T-MOBILE
FOR GOVERNMENT

INSIGHTFUL FLEET MANAGEMENT

HARNESSING DATA-DRIVEN TELEMATICS FOR MODERN LAW ENFORCEMENT

GEOTAB

Introduction

Tech innovations have transformed how law enforcement addresses increasingly sophisticated criminal activities, enhancing the protection of both officers and the communities they serve. Telematics is at the heart of this transformation, evolving beyond basic GPS to become a vital source of rich data, optimizing fleet operations and enhancing officer and community safety. This technology supports smart, data-driven policing by improving decision-making and operational efficiency.

More than ever, vehicles are serving as offices on wheels. That means effective fleet communication and management are essential to effective policing. Telematics enables fleet connectivity to strengthen safety measures for the public and officers alike and improves operational efficiency.

This eBook explores how telematics revolutionizes law enforcement fleet management and supports safer, smarter, data-driven policing strategies.

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Using data to optimize law enforcement fleet performance

Telematics may have originated to connect GPS and real-time tracking to vehicles, but it has evolved into a cutting-edge technology that gathers intelligence on a fleet's health and performance. The actionable insights from a modern telematics solution are key in maintaining a healthy fleet and rightsizing the vehicle mix to have the best assets available. What puts these kind of advantages within reach? The robust and resilient T-Mobile network, which provides reliable connectivity crucial for the consistent delivery of relevant and accurate fleet data.

How to take a proactive approach to fleet maintenance

Whether patrolling neighborhoods for suspicious activity or quickly responding to emergency calls, police officers rely on their equipment, including their most critical frontline tool—their vehicles. Law enforcement vehicles are driven more miles, more harshly than civilian vehicles, and must be in top condition to enable officers to attend to incidents quickly and safely.

Proactive fleet maintenance means peace of mind for the front line. The impact of a car breaking down when responding to a critical call would be catastrophic.

Telematics acts as a diagnosis tool, providing a firsthand account of what's happening under the hood, allowing fleet teams to pinpoint faults and understand with meticulous precision the condition of every vehicle in the fleet. Understanding vehicle health allows you to maximize vehicle uptime and assign tasks to officers whose vehicles you know are in proper working condition.

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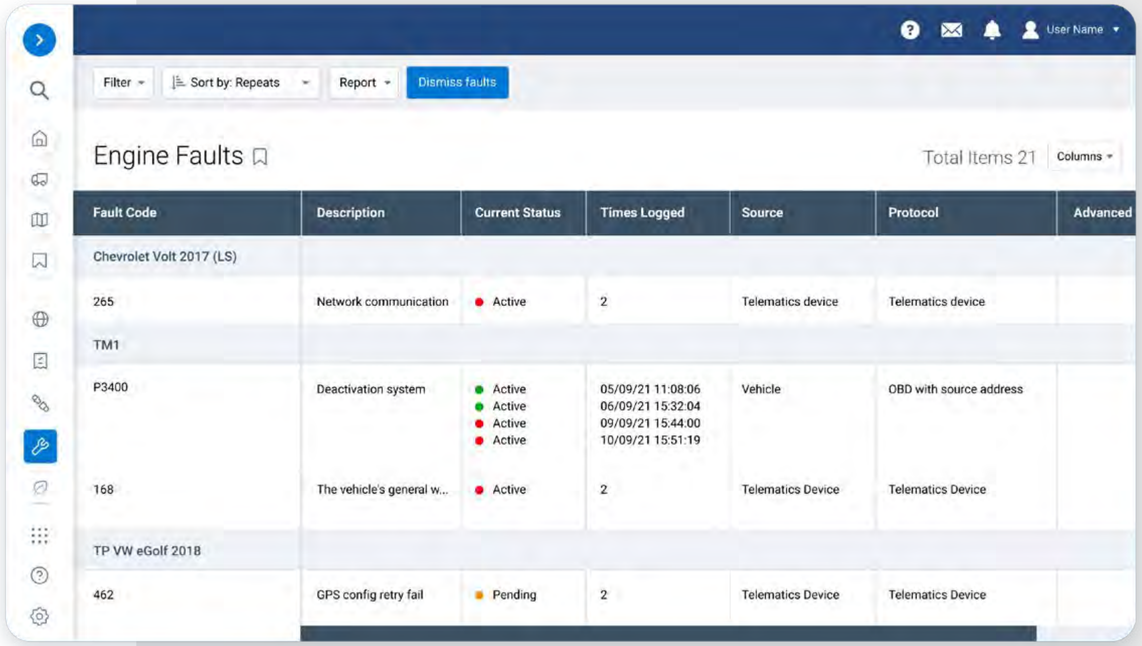
With the right telematics platform powering your fleet maintenance practices, you can:

