municipalities. As a result, the quality of life for Canadians has advanced significantly through investments made in ITS that lead to increased safety, security and mobility.

The ITS industry also has a strong heritage of creating employment, as well as providing a significant export industry: with the support of the federal government, our members have exported Canadian ITS products and services to more than 30 countries around the world. As well, our relationships with other international associations are in excellent shape and the Society is respected in the international community, further enhancing our members’ ability to export ITS products and services.

Today, ITS Canada is in excellent shape, the culmination of countless hours dedicated by those who volunteer their time: Board members who share their expertise to develop strategies, Executive Committee members who oversee the day-to-day operations, Committee members who develop ideas and new initiatives, and Conference organizing committees who devote hours to making our events a huge success. It’s important to recognize that the Society has become a strong entity through the contributions of many. The future is bright, with a new, full-time Executive Director, a committed Board, and members that care and serve.

These are exciting times for ITS in Canada and around the world. I have been proud to represent the Society, and I look forward to continuing to work with all of you.

Joseph Lam, Chairman, ITS Canada

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Newsletter published by
ITS Canada.

Submissions or comments can
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Carl's Corner

As you read this, you will either be reading a hard copy at our Annual Conference in Edmonton, or you will be reading the PDF and wishing you were there! The excitement is in play! Special workshops are taking place on the issue of "Warrants", specifically targeted at our municipal governments, as well as the "ONE-ITS" workshop sponsored by one of Canada's largest national research centres of excellence, CANARIE. In addition, Transport Canada will be hosting a major workshop for all delegates on Version 2 of the Canadian ITS Architecture. It is an exciting time to be part of ITS Canada.

On the international front, ITS Canada was heavily engaged in March. Our Chair, Joseph Lam, travelled to South Africa, where the Canadian Embassy hosted an 'invitation only' breakfast seminar on Canadian ITS capabilities. Some 30 South African senior government and private sector officials attended, and were impressed enough that a group of them is travelling to Edmonton for our conference. The presentation took place during ITS South Africa's Annual Conference, 'e-Transport'.

While Joe was in South Africa, your Executive Director was hosting a large delegation from Nanjing, China. Look to the right for the detailed description. Pictured below is the Head of the Chinese Delegation, Mr. Rong, outlining Nanjing's needs to the group.



The election results are in, and you did not even have to vote! Seven of our Board Members are retiring this year, and nine are standing for re-election. Seven new candidates were nominated, and as a result we have 16 positions to be filled by 16 nominees, eliminating the need for balloting. The current Board will recommend to the members-at-large at the AGM on Sunday the 10th, that this group be ratified.

They are, in alphabetical order: Michael Bailey, Bob Burrows, John Greenough, Doug Gubbe, Kara John, Bill Johnson, Steven Kemp, Eric Labrie, Mike Ouellette, Chris Philp, Michel Savard, Tim Schnarr, Robert Shirra, Jeffrey Smart, Scott Stewart and Bruce Zvaniga. Their biographies are on the website. Get to know your new (pending) Board!

Finally, our seven Board Members stepping down this year deserve our heartfelt thanks for their contributions. Rob Bruce, Paul Frigon, Joseph Lam, Jacques Legault, Nancy Lynch, Robyn McGregor and John Pump have provided total dedication to ITS Canada during their tenure and their work has moved the Society forward in many ways. We hope that they will continue to be active in guiding ITS Canada into the future.

ITS Canada Hosts Incoming Chinese Mission

A delegation of seven ITS professionals from the City of Nanjing, which has been designated a National Centre of Excellence for ITS in China, visited Toronto on March 23 and met with ITS Canada's Executive Director Carl Kuhnke and six of our members. Representatives from Tacel, Associated Engineering, Delcan, ISS, G4 Apps, and Coordinated Traffic Solutions spent two hours outlining the capabilities of their firms to the seven-member Chinese delegation. The Nanjing representatives outlined ITS plans for Nanjing for the next 5-10 years, including two new bridges crossing the Yangtze River, and a new tunnel underneath it. The City is making great strides at integrating public transit fare systems and is now moving towards microwave-based technologies for a few of its road systems. It needs more and welcomes companies from abroad that will either partner with Nanjing firms to bid on contracts, or come in and bid on a standalone basis. ITS is being 'pushed' down' to the private sector from government in China, a different model than here with companies encouraging governments to employ what they have developed. A representative from Nanjing Science and Technology Division will probably attend our Annual Meeting in Edmonton, and they hope to have a delegation to enter into further discussions with our member companies in Stockholm. Watch the newsletter for information on upcoming events, including the Nanjing Software Technology Fair in early September

