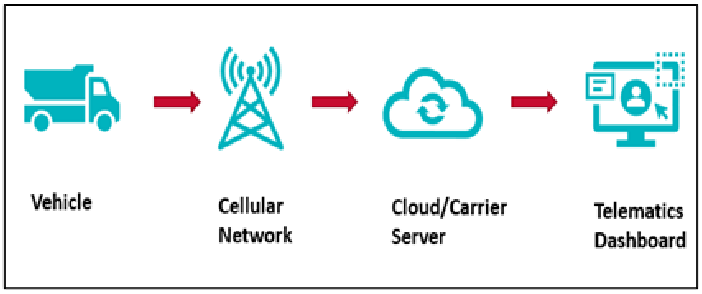
Smarter Fleets in Action: Leveraging Telematics to Reduce Risk and Boost Performance

Fleet vehicle telematics isn't a bonus or a nice-to-have vehicle add-on anymore; it has already been considered a standard feature that fleet operators would like to have installed and activated in their vehicles. This technology provides advanced capabilities to fleets, such as tracking vehicle whereabouts, diagnostic functions, and monitoring driver behaviour, as well as collision/incident investigation, all of which lead to managing risk more innovatively.

As more and more municipal fleets show interest in joining this emerging trend, many are unfortunately still not tapping into its full potential. Although there aren't many headline-making success stories yet, some municipalities have adopted this technology and already seen tangible improvements in their fleet performance and safety management. The truth is, installing telematics devices alone won't magically fix anything. The real value comes when the data is used and when it's turned into insights that guide decisions, shape driver behaviour, and streamline operations.

Once the device is installed in a fleet vehicle, it continuously collects data, regardless of whether the vehicle is actively managed or if anyone is monitoring the data in real time. That information doesn't disappear; it's just waiting to be put to work. And when it is, it can make a big difference in reducing risk and improving accountability. At the end of the day, data without a plan is just noise. But with the right strategy, telematics can turn that noise into action and help municipalities move from reacting to problems to preventing them altogether.

How does telematics work?



Systems installed in the vehicle transmit the signal using the cellular network, including the GPS coordinates and send it to the telematics provider's server/cloud. This raw data is then transformed, and from there, the end-user can access and analyze all these metrics from a single dashboard.

Telematics have proven to be advantageous in analyzing driver behaviours. With the possibility of data aggregation on a vehicle or even driver basis, you can get up-to-date driver reports, which can include, but are not limited to:

- **Driver Safety Scorecard,** which includes various metrics, such as speeding and seatbelt violations.
- **Productivity Reports**, which include vehicle downtime, fuel management, and vehicle maintenance.
- **Harsh Activity Reports** highlighting aggressive drivers and the type of harsh activity, such as harsh braking, harsh cornering, and harsh acceleration.
- Collision/Incident Investigation
- Creating loss lessons using past collisions

In addition, when combined with dashcams, it can identify areas where drivers need additional training and provide targeted coaching to promote safety. Dashcam videos can be utilized as evidence to prevent fraudulent claims.

How to introduce a Telematics program

Suppose you are looking to onboard this technology in your fleet operations. The steps below will guide you through rolling out the plan.

- **Business Case Plan**
  - Clearly define the purpose and scope of the project.
  - Define the resources needed (e.g., financial, hardware, teams, people, etc.)
  - Establish measurable success metrics (e.g., cost savings, efficiency gains, compliance improvements).
- **Establish policies and critical metrics for improvement**
  - Define baseline metrics and Key Performance Indicators (KPI).
- **Establish a roll-out strategy and installation schedule**
  - Define the strategy as if there is a pilot program to start, which will be expanded later.
  - Define the timeline for procurement, installation, testing, training and Go Live.
- **Conduct regular reviews throughout the pilot**
  - Select a group to run trials to assess the working of the program.
  - Collect feedback from the user groups.
  - Adjust the program based on the feedback.

How to select a Telematics vendor

Before you embark on the telematics journey, you should consider asking the following of your vendor:

1. Check if they offer a trial, and if their program can support municipal fleets.
2. What is the monthly cost, installation cost and contract commitment times?
3. Check for the installation timelines.
4. Enquire whether they provide onboarding training and ongoing support.
5. Ask the vendor about their support channels, such as phone support or email.
6. Data storage – ensure the vendor has a data repository in Canada and conducts regular audits to ensure the data remains within Canadian borders.
7. Enquire if the vendor offers any customization required for your operations or additional tools available within their marketplace for municipal needs.

