



OBJECTIVE

The City of Ottawa aimed to ensure the safe and efficient movement of all pedestrians, cyclists, and motorists as they traveled through Ottawa's transportation system. It also sought to understand the potential to leverage Michelin's data products to enhance road safety goals.

CHALLENGES

The City of Ottawa has a large geographic area with over 6,000 lane kilometers of roadway. Many areas across the 6,000 kilometers experienced frequent speeding and harsh braking, creating pockets of risky hotspots and raising concerns among residents.

Ottawa wanted to shift its road safety approach from reactive and based on past collision data to proactive and focused on anticipating future problems. This shift aimed to provide a full view of what was happening over time and support data-driven decisions.

Although Ottawa uses speed cameras in various community safety zones across the city, identifying locations of high-risk and roadways with higher thresholds of speeding incidents was of interest.



CHALLENGES

- Large geographic area with 6,000+ lane kilometers of roadway
- Reactive approach based on past collision data
- Data collection hardware can only be in a few locations with limited coverage

SOLUTION

- Reactive to proactive approach
- Prioritizing and implementing new speed cameras
- Uncover high-risk areas for enforcement

DELIVERABLES

- Before & After Analysis
- Hotspot Identification
- Vulnerable Road User Risk Analysis

RESULTS

- Initial camera implementation reduced speeds by 20%
- High-risk areas were identified and prioritized for continued enforcement



SOLUTION

To meet its goals, the City of Ottawa collaborated with Michelin to implement the following approaches:



Before and After Analysis:

To assess the impact of automated speed enforcement over a 10-month period to evaluate its effectiveness.



Hotspot Identification:

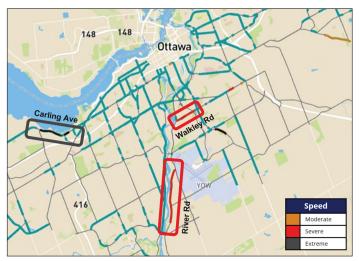
An extensive network scan was conducted by Michelin Mobility Intelligence to uncover high-risk areas and critical safety concerns in the city to target specific zones for enforcement.



Vulnerable Road Users Analysis:

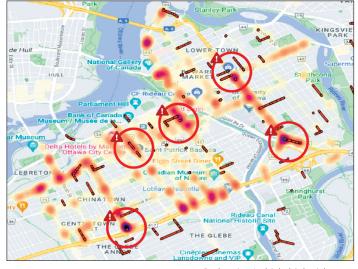
Modeling techniques were leveraged to pinpoint locations with increased risks for non-vehicle road users, such as pedestrians and bicyclists, to help improve planning for future safety challenges.

RESULTS



Prioritized highest-risk areas

- Ottawa's implementation of automated speed enforcement cameras helped to decrease speeding by 20% in less than a year.
- 8 high risk areas were uncovered, with 3 identifed as prime locations for further enforcement efforts.
- 5 areas were identified as high-risk hot spots for vulnerable road users



Pedestrian/vehicle high-risk areas