Regional Updates

INFORMATION FROM ACROSS CANADA ON INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENTS

NEWFOUNDLAND AND LABRADOR

By Justin Garrett,

Government of Newfoundland & Labrador

GIS-T Implementation Project – Newfoundland and Labrador is entering into Phase 4 of the GIS-T Implementation Project. This phase is predominantly concerned with ensuring the completeness and robustness of the Road Network Management System (RNMS). The RNMS is implemented using the software platform *Highways*, which is in broad use across North America. Work continues province-wide on collecting and loading Road Feature Inventory data into the RNMS. A web-based application for accessing the RNMS data is also under development. Preliminary work is ongoing regarding the integration of pavement management, accident and traffic information.

Road Weather Information System (RWIS) – The RWIS has been up and running for four years providing valuable information to our front line supervisors in their day-to-day work of providing safe winter transportation for the residents of our province. Plans are in place for a 10-year contract for the continuation of this RWIS system with an expansion from 18 to 28 sites in the first five years. This expansion will allow for even more reliable weather and road forecasts for winter maintenance.

SmartBay – The province's expanding ocean technology sector was strengthened with a \$250,000 provincial investment in the next phase of the SmartBay Project. SmartBay began as a vast environmental monitoring demonstration project in Placentia Bay in 2005, with the goal of better observing the marine environment. SmartBay is the largest ocean observation project in Eastern Canada and an example of industry, government and the applied research arm of the Marine Institute working together to position the province as a leader in this aspect of ocean technology.

Placentia Bay is becoming the industrial heartland of the province and is busy with marine traffic, a shipyard, wildlife reserves and an active fishery – all of which operate in a harsh weather environment. This funding will enable the project to become a fully operational information service for improved weather forecasting, environmental monitoring and ship navigation. It will also enhance linkages with international partners. For more information please see smartbay.ca.

NEW BRUNSWICK

By Diane Nash,

New Brunswick Department of Transportation

New Brunswick continues to be a supporter of ITS. The Province is participating on an Atlantic Gateway ITS Project Committee with the other Atlantic provinces and Transport Canada, working together to develop a coordinated approach to the application and deployment of ITS throughout the Atlantic Gateway corridor. This collaborative approach will help to provide seamless, safe and efficient trade and travel along the Atlantic Gateway.

New Brunswick has also initiated the move toward 511. A Travel Condition Reporting System has been purchased and is currently being tested internally before rollout to the public. The existing telephone number for road condition information (1-800) will remain in use until the switch to 511 can be finalized.



*ITS Canada
Welcomes New Members*

CORPORATE

City of St. Albert
DMTI Spatial

Regional Updates

INFORMATION FROM ACROSS CANADA ON INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENTS

NOVA SCOTIA

By Heather Neish, Nova Scotia Department of Transportation & Infrastructure Renewal

Since the launch of 511 in January 2008, the Nova Scotia Department of Transportation and Infrastructure Renewal has continued to make upgrades to the 511 system. As a result, the Department has seen a sharp increase in the use of 511 by Nova Scotians. Statistics indicate that the number of calls has increased by 900 percent after 12 months in service. Due to the increase in demand, the Department added 12 additional lines in February 2009 to accommodate the call volume. With the addition of these new lines, the total number of lines has reached 36. After a long winter season with many snow days, the new lines have proven to be invaluable, as they were often used by the public to access road information during severe weather conditions.

In February 2009, the Department launched *511 Mobile*, a service for the public that provides easy access to 511 information on a personal digital assistant (PDA). The information that is available by calling 511 can now be viewed as a text file using a smart phone: <http://511.gov.ns.ca/mobile>. Similarly, the Department is in the testing phase of an application that allows staff to update 511 using a personal digital assistant instead of a desktop computer. On stormy days when staff may have a challenge returning to the office to update 511, they can now update directly from a PDA.

Due to the frequent changes in temperature, accessing information about spring weight restrictions on provincial roadways is crucial in Nova Scotia. Trucking industry staff and other drivers can find information on road closures and spring weight restrictions by dialing 511.