- Enable remote monitoring for key vehicle performance characteristics (warning lights, brake pads, fuel economy, battery charge and health, tire pressure, etc.)
- Track your fleet inventory and see when vehicles have been serviced
- Create predictive maintenance scheduling and custom in-system reminders
- Manage seamless work order management, including maintenance cost reports
- Customize pre- and post-shift vehicle inspections via DVIR (driver vehicle inspection reports) for specific sensors and equipment on board your police fleet like sirens, lights, or gun racks

By actively monitoring the need for maintenance on a vehicle, law enforcement agencies can help keep their vehicles in good condition while saving money on unnecessary repairs. Supply chain issues are hindering new vehicle purchases for fleets that can't afford to be short of vehicles. Maintaining vehicles in the fleet and keeping them healthy means safer communities and longer vehicle life expectancy.



TIP

T-Mobile Fleet Management from Geotab features a comprehensive list of Diagnostic Trouble Codes (DTC) for quicker and more accurate diagnosis of vehicle issues. With Engine Status Reports, you can even detect signs of vehicle engine health issues in advance to help reduce downtime and avoid costly repairs down the road.

IMPACTFUL INSIGHT

Before using Geotab, one police service maintenance team struggled to keep up with oil changes and other routine vehicle maintenance. According to the agency's police inspector, "We're now proactive with Geotab, staying ahead of oil changes and keeping the fleet in the best shape it's ever been in."

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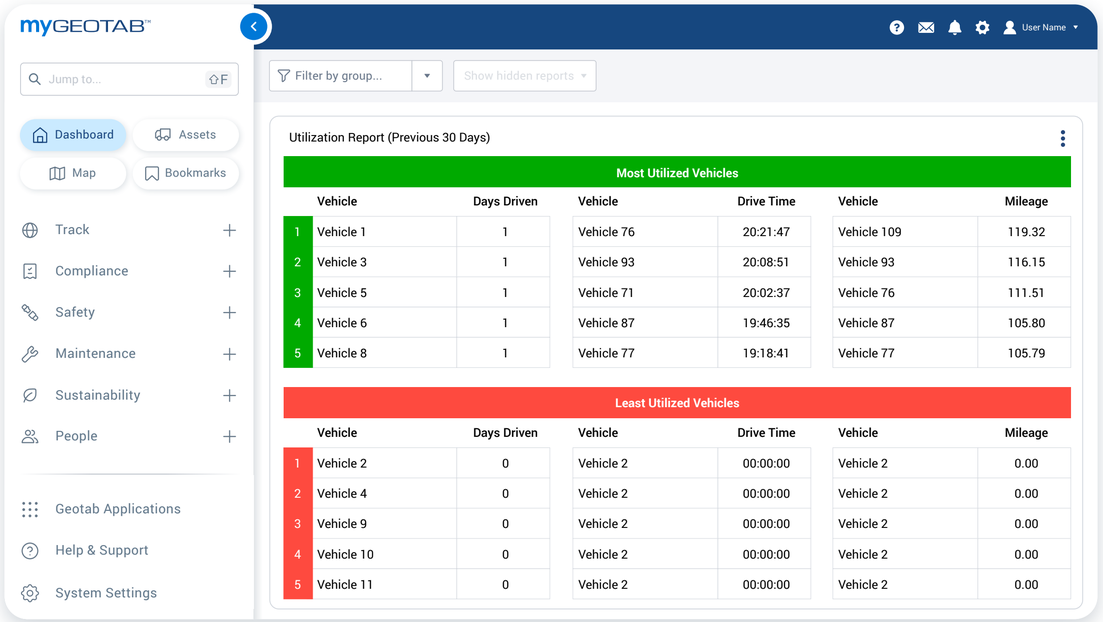
A rightsized law enforcement fleet has all the right moves

