

Report Offers Congestion Mitigation Solutions for GTHA

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When and where the volume of commuters exceeds the capacity of infrastructure, traffic congestion is the inevitable result. Transportation failure is gradual and it becomes worse with time at an increasing rate, as is common in the Greater Toronto and Hamilton Area (GTHA). More demand and less capacity, due to volume, accidents, or construction, means more spread of congestion over wider spaces and longer times. This results in lower service quality, as well as rising economic and social costs in this region.

These findings come from a presentation made Apr. 25 at the [University of Toronto's Intelligent Transportation Systems Centre](#) by its director, professor Baher Abdulhai. The findings are also available in a recently published report- "Congestion Management in the GTHA: Balancing the Inverted Pendulum" ([download report PDF](#)) - prepared for the [Residential and Civil Construction Alliance of Ontario](#) and authored by the centre.

"Transit expansion and road improvements are clearly required in this region, but we must also address congestion in smarter ways," said Andy Manahan, executive director of the RCCAO, in a press statement before the event. "This report makes a strong case for investing in technology to improve the capacity of both existing and new infrastructure,"

Among Abdulhai's recommendations:

- Introduce intelligent transportation systems to maximize infrastructure efficiency. For example, smart, self-learning traffic lights will cut down intersection delay and improve traffic flow across the whole road network.
- Manage congestion using road pricing to reduce capacity loss, moderate road use and generate revenues for reinvestment in the transportation system. Solutions are being developed to implement "dynamic congestion pricing" as a way to influence travel behaviour and spread travel demand more evenly across modes (e.g., transit, bike, walk, carpool), over time and along alternative routes.
- Encourage an open service innovation model to harness the collective intelligence of the community, including the public, private, and academic sectors, as well as the travellers. Open innovation can create an eco-system of solution providers that creates innovative solutions faster, at less cost and lower risk.
- Optimize large-scale emergency evacuation that could cut down evacuation time by as much as 75 per cent.

RCCAO and the [Canadian Automobile Association](#) are part of a coalition that has been providing input to [Metrolinx](#), an agency of the Government of Ontario, created to improve the coordination and integration of all modes of transportation in the Greater Toronto and Hamilton Area. Metrolinx will be delivering an investment strategy by June 1, 2013, and it is hoped that this report will be used by the Province of Ontario and municipalities to expand the range of transportation solutions.

"While cost and ability to implement may vary, recommendations like intelligent transportation systems and an expansion of our transportation infrastructure network are important to alleviate congestion. Abdulhai and his team are commended for their locally developed research and solutions, some of which can help tackle gridlock and improve the quality of life for commuters," said Teresa Di Felice, director of government and community relations and driver training for CAA in South Central Ontario.