In an effort to reach all Nova Scotians, the Department is developing a 511 service for the Deaf and Hard of Hearing community. By enhancing the current 511 service to make it available via TTY/TDD, the road condition information will be available to the broader public.

The Department of Transportation and Infrastructure Renewal strives to provide accurate and up-to-date 511 information services to ensure safe and efficient operations on Nova Scotia's roads and highways throughout the year. The Department continues to maintain the high quality of the existing 511 system while also anticipating changes in technology as well as changing needs in the public's requirements for 511 services.

QUEBEC

By Michael De Santis and Floriane Vayssières, Agence métropolitaine de transport

A strategic plan for ITS – In 2002, the AMT demonstrated its determination to improve the services it offers its customers by developing a strategic ITS plan for the metropolitan area, in collaboration with its partners. The objective at that time was to act as a unifying force in order to develop a joint regional ITS plan and thereby meet users' needs. The strategic ITS plan is based on the various steps that passengers take when they use public transit; in other words, before, during and after travelling. For each step, existing solutions were studied, allowing us to identify innovative projects that could be implemented.

A metropolitan ITS architecture – The work undertaken during the strategic planning phase enabled the AMT and its partners to develop an integrated metropolitan architecture, centred on the integration of transit management and passenger information systems and based on the existing Canadian ITS architecture. This architecture allows for the interconnection of all the elements that make up a system, such as the control and monitoring centre, vehicles and passengers.

Working together in a regional ITS committee – The consultations between the AMT and its partners led to the creation of a regional ITS consultation committee, which was set up to share an overall vision of ITS needs and solutions in the metropolitan Montreal area and to promote constructive discussions on projects of mutual interest.

Regional Updates

INFORMATION FROM ACROSS CANADA ON INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENTS

QUEBEC ... Continued

The committee must establish the functional parameters for projects to ensure that all systems are interoperable and integratable. As well, it participates in the upgrading of the integrated metropolitan architecture, and identifies priority projects and actions for the region, with the aim of improving the services offered to public transit users. The ITS consultation committee, under the leadership of the AMT, is comprised of representatives of the main regional transit companies, as well as public agencies such as the city of Montreal, the Ministère des transports du Québec and Transport Canada. The approach adopted here can be seen as an example to be followed in the joint planning of ITS projects, since it made it possible to initiate key projects intended to improve the services offered to customers.

Providing travellers with useful information at all times – To meet its customers' needs, the AMT is involved in projects aimed at enhancing the public address system and constantly displaying information such as next train arrival, or any service disruptions. For example, a project related to en-route traveller information is currently in the design phase; in late spring 2009, the system's functionalities will be tested. Users who sign on to this service will be able to obtain real-time information by means of SMS text messages and e-mails regarding service conditions. Once users arrive at a station, dynamic signage on the platforms will take over to inform them about the current status of operations. These pilot projects benefited from a financial contribution from Transport Canada, under the Strategic Highway Infrastructure Program (SHIP).

Moving beyond the provision of information – AMT will not be content to simply provide information; it wants its users to be able to enhance their experience. Thus, in the near future, it intends to provide on-board Internet access. This service is becoming increasingly common in Europe, Asia and North America. Internet access onboard commuter trains allows users to send and receive e-mails and documents, browse the Web for information, or engage in online chat, thereby making the most of their travel time. In addition, this service is an excellent means of getting information to customers.

Internet access on commuter trains will be an additional opportunity to encourage and expand the use of this mode of transportation.

A regional route planner and a project to make transfers easier – In October 2008, the AMT and its partners, along with Google Transit, launched a metropolitan route planner integrating all the modes of transportation that exist in the metropolitan area. The link to access the planner is available on the AMT's website: www.amt.qc.ca, tab: *Planifiez votre itinéraire*. As well, a real-time information integration project on service conditions is currently being developed, in partnership with the transit operators. It will make it possible to transmit information among the transit companies so that services can be adjusted in the event of a disruption and users can still make their transfers. For example, dynamic signs could indicate the next train or bus departures.

Information on disruptions: a duty for transit companies – The AMT's vision and that of its partners will make it possible to provide the same quality of service to transit users throughout the metropolitan Montreal area, particularly regarding the provision of information along their travel route. This will facilitate and contribute to an increase in the use of public transit in the region. It is not always easy for transit operators to provide high-quality service at all times, especially when major disruptions occur; however customers will undoubtedly be more indulgent towards transit operators if they receive better information during the course of these events.