Maintaining an efficient fleet is crucial for cost control and performance. Analyzing fleet operations helps implement predictive maintenance and strategies that enhance performance. Fleet usage data identifies heavily used vehicles for targeted maintenance, ensuring reliability and balancing wear and tear to extend vehicle lifespans.

With a clear understanding of fleet utilization, managers can reallocate resources and identify rightsizing opportunities, which reduce costs and enhance fleet efficiency, ensuring vehicles are used optimally. More balanced use across the fleet helps increase the average life expectancy of these vehicles.



Most Utilized Vehicles

	Vehicle	Days Driven	Vehicle	Drive Time	Vehicle	Mileage
1	Vehicle 1	1	Vehicle 76	20:21:47	Vehicle 109	119.32
2	Vehicle 3	1	Vehicle 93	20:08:51	Vehicle 93	116.15
3	Vehicle 5	1	Vehicle 71	20:02:37	Vehicle 76	111.51
4	Vehicle 6	1	Vehicle 87	19:46:35	Vehicle 87	105.80
5	Vehicle 8	1	Vehicle 77	19:18:41	Vehicle 77	105.79

Least Utilized Vehicles

	Vehicle	Days Driven	Vehicle	Drive Time	Vehicle	Mileage
1	Vehicle 2	0	Vehicle 2	00:00:00	Vehicle 2	0.00
2	Vehicle 4	0	Vehicle 2	00:00:00	Vehicle 2	0.00
3	Vehicle 9	0	Vehicle 2	00:00:00	Vehicle 2	0.00
4	Vehicle 10	0	Vehicle 2	00:00:00	Vehicle 2	0.00
5	Vehicle 11	0	Vehicle 2	00:00:00	Vehicle 2	0.00

TIP

T-Mobile Fleet Management from Geotab offers an Asset Utilization report that is customizable to see at a glance which vehicles are the most and least utilized. It can be broken down by vehicle type, days driven, and mileage.

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Leveraging robust connectivity to optimize fleets

Geotab Fleet Management optimizes operations through a robust network, enabling superior data analytics and machine learning for increased productivity, improved safety, and compliance. Supporting both traditional and electric vehicles with the advanced G09 tracker, Geotab delivers seamless fleet management.

Key advantages of robust connectivity in fleet management:

- **Driver behavior management and coaching:** uses real-time network communication to monitor and instantly report aggressive driving, enhancing safety and efficiency
- **Advanced fleet routing and optimization:** utilizes MyGeotab software to enhance safety and efficiency, and optimize routes, effectively reducing time and fuel usage by managing traffic and precise geolocation
- **Fleet management protection:** proactively maintains fleet health through rapid diagnostics and engine data, with continuous network connectivity for instant fault code alerts
- **Streamlined compliance:** ensures top-tier data security by adhering to ISO/IEC 27001 and FIPS 140–2 standards, crucial for municipalities using advanced telematics while protecting sensitive information

Did you know?

When the state of Utah's Department of Corrections (DOC) realized its fleet was bloated with low-mileage vehicles, it set out to improve utilization. Specifically, the department wanted to tackle the critical components of a rightsizing analysis—measuring vehicle utilization more accurately, and then tracking on-duty versus off-duty use.

