



FORTRAN INNOVATION HIGHLIGHT



FORTRAN

COMPANY OVERVIEW

Fortran Traffic Systems Limited has been an innovator in the North American transportation industry for more than 40 years. Fortran develops, assembles, distributes and supports transportation and traffic management solutions for cities. Since 2016, Fortran has been developing advanced traffic management systems to help cities take advantage of real-time data to proactively optimize mobility performance within their transportation networks.

LOCATION: TORONTO, ON

TECHNOLOGY



Internet of Things

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IMPROVE TRANSPORTATION EFFICIENCY AND REDUCE VEHICULAR EMISSIONS

Cities face a major challenge to efficiently manage the growing traffic problem and the negative impact congestion has on user productivity and increased greenhouse gas emissions (GHG). The adoption of 5G enabled connectivity will increase the number of connected vehicles on city roadways allowing cities to take advantage of new innovations that optimize the efficiency of their transportation networks. By making vehicles the sensors on the road, connected vehicle traffic management systems can more proactively optimize mobility because they access a richer set of live data. As a result, connected vehicle systems increase road user satisfaction while contributing to the reduction of GHG emissions.

FLUX MOBILITY MANAGEMENT PLATFORM

Fortran's Flux Mobility solution is a patented, award-winning V2X (vehicle-to-everything) connected vehicle platform that provides a multitude of capabilities for road operators to implement a V2X infrastructure. It supports real-time monitoring and configuration of a network of physical and virtual Roadside Units (RSUs) enabling a wide range of V2X applications such as FLUX CVSP: a centralized system that optimizes signal timing to minimize vehicle dwell times at the intersection. Additionally, Fortran offers FLUX GLIDE: a smart city mobility solution that helps keep drivers, cyclists and pedestrians safe by putting the power of traffic awareness directly in their smartphones with an open-protocol, cross-platform mobile application that is available for iOS® and Android® devices.

SCALING FOR MOBILITY

Using the CENGN Testbed, Fortran was able to successfully process data streams from ten million simulated vehicles simultaneously. From this project, Fortran was able to collect the volume of data to prove that the FLUX mobility management platform can scale to handle real-world traffic scenarios, and define the cloud resources required to support different levels of scale. Access to CENGN's platform and technologies provided Fortran with the tools required to implement FLUX on a large commercial scale moving forward.

“Through optimizations at CENGN, we managed to reduce both the amount and cost of cloud resources required for commercial deployment.”

Glenn Asano

Chief Revenue Officer, Fortran