ONTARIO

By Steve Erwin, Ministry of Transportation of Ontario

There are numerous ITS activities at the provincial level in Ontario. On April 1, 2009, Stephen Erwin returned as the Head of the ITS program at the Ministry of Transportation. A key item for Stephen will be to deliver the new ITS Strategic Plan that Heather McClintock was leading the development of while she was the Acting Head of ITS. Key elements of the plan include implementation of 511 and expansion of traveller information services in the province.

Regional Updates

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ONTARIO ... *Continued*

TRANSMIT – The Ministry is moving forward with the deployment of the TRANSMIT system in the Niagara Region. Seven sites on the Queen Elizabeth Way, Highway 405 and Highway 420 will feed data back to the NITTEC centre in Buffalo, integrating them with the sites on the U.S. side of the border. This will provide average speeds and travel times on area freeways and across three of the four crossings (Queenston-Lewiston Bridge, Rainbow Bridge, and Peace Bridge). Completion is expected this summer.



1000 Island Queue Warning System – Implementation of a new Queue Warning System (QWS) at the Thousand Island Border Crossing was initiated to deal with queuing vehicles at the border. The system will improve motorist safety by providing advanced warning of slow/stopped traffic and improve traffic management at the border crossing. The system, which consists of four CCTV cameras, vehicle detection stations, five QWS signs and two pole-mounted variable message signs, will be installed on Highway 137 southbound and on the Highway 401 eastbound and westbound approaches to Highway 137. This installation is unique in that queues approaching the border will be tracked from both directions on Highway 401. Previous Queue Warning Systems were all linear.

The CCTV video images will be transmitted to the Ottawa Traffic Operations Center via a leased communication service, and video images will be shared with the Thousand Islands Bridge Authority. Operators at the Ottawa Traffic Operations Center will use the CCTV images along with PVMS and QWS sign messaging to assist in managing traffic crossing the border.

Construction of the QWS is near completion and system integration tests are being performed. In the coming weeks, the details of the wireless communications link from the site to the Ottawa Traffic Operations Center will be finalized with the local service provider. This link will be capable of providing a secure and reliable transmission of defined video signals over large distances.

Colour Variable Message Signs – Ontario is moving forward with the implementation of new Variable Message Sign standards. Joint work by the ministry's Advanced Traffic Management and Intelligent Transportation Systems sections identified a need to enhance the physical design for the Ministry's variable message signs in order to accommodate new bilingual messages. New VMSs will be full colour, using red, green and blue LEDs; full-matrix – moving away from the current three-lines with graphic panels at either end; and will have a higher pixel density moving from the current 66 mm pitch to a 33/34 mm pitch. The first of these signs could be installed later this year.

Satellite IP Cameras – Through our partnership with the ENTERPRISE shared pool fund, this is an evaluation project on the use of satellite IP cameras. The partnership with ENTERPRISE and including Transport Canada has proven to be very useful in the early evaluation of new technologies, and this project is looking like another very successful effort. The project investigated the ability to use solar-powered cameras with satellite-based communications to allow monitoring of conditions virtually anywhere. A report on the results and recommendations for future efforts will be issued later this year.

Durham

Bob Szwarz, Regional Municipality of Durham

The Region of Durham has developed a real-time and integrated Roadway Performance Index (RPI) application through the use of its traffic signal control system (Fastracs/T2000c) operations to properly measure and rank traffic flow. This project was inspired to better address the Region's investment in system operations, and to quantify and prioritize the need for capital road improvements from a road network performance and operating perspective.



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ONTARIO ... Continued

Although most traffic signal control systems are capable of generating data to assess traffic flow, measuring the actual road performance in real-time has not been easy or practical in the past. For this reason, most systems operate to minimize vehicle congestion and do not monitor or archive traffic system performance data. The development of RPI enables the Region to improve its capabilities by monitoring real-time road network performance for the purpose of measuring the benefits of re-timing signals and prioritizing the need for future capital road improvements.

A project is underway to review best practices and develop a set of methodologies and algorithms in addition to an implementation plan to measure and rank real-time and historical traffic flow performance through the automatic collection and archiving of traffic data. The plan and computational 'engine' was to be clear and rational with input data conveniently and reasonably accessible to practitioners. The application utilizes 200+ mid-block permanent count stations, primarily located in the urban areas of Pickering, Ajax, Whitby, Oshawa and Clarington, that continually stream volume, speed and occupancy data to the Region's Traffic Management Centre.