Telematics data quickly pulled relevant information the DOC needed and correlated odometer mileage and engine hours for more accurate vehicle utilization reporting. Then, with Geotab's IOX integrations, the vehicle usage was broken down even further, showing time spent using the lights and sirens versus time parked or time spent patrolling. The DOC has now included the vehicle status "in pursuit" in their vehicle fleet utilization studies for a clearer understanding of how vehicles are being used.

This level of analysis helped the state of Utah downsize its fleet by 60 vehicles, saving money and freeing up the budget for other essential expenses for the service.

02

Elevating community safety

Law enforcement agencies are committed to creating safer communities by developing safety initiatives and securing resources to combat crime in their jurisdictions. Technological advancements enable law enforcement to respond swiftly to emergencies and proactively strategize to prevent future incidents. Data-driven policing not only underscores the scope of local police activity but also promotes transparency and accountability.

Telematics data can aid in creating a new level of transparency between police departments and their communities. For example, vulnerable communities can see comprehensive reports of miles patrolled in their neighborhood. This data-based accountability can help restore trust in police action and engage members of the public through open lines of communication.

With social media being one of the first places members of the public go for information, technology can play a part in proactively communicating with the public about ongoing incidents. By keeping the public updated on a need-to-know basis with information, officers can prioritize the safety of the public and those attending the scene.

Telematics aids more efficient and transparent policing for the community in the following ways:

- More accurate dispatching of nearby officers means resources are allocated faster and more efficiently to emergency calls
- Route completion reporting by zone demonstrates that highly volatile areas are being patrolled by police vehicles
- Time and date stamps show when and where there was a police presence and in what zones
- Historical pattern tracking shows where police vehicles were in relation to crime hot spots and by location

IMPACTFUL INSIGHT

Dispatchers have discovered unexpected benefits from using Geotab telematics, particularly in viewing the live location of vehicles during calls. According to the director of IT services for a police department in Illinois, this feature has significantly improved operational efficiency.

Additionally, the extensive vehicle data collected has streamlined the process of responding to public inquiries, providing clear, timely information on the frequency of police patrols in specific areas.

Another benefit has been the amount of vehicle data captured, helping to quickly answer public inquiries about how often police cars were patrolling in certain areas of concern.

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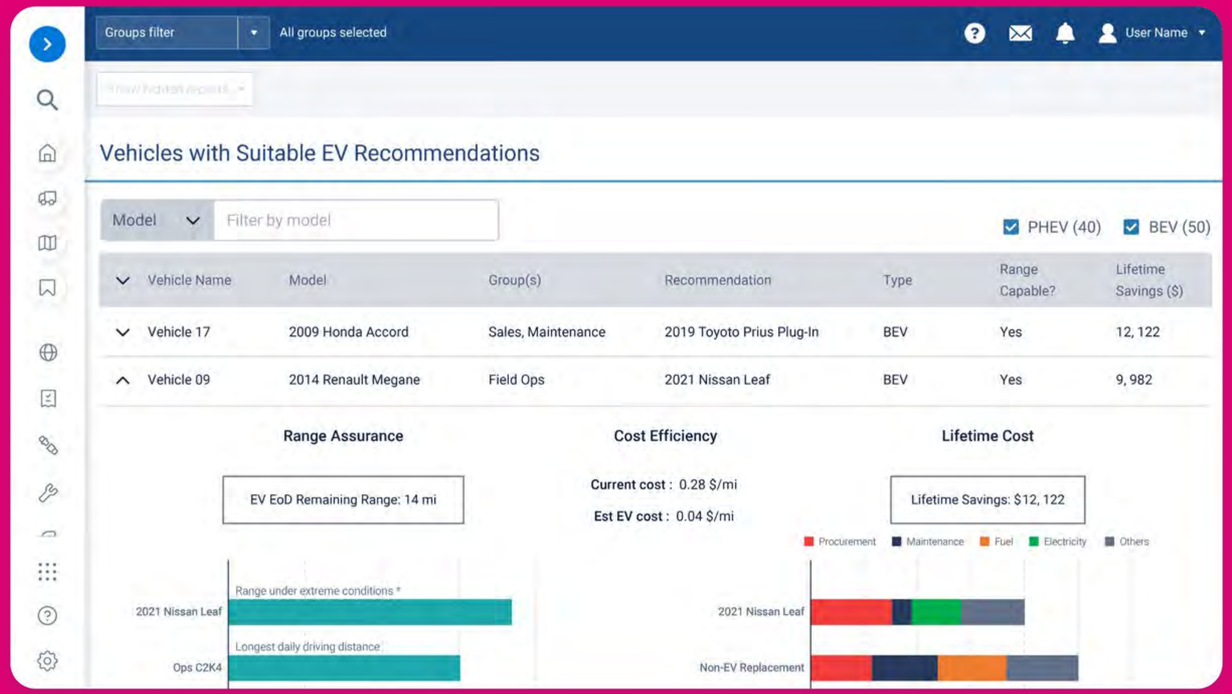
Simplifying sustainability strategies

