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Gridlock report recommends software before shovels

By Andrew Reeves

Existing technology could improve the flow of traffic in the Greater Toronto and Hamilton Area without massive spending on infrastructure, a new report says.

The study was commissioned by the **Residential and Civil Construction Alliance of Ontario (RCCAO)** and written by a team from the University of Toronto's Intelligent Transportation Systems Centre.

There is no silver-bullet solution to the \$6 billion challenge of congestion in the GTHA, the report says, and new builds and upgrades to existing transportation infrastructure might well be answer in some cases. But the report stresses that Ontario is missing an opportunity to promote private and public sector investment in intelligent transportation systems to ease gridlock.

Professor Baher Abdulhai and his team at the U of T research centre argue that intelligent transportation system technology has been growing rapidly since the 1990s. Better traffic lights alone, which have been designed in recent years to respond to changing traffic patterns, could cut delays at certain intersections by as much as 60 per cent.

"This is a technology-based solution that does not require physical infrastructure expansion or demand reduction," the report says. "It is simply efficiency-enhancing technology."

The report cites a smart traffic light model known as MARLIN-ATSC , which had economic benefits of \$53,000 daily in travel time saved and cost about \$1.2 million to implement across a network of 59 intersections. The system would pay for itself in less than a month, the report says.

The research centre is pairing the MARLIN-ATSC software with the necessary hardware to test the project with a willing municipal host.

The report is the sixth that RCCAO has commissioned on the topic of transit and transportation infrastructure since 2007.

Though it might not seem like a logical link for a construction industry group to advocate technological suggestions over nuts-and-bolts solutions to gridlock, RCCAO head Andy Manahan said the two pieces fit together in a larger plan.

"Our organization's primary objective is to ensure new infrastructure is built, but our primary interest is to make sure the region is livable and we have an active economy and that people are mobile," he told QP Briefing.

The province has a lot of transportation infrastructure already and good technological suggestions, but the challenge is how to get them working better together, Manahan said.

Another key factor is how to engage the academic community in the transportation debate. Manahan maintains they have been "underutilized in policy decision-making".

Technology solutions will benefit not only his membership, but the public at large, he said. "There are great ideas out there."