You can also add any additional questions. With the help of this information, you should be able to make a better decision when selecting a vendor.

How to use Telematics in the Fleet Risk Management Function

There are many ways telematics can improve fleet management. Risk management and monitoring driver behaviour are two ways telematics can help the fleet manager improve overall fleet performance. As a fleet manager wearing many different hats, it can be challenging to implement an efficient and effective process in coaching and monitoring your drivers. We understand that telematics can only go so far in providing relevant information on driver behaviours, and hands-on coaching must be present to witness improvement among your fleet.

As we recognize the obstacles in implementing a coaching process through telematics, we do not want to overlook certain technologies that can provide an immediate impact on your fleet and drivers. As dash cameras have evolved, they have not only proven to be a powerful tool in visualizing accidents and determining fault, but they have also demonstrated effectiveness in improving driver behaviour.

- **Creating Risk Profiles** – The amount of data that is generated by telematics can be overwhelming and can be difficult to review if not organized. It is extremely important to develop distinct risk profiles for each type of driving behaviour. These individual profiles can then be used to establish internal thresholds, also called KPIs. The principle is straightforward: if we can't measure it, we can't improve it.
- **Focus on one area** – Once we have established the risk profiles, and from all those profiles, if you recognize the one that stands out the most, for example, speeding, this will help you prioritize which profile you would like to act on first. In this case, if the fleet wants to improve its metrics on the speeding profile, it needs to analyze the granular data from the telematics and set up a communication plan for its drivers.
- **Driver Coaching** – Once the data collected from the telematics is categorized and analyzed, fleets can now use the same data to coach their drivers and put them on a remedial program.
- **Rewarding** – Healthy competition between the drivers is always found to be helpful, and rewarding the best performer will continue to have momentum going.

How Telematics Can Support Collision Management

Collision management can also be enhanced by using data from telematics. With the help of this data, fleet managers can access the complete trip history and understand how the driver was driving before the collision occurred and how they reacted during the crash. Many telematics service providers now have the tool to create an Electronic First Notice of Loss (EFNOL), which can be used to report incidents and send the same information to the Insurer as well. The quicker the loss is reported, along with all relevant information, to the insurance company, the better it is for all parties involved, and the claim can be settled more quickly.

Advanced telematics, such as adding dash-cams to the telematics program, can provide an additional source of real-time information for the collision reporting file. There have been many industry examples where the information captured in the dash-cam was used to exonerate drivers.

Case Study – Driving Change with Telematics: A Municipal Success Story

The City of Kitchener was one of the early adopters of the vehicle telematics system. They saw the benefits early on and installed devices across their entire fleet, including light-duty, heavy-duty, and even off-road vehicles. Supervisors were given access to the dashboard to monitor employees' driving behaviour and manage communications. This gave them real-time visibility into fleet operations.

In 2022, they conducted an internal review of their telematics data. They discovered the data wasn't clean—many inactive or incorrect users were still in the system. As we all know, data out is only as good as the data going in. They promptly removed around 400 incorrect staff entries and updated the list of active drivers. The fleet staff then reorganized the data, assigning vehicles and drivers to their respective departments accordingly.

They also collaborated with their HR department to update their fleet data collection policy and created the document "***Addressing Unacceptable Driver Behaviour***," allowing for clear guidelines and metrics for addressing employees who were flagged on the daily driver reports. They set clear parameters in the system and introduced in-vehicle audible warnings. These alerts are based on custom rules to help drivers self-correct in real time. This consistent approach, which involved cleaning up data, coaching drivers, and utilizing real-time feedback, led to a significant decrease in unsafe driving events. The charts below show their improved telematics performance. **Chart 1** shows their improved speeding performance based on telematics data, and **Chart 2** shows their overall CVOR Safety Violation Rate dropping sharply after the 2022 review.