Public service fleets are looking to lead the way in sustainable practices, with many new green fleet government mandates being rolled out. Police fleets are keen to move toward more sustainable fleet practices, and a data-driven approach is the best way to reap the benefits of a greener fleet.

Telematics helps fleets drive their sustainability efforts forward with unparalleled insights into how a green fleet operates. Through comprehensive reporting, telematics data can help a police fleet:

- **Reduce fuel usage and improve a fleet's fuel efficiency**
- **Set and achieve CO_2 emission reduction targets**
- **Identify candidates in the fleet for electrification**



TIP

T-Mobile Fleet Management from Geotab offers an Electric Vehicle Suitability Assessment, an excellent tool for fleets exploring options to replace gas-powered cars with EVs. The assessment analyzes a fleet's unique driving profiles and patterns to identify suitable vehicles to switch to electric. Each fleet receives an electrification blueprint, which explores the total cost of ownership and reveals the potential cost savings of switching to EVs.

Charging law enforcement fleets forward

Many fleets recognize the benefits of adding electric vehicles to their lineup. Despite the higher upfront costs of acquiring an electric vehicle, they offer a lower total cost of ownership in the long run, especially for heavily utilized vehicles like police vehicles.

In addition to fuel savings, electric vehicles in a fleet also have the potential to reduce maintenance costs. Compared to their internal combustion engine counterparts, electric vehicles don't require oil changes, and with regenerative braking, brake servicing also becomes less frequent. Overall, EVs require less maintenance and represent a cost-effective option for fleets on their green journey.

Did you know?

Law enforcement fleets are increasingly adopting electric vehicles. Curious about what kinds of benefits you can expect?[1]

- **Cost efficiency:** In Indiana, the Bargersville Police Department's shift to EVs has saved thousands of dollars since 2019, with long-term savings outweighing initial costs.
- **Reduced environmental impact:** Boulder County in Colorado employed EVs to cut emissions and operational costs, proving greener options can be cost effective.
- **Enhanced community relations:** Gates Mills Police in Cleveland uses a high-end EV, donated by a local supporter, demonstrating community alignment and adaptability for police forces.
- **Superior performance and maintenance:** Fremont PD in California reports that their EVs outperform gas cars in efficiency and require significantly less maintenance, costing only $0.023 per mile compared to $0.173 for their traditional vehicles.

[1] Police 1

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Prioritizing officer safety

Police officers face many dangerous and stressful situations every shift. Telematics helps enhance officer safety significantly while keeping the police fleet reliable and safe.

Telematics provides the necessary location-based data for increased patrol efficiency. It also helps to improve lines of communication with dispatchers who are giving directions on the best routes to take. Real-time visibility allows officers to monitor each vehicle's location, offering teams an extra layer of security.