Mathematical models and an estimation of average travel speeds and level-of-service (LOS) were built to calculate the performance measurements from existing detector data. The model used micro-simulation and a deterministic equation on the basis of volume-to-capacity (v/c) through assessment of adjacent signal timings, approach capacities, volume and speed data. Roadway geometry and signal timing information were used to determine the approach capacities. The performance index for each roadway segment was obtained by assigning weights to the road characteristics for a selectable time period in order to rank their relative importance. The algorithms were coded in a SQL database, which was used as the medium for a software application that was developed to automate the data extraction and summary reports.

The application has produced encouraging results with ranked road segments emulating actual road operating characteristics. The output also provides valuable assessment in measuring the benefit/cost of signal optimization. Future development includes integration with current mapping applications and the Region's Safety Performance Indexes to further attune input into the Region's Capital Road Program.

York

By Steve Kemp, Regional Municipality of York

The Regional Municipality of York continues to roll out its Integrated ITS Strategic Plan. Recent ITS successes within York Region include expansion of CCTV coverage at critical intersections, onboard closed circuit television monitoring for public transit, a traffic adaptive control pilot project on Kennedy Road, an Automated Vehicle Location (AVL) system for public transit/winter maintenance vehicles, and improved traveller information services such as the online Google transit trip planner and real-time next bus arrival e-mail service.

Quick hit projects identified for this calendar year include provision of CCTV camera images over the Internet, roadway disruption tracking and reporting system, and a smart work zone demonstration project.

Niagara

By Nick Rosati, Niagara Region

The Niagara Region is currently gearing up to upgrade its existing closed loop traffic signal control system to a central Traffic Signal Management System. Initially, there will be 12 traffic signal controllers and 4 tilt/pan/zoom cameras brought online along a major arterial route in Niagara Falls. This will allow for traffic surveillance and monitoring of conditions along the arterial, which is a major diversion route if an incident occurs on the QEW through St. Catharines. It will also allow for changes in signal timings and operating parameters from Regional Headquarters.

Regional Updates

INFORMATION FROM ACROSS CANADA ON INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENTS

ONTARIO ... Continued

Brampton

By Alex Milojevic, Brampton Transit

Brampton Transit has several initiatives on the go and is very excited to provide enhancements to the public and other departments.

One of the projects is the SmartBus Initiative. The SmartBus system includes CAD/AVL, Automated Next Stop Annunciation, Real-Time Traveller Information through mobile devices, onboard security cameras, Next Bus Information, APC (Automatic Passenger Counters) and vehicle diagnostics. Implementation of the system is planned for summer 2010. Also included will be WiFi communications.

The AcceleRide Program, which is the City of Brampton's Bus Rapid Transit System, is well underway and implementation of Phase 1 starts in the fall of 2010 along Brampton's busy Queen Street corridor and then 2011 deployment on Main Street, followed with Steeles Avenue in 2012.

New hybrid buses (40' and 60') have been procured that showcase a sleek design and incorporate the branding of the service. Included in the project are construction works of queue jump lanes, mixed traffic lanes, TSP (Transit Signal Priority) and enhanced station stops that will provide security, Next Bus Information and passenger comfort. New terminals will be built for Bramalea City Centre and Shoppers World, with upgrades to Brampton's Downtown Terminal.

Brampton Transit's web-based 'eRide' service launched as one of Canada's first online trip planner applications featuring user-friendly interactive mapping software. eRide is an easy-to-use tool that takes the guesswork out of planning a transit trip and calculates for riders their journey from start to finish, including walking and transfer times. Since its debut in November 2007, eRide has helped nearly a quarter of a million people get to where they need to go effectively and efficiently.

To plan a trip using eRide, customers navigate to www.bramptontransit.com, click on eRide, enter origin and destination points with a street address, intersection and point of interest, or they can use the interactive transit map to select a bus stop or landmark.

Also, the City is part of the Presto (SmartCard) initiative with other Greater Toronto Area transit agencies. This is an integrated fare collection system where transit users will be able to travel between transit jurisdictions using a contactless SmartCard.

Finally, a state-of-the-art video wall is being installed at the new Sandalwood Transit facility that will provide the controllers additional means to monitor operations in real time and be able to provide quick response to issues that may arise.