Chart 1 – Telematics Performance

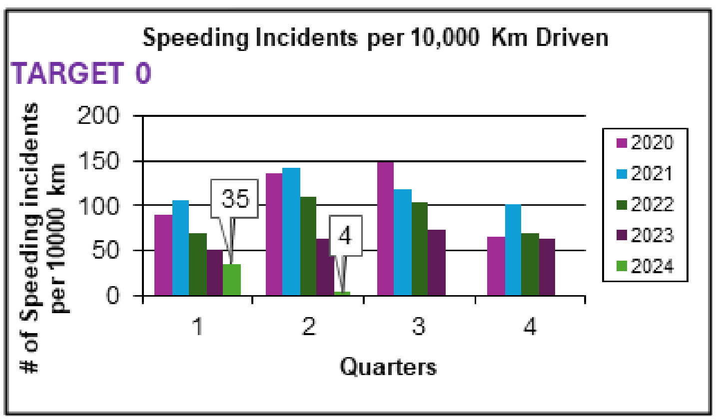
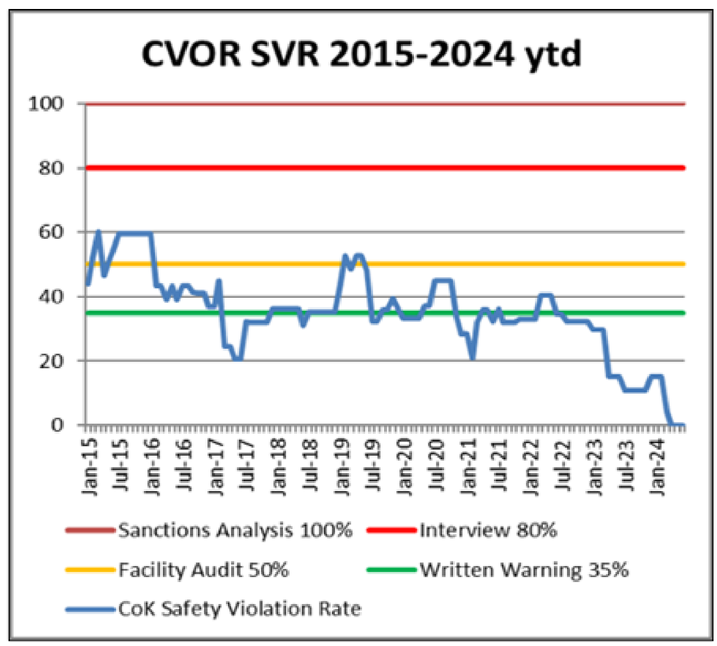


Chart 2 – Overall CVOR Violation Rate



"Improving driving behaviour of fleet drivers is certainly attainable, provided organizations build strong policies and procedures, supported by clean and reliable telematics data. The recipe for success is by securing buy-in across the board - from drivers, mechanics and senior leadership, which then turns that data into actionable items."

— Matthew Lynch, Director of Fleet, City of Kitchener

Sample Telematics Rollout Project Plan: Speeding Behaviour Reduction

Project Objective

To reduce and ultimately eliminate speeding behaviour among fleet drivers using telematics data, policy enforcement, and behavioural change strategies.

Business Case Summary

- Problem: Excessive speeding increases accident risk, fuel costs, and vehicle deterioration.
- Solution: Use telematics data to monitor and reduce speeding.
- Goal: Achieve Zero Tolerance for speeding within 12 months.

Key Components

- Telematics Partner: ABC Vendor
- Focus Area: Speeding
- Policy: Revised speeding policy with clear thresholds and disciplinary actions.
- Support: Secured senior leadership buy-in and middle management support.
- Communication Plan:

Roles & Responsibilities

Role	Responsibility
Project Sponsor	Executive oversight and funding
Project Manager	Day-to-day management, reporting, and coordination
Fleet Manager	Driver engagement, policy enforcement
HR	Disciplinary process and documentation
IT	Telematics system integration and support
Vendor	Data insights and reporting

Phased Rollout Timeline (12 Months)

Phase	Duration	Speed Violation Threshold	Key Activities
Phase 1	Month 1	No discipline	Trial run, driver education, baseline data collection
Phase 2	Months 2–3	>15 km/h	Begin soft enforcement, issue warnings
Phase 3	Months 4–6	>10 km/h	Formal warnings, minor disciplinary actions
Phase 4	Months 7–9	>8 km/h	Escalated disciplinary actions
Phase 5	Months 10–12	>5 km/h	Move toward zero tolerance, full enforcement

Success Metrics

- % reduction in speeding violations
- % of drivers with zero violations
- Reduction in fuel costs and incident rates
- Driver satisfaction and engagement scores

intact public entities