Telematics technology works hand in hand with dispatchers to streamline an emergency response. Pinpointing vehicle locations helps dispatchers send backup quickly for emergency response calls or a collision scene. Every second counts, and telematics technology can help provide that much-needed situational awareness of where all the nearby vehicles are located to coordinate a faster response.

Tracking police vehicles helps maximize productivity and efficiency while boosting officer safety. Live GPS tracking with telematics coupled with geofencing also helps to improve safety by monitoring when and where patrol cars enter high-risk areas. Telematics is a powerful tool for improving officer safety amid the unpredictability of policing, representing a significant step forward in building a safer future for law enforcement personnel.

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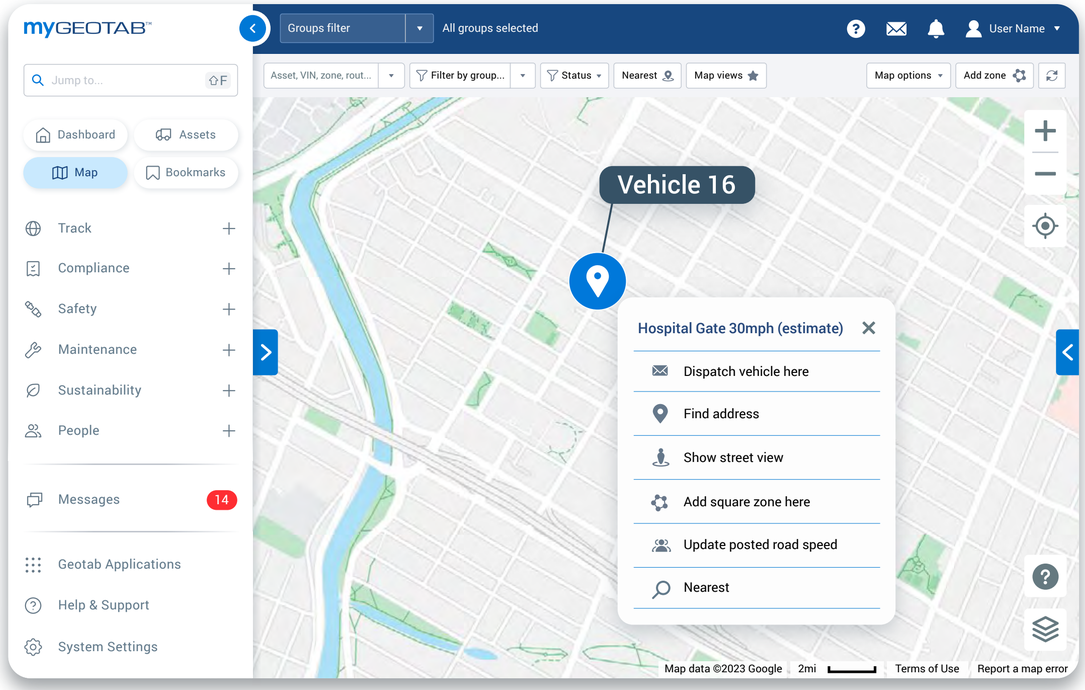
