



Case Study

ENABLING HOLISTIC INTELLIGENT CITY TRANSPORTATION MANAGEMENT

Hardware-free, real-time,
crowdsourced traffic data widely
leveraged for decision-making

Overview

Ottawa is the capital of Canada, located in the province of Ontario and is near the border of the United States. As the capital city, it is home to Parliament where the Senate and the House of Commons meet. The population is approximately 1 million in Ottawa and 1.4 million when including Gatineau. With the city longing the Ottawa River as a border to the province of Quebec the city boasts an English-French bilingualism rate of 44%.



The City of Ottawa

The City of Ottawa Traffic Services is responsible for a wide scope of operations while aiming to maximize the safety, efficiency, capacity and predictability of the existing road network for all users. With the amount of construction in Ottawa, the impact of lane closures and work zones drastically affect the flow of traffic regularly. Recently, Hog's Back Bridge in Ottawa has been closed, forcing traffic to be rerouted in other directions.

Company Name: City of Ottawa
Date: January, 2018
Website: <https://ottawa.ca/en>

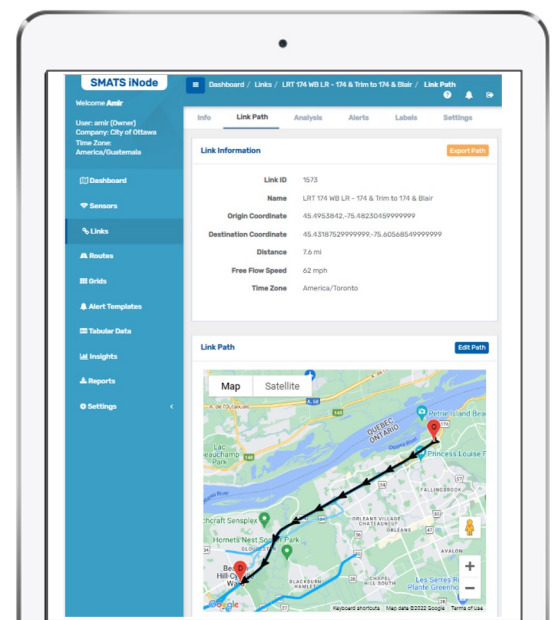
The Challenge

In 2018, Ottawa ranked 4th most congested city in Canada and 14th in North America (TomTom Traffic Index). Congested roadways were preventing economic and cultural progress. Knowing this, the City of Ottawa looked for a way to actively monitor and manage the impact of local traffic events and present data-backed findings. Making improvements in collected traffic data's reliability is crucial to effectively manage roadways and relay accurate information to travelers and traffic managers.

The Solution

SMATS Traffic Solutions' data analytics platform, iNode™, used integrated crowdsourced traffic data. This allowed the City of Ottawa to establish "virtual sensors" and monitor traffic conditions in real-time, eliminating the need of dealing with hardware in terms of installing, relocating or retrieving.

The use of iNode™ enabled the city to monitor live travel time, compare alternative travel routes, and perform before-and-after studies. Keeping in mind social impact, traffic data was sourced from "floating-cars", made anonymous to respect public privacy.

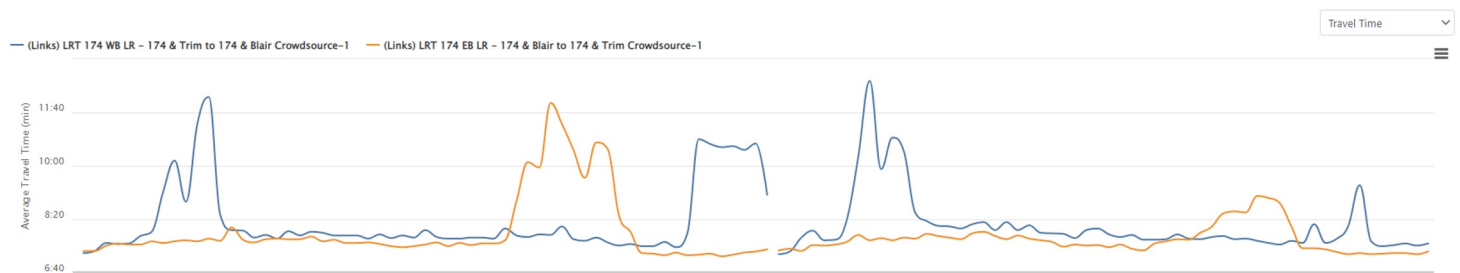


The Results

The City of Ottawa, with the help of iNode™, was able to actively monitor traffic flow, pinpoint issues in congested areas, identify and measure the impacts of construction. Using the platform, city officials have established over 80 links monitoring travel times on highways and roads within the City. The exported charts and CSV files of the data have been used to validate project findings, support city decision-making, investigate traffic issues, measure impacts of traffic pattern changes, and back up necessary proposals.

“Diverse functionality, remote accessibility, and the valid traffic data we obtain using SMATS’ iNode™ platform greatly helps us make many traffic-related decisions.”- Bruno Lepage Incident Management Coordinator, City of Ottawa.

Other units within the city, such as Traffic Engineering, have begun to implement parts of iNode™ to streamline their operations, including before-and-after studies for traffic signal retiming.



SMATS for The City of Ottawa

The City of Ottawa chose SMATS for their traffic data management for its simple-to-use, quick to deploy, cost-effective, and versatility. The iNode™ data analytics platform offered unlimited access for municipality staff to monitor and evaluate traffic conditions. This allowed for multiple sections within the city to leverage a common platform for transportation decisions.

The comprehensive web-based transportation monitoring system allowed the city to effectively perform traffic studies of all durations on high-frequency city roads. With the help of SMATS, the City of Ottawa was able to create an advantage with adaptable and accurate traffic data.

Let us help you achieve your transportation management goals

Get a FREE demo: info@smats.ca