ALBERTA

By Vince Wu, Alberta Transportation

Alberta is expanding the **Automated Vehicle Identification System (AVI)** to four vehicle inspection stations to achieve province-wide coverage. The AVI system enables electronic bypass of low-risk commercial vehicles using vehicle-mounted transponders and AVI readers. This ITS solution has enhanced the productivity of commercial vehicle operations in the province, offering transport officers the means to manage vehicle inspections in a timely and systematic manner. For commercial carriers deemed eligible for bypass, the benefits include time and fuel savings, added dependability in the business' supply chains, and potentially customer recognition. The success of the AVI project can be attributed to the partnership and cooperation of the government and industry stakeholders. The first phase of the project has 12 vehicle inspection stations outfitted with the AVI technology, and the system has been in full operation since January 2008. Alberta is looking to expand implementation of AVI to the last four inspection stations in the province.

Regional Updates

INFORMATION FROM ACROSS CANADA ON INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENTS

ALBERTA ... Continued

The **Remote Control Weigh Station (RCWS)** project in Alberta is a pilot project employing existing and proven technologies such as video cameras, variable message signs and high-speed Internet to remotely operate unattended weigh stations. An officer located in a distant office will be able to operate and monitor a number of scales. This pilot project is to demonstrate an efficient and less costly alternative for operating weigh stations, thereby improving the productivity and efficiency of enforcement personnel and enhancing commercial vehicle operations and traffic safety. The project, jointly developed by Alberta and Saskatchewan, is located at Macklin, an existing unattended weigh scale situated east of the Alberta-Saskatchewan border. All major components of the RCWS have been installed and testing of the technology is underway. Other enhancement components, such as a kiosk printer and loudspeaker, are being added as upgrading is required.

Alberta's **Road Weather Information System (RWIS)** is currently a 75-station network. Alberta is developing a plan to fill in gaps in the province over the next few years. Additionally, the department has contracted to design and build several RWIS stations along the new ring road systems.

Regional Traffic Management Centre (TMC) Concept – Alberta Transportation has recently negotiated with the City of Calgary to expand a seven-km monitored section on the Deerfoot Trail in Calgary to equip the entire Trail roadway with monitoring traffic video cameras and side-mounted Dynamic Message Signs (DMS) over the next five years. These new devices will be fed back to the current TMC operated continuously by the City. Coupled with signal optimization and remote controls at interchange "choke points" and along designated detour routes adjacent to the Trail, the TMC will manage and coordinate incident responses on the heavily travelled Deerfoot corridor for the province. This regional TMC concept will benefit the public with faster responses to incidents, reduced travel delays, lower driver frustrations and improved overall safety.

A much smaller effort to install video cameras and DMS along the Northeast Alberta Transportation Corridor (NATC) to Fort McMurray is also being carried out. It is expected before the end of this year that two traffic video cameras and three side-mounted DMS will be completely operational, and the Regional Municipality of Wood Buffalo will be able to access the cameras to monitor traffic problems on the bridges over the Athabasca River in Fort McMurray.

Automated Vehicle Location System (AVLS) – Over 600 contractor snowplows have been equipped with AVLS. The winter of 2008/09 saw the full launch of the AVLS automated billing system for all parties contracted to use the system. This system uses the GPS capability and related software to generate worksheets for trucks that worked on the provincial highways. While there have been technical "glitches" discovered in the billing system, for the most part they were taken care of and the department is able to use the system to audit the work done by the contractors.

New Road Animal Fatality Information Application (RAFIA) – A pilot to track wildlife carcasses with GPS devices has been initiated to determine how many unreported animal kills are occurring. This information will aid the department to decide on effective countermeasures along highway corridors based on priority needs.

Calgary

Calgary Transit – Calgary Transit is investigating Radio Frequency Identification (RFID) as a potential automated vehicle location technology. RFID will be evaluated for use in tracking vehicles outdoors as well as in areas such as tunnels, underground stations and indoor maintenance facilities that are not accessible by GPS.

ITS Wireless Data Network – Partially funded by a grant from Transport Canada, this broadband wireless network will be used to facilitate wireless communication for ITS devices, both fixed and mobile.

