



Taking a Byte Out of Traffic

Better traffic management saves time and lives, improves the economy, and helps the environment.

Project Name: On-line Network-Enabled Intelligent Transportation Systems (ONE-ITS)

Project Leads: University of Regina and University of Toronto

CANARIE Contribution: \$700,000

Participants:

- Ontario Ministry of Transportation
- Transport Canada
- City of Toronto

What is ONE-ITS?

On-line Network-Enabled Intelligent Transportation Systems (ONE-ITS) allows users to work together to solve problems related to easing traffic congestion, enhancing safety, developing optimal emergency-evacuation planning, reducing fuel consumption and pollution, protecting the environment and promoting urban sustainability.

Using CANARIE's high-speed network, ONE-ITS enables researchers across Canada and around the world to exchange, analyze, see, and manage transportation data in real time.

Value to Research and to Canada:

- ONE-ITS helps Canadian researchers lead the world in traffic-management optimization
- ONE-ITS may help reduce emissions caused by cars idling in traffic jams
- ONE-ITS can help improve economic performance and productivity by expediting the movement of billions of dollars of commercial goods on roads and highways
- ONE-ITS can save lives and improve safety, particularly through analysis and effective problem-solving for disaster and emergency preparedness, planning and recovery

Did you know?

Traffic density in Canada has increased 60% in the last 20 years. That costs between \$2.3 and 3.7 billion per year in lost productivity and increased operating costs.



The ONE-ITS display could help first responders plan an efficient evacuation.



ONE-ITS allows users to visualize traffic flow and zoom in to observe closely.