

Region of Waterloo

Using real-time data to actively manage road incidents

Known as Canada's Tech Triangle, Waterloo is a rapidly growing region in Canada.

The Region of Waterloo is experiencing an influx of new residents, the addition of ION Light Rail Transit, and infrastructure development, which has led to a rise in traffic complexity.



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The challenge

The Region of Waterloo initially relied on citizen complaints or police calls to be alerted to traffic problems. With a small traffic operations team and over 500 traffic signals; the region was seeking a solution that would allow them to use data to instantly respond and manage road incidents while reducing operating costs.

At a glance

With TrafficLink, the Region of Waterloo now receives immediate alerts of road or infrastructure incidents. Now they can remotely monitor and resolve incidents by:

- Using infrastructure alerts to prioritize maintenance resources
- Receiving alerts to significant changes in traffic flow
- Utilizing streaming video from intersection cameras for incident verification
- Sending automated alerts of road issues to transit and EMS

Miovision was tasked with solving this problem with a solution that was cost-effective, easy to implement and could easily scale as the city continues to grow.

Our Solution

After analyzing a variety of Intelligent Transportation System solutions, the Region of Waterloo selected Miovision TrafficLink.

TrafficLink checked off all the boxes for the Waterloo Region including:

- Easy integration with existing infrastructure
- Remote access to their traffic cabinets
- 20-minute install. No extra software or hardware required
- Instant alerts on traffic incidents and maintenance issues
- Traffic insights that allowed for deeper understanding of traffic network

TrafficLink is a fully managed ITS-hub that provides signalized intersection communications, monitoring, alerting and performance measures.

Waterloo Region installed the full TrafficLink solution in key corridors across the city.

“With TrafficLink you have cameras and real-time information coming back to do the fieldwork from the traffic management center and get issues cleared more quickly.”

-Mark Liddell, Region of Waterloo Traffic Analyst

Results: TrafficLink in Action

In June 2016, an accident occurred at a busy intersection with average daily traffic of over 56,000. Using TrafficLink, the Region was alerted to the incident when changes in the traffic performance measures were detected. With this information, engineers were able to remotely monitor and measure the impact of the incident.

Within minutes of the accident, the following traffic insights were highlighted by TrafficLink: A spike in Travel Time along that corridor was reported. A large drop in Southbound vehicle volumes was reported. Video footage confirmed the traffic backup and allowed the team to monitor the situation remotely.