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ALBERTA ... Continued

The wireless network will cover the 7th Avenue LRT corridor as well as Macleod Trail from 7th Avenue to 162nd Avenue SW. The network will be used for communication to traffic signals controllers, traffic cameras and permanent data collection stations. City of Calgary's Transportation Department partnered with the City's electric utility (Enmax Corp.), Calgary Police Service and other City departments to design and implement this project.

Regional Traffic Management Centre (RTMC) – A five year agreement (2008-2013) has been signed with the Province of Alberta (Alberta Transportation) for providing traffic and incident management services to Alberta Transportation and its maintenance contractor for Deerfoot Trail and future ring roads. Traffic monitoring cameras, portable and permanent dynamic message signs, traveller information and real-time detour signal timing adjustments will be provided by the City of Calgary Traffic Management Centre to manage growing traffic demands and congestion on these roadways. Additionally, the City of Calgary will design and install a number of new traffic cameras and DMSs for the Province under this contract. The contract is worth \$3.8 m over five years.

BRITISH COLUMBIA

By Keenan Kitasaka, TransLink

BC's ITS Vision and Strategic Plan will be updated in 2009. Since 2001, we have made significant progress in our various ITS programs, both regionally and provincially. Some of the elements of the ITS Program that have been developed since 2001 or will be explored in the near future include:

- Regional traveller information web portal called "iMove"
- Regional Condition Reporting System (RCRS) that allows municipalities to input projects and events into iMove
- Regional Telecommunications Plan – examining the long-term telecommunication requirements to support ITS

- Integrated Regional Signal System (IRSS) pilot – integrates 11 intersections in 4 jurisdictions in Langley and Surrey
- IRSS Advanced Rail Warning System – provides early detection of trains at at-grade crossings and warns motorists
- Regional Detectorization Strategy – to deploy traffic data infrastructure in our region
- Smart Corridor Strategy – identifies high-priority goods movement corridors and develops a phased ITS program to address them
- Transit Signal Priority (TSP) measures throughout the region
- Automated Passenger Counters (APC) throughout our fleet
- GPS enabled tracking of our buses and real-time next bus arrival information
- Incident management and traveller information systems supporting the provincial gateway program projects
- Regional Transportation Management Centre (RTMC).

For a more detailed report on ITS activities in BC, please review the February 2009 issue of ITS Canada's newsletter.

YUKON

By Wally Hiding, Government of Yukon

Our two main ITS projects – the automated traffic counting system and the 511 road condition reporting system – continue to operate reliably. We've just wrapped up projects on automated vehicle location and the development of an ITS strategy. The development of a GIS system is ongoing and will continue for some time, as the steps we've taken so far are proving to be valuable not only for the planning group where the project is being done, but for the other branches of the Transportation Division as well.



Upcoming Events ... Visit the website for more events

ITE Quad Conference

May 1 and 2, 2009 – Vancouver, British Columbia
www.citevancouver.org/quad



ITS CANADA ANNUAL CONFERENCE AND GENERAL MEETING

May 10 to 13, 2009 ~ Edmonton, Alberta
www.itscanada.ca/edmonton2009

Retail and Transport Cards Conference

May 13 and 14, 2009 – London, England
www.smi-online.co.uk/events/overview.asp?is=3&ref=3079

IntelliDriveSM Proof of Concept Results

May 19, 2009 – Detroit, Michigan
clane@itsa.org

Intertraffic Istanbul 2009

May 27 to 29, 2009 – Istanbul, Turkey
www.intertraffic.com

ITS America's Annual Meeting 2009

June 1 to 3, 2009 – National Harbor, Maryland
www.itsa.org/annualmeeting.html

ITS Spain Annual Conference

June 2 to 4, 2009 – Andorra La Vella, Spain

ITS (UK) AGM and Summer Conference "Better Transport Through Technology"

June 3, 2009 – York, England
www.its-uk.org.uk

CUTA 2009 Annual Conference

June 6 to 10, 2009 – Whistler, British Columbia
www.cutaactu.ca

Ontario Traffic Conference (OTC) AGM

June 7 to 9, 2009 – Kingston, Ontario
www.otc.org

Canadian Multidisciplinary Road Safety Conference

June 8 to 10, 2009 – Saskatoon, Saskatchewan
www.cmrcs.ca

ITS-NY 16th Annual Meeting and Technology Exhibition: "ITS – Solutions for Challenging Times"

June 11 and 12, 2009 – Saratoga Springs, New York
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