

ITS for small and mid-sized cities: the next frontier?

By Trevor Hanson, University of New Brunswick

When people think of New Brunswick, they often think of our forests or our mighty rivers, such as the St. John, Miramichi and Restigouche. In addition to our great natural setting, New Brunswick is also home to 750,000 people, with two cities with over 100,000 people and one city with a population of over 50,000. We are headquarters to some of Canada's largest companies (including Irving Oil and McCain Foods), home of Canada's largest oil refinery, and the most modern Trans-Canada Highway in the country. We have also been a leader in rural ITS deployments, including Canada's first high-speed mainline Weigh-in-Motion (WIM), an extensive RWIS network, and the Rural ITS Research Program with Transport Canada, New Brunswick DOT, and UNB. Looking to the future in New Brunswick (NB), I believe there is an opportunity to move forward on a research and deployment opportunity that will not only benefit NB, but all provinces with small or mid-sized urban areas.

In discussion with some of my municipal colleagues in NB about ITS, I discovered that there are several ITS deployments at the municipal level, but my colleagues did not frame them as such. They envisioned ITS as something only deployed in the largest cities. If this perception of ITS is widely held, it may explain why there are fewer ITS Canada members who represent smaller metropolitan areas (SMAs) (e.g. 50,000-100,000 persons) and local governments. This leads to important questions for our organization and the ITS industry as a whole:

- How can we improve the awareness/uptake of ITS by SMAs and local governments?
- How can we better engage and retain members from these areas?

I believe that the lack of awareness is because ITS have generally been portrayed as either solutions to large urban area congestion, or as solutions to rural area safety and mobility (WIM, RWIS). In the middle, we find the small metropolitan areas (SMAs), who maintain millions of dollars of transportation and

traffic control infrastructure, and incorporate many elements of ITS in their day-to-day operations, but may be missing out on opportunities to pilot further integration of their ITS technologies. SMAs may not have the resources to have a dedicated "ITS section" or "ITS person". Also, there may not be enough ITS demonstration projects at the SMA level to provide the comfort level needed to move forward. Reaching out to SMAs to conduct demonstration projects could make ITS more accessible and increase awareness.

Engaging and retaining members from these areas requires reaching out to connect SMAs to ITS resources so they can make transportation decisions with the full knowledge of the potential of ITS. Similarly, it is an opportunity for ITS Canada to engage federal and provincial partners in this discussion, especially in the context for the need for further funding programs for ITS research and deployment in these jurisdictions.

With advances in technology bringing down the total cost of technology in many realms, it is conceivable that ITS technologies have become accessible and affordable enough for SMAs to take advantage of them, but a catalyst is needed, such as a targeted program for SMAs. This could introduce ITS as an integral part of their transportation planning process at a point before congestion problems match those of their larger counterparts. The positive impacts of such a catalyst for rural ITS and large urban area ITS are evident, given such national initiatives as RWIS and 511 have helped enhance the uniformity of uptake and deployment. If a pilot project of the SMA program is needed, I think New Brunswick would be a great place to start.

This article is intended to stimulate discussion among Canada's ITS players. The time is right for us as an organization and industry to evaluate how we can better engage our colleagues in smaller metropolitan areas and encourage them to consider ITS in addressing their perennial transportation issues. I look forward to hearing your thoughts and comments on this. My email is thanson@unb.ca