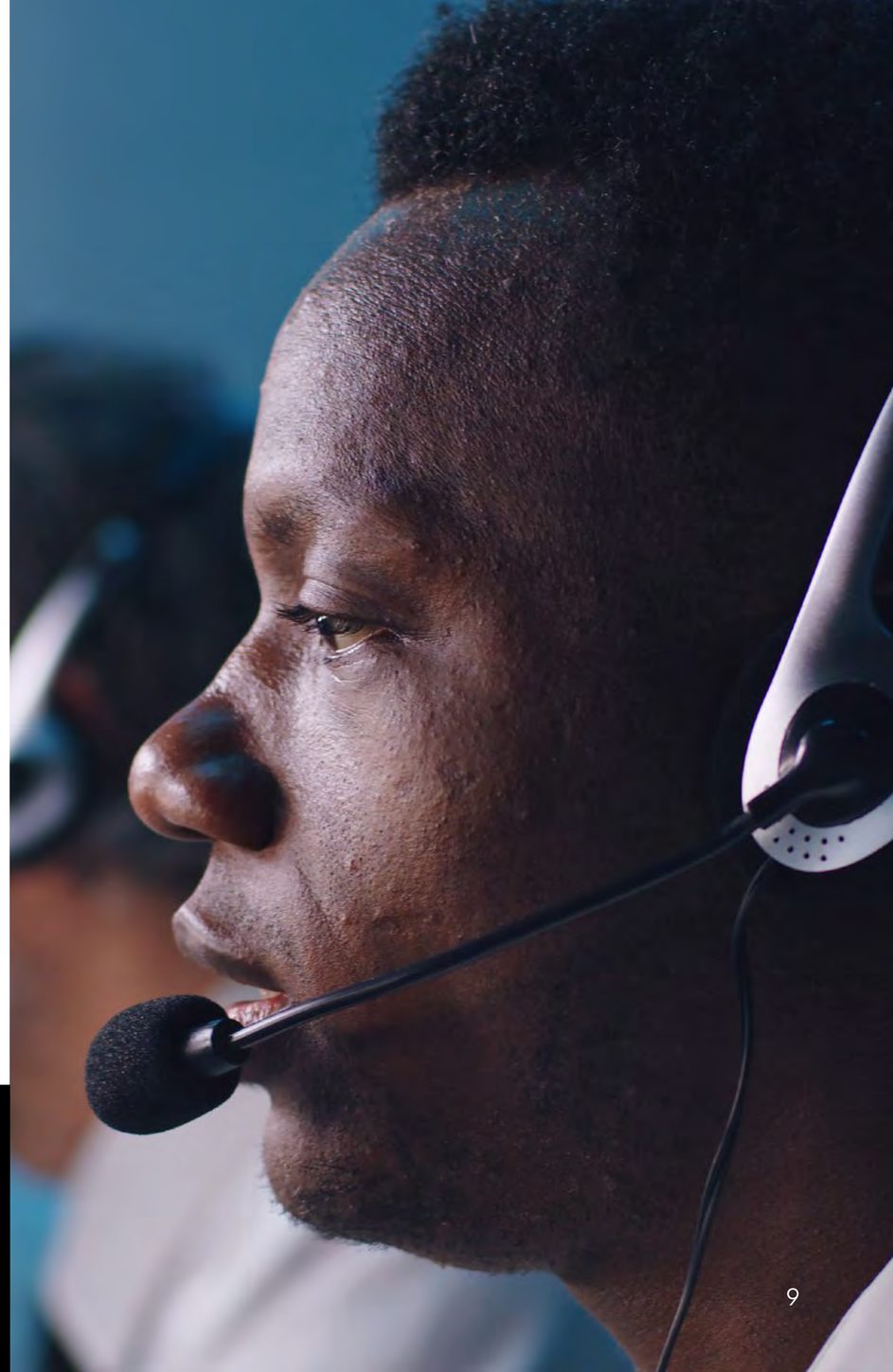


As more routine calls from members of the public turn into heightened threat scenarios, having clear information about the whereabouts of an officer and their vehicle ensures a rapid and accurate support response from dispatch or other officers nearby. It can also aid in identifying the quickest escape route and help in coordinating the response from other emergency teams who may need to attend the scene.

TIP

Active tracking exclusively from Geotab allows dispatchers to follow the live movements of a police vehicle, knowing it quickly and safely arrived on the scene.



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Promoting safer driving

Keeping officers safe behind the wheel is critically important. Motor vehicle-related incidents were the leading cause of line-of-duty deaths for law enforcement officers from 2011 to 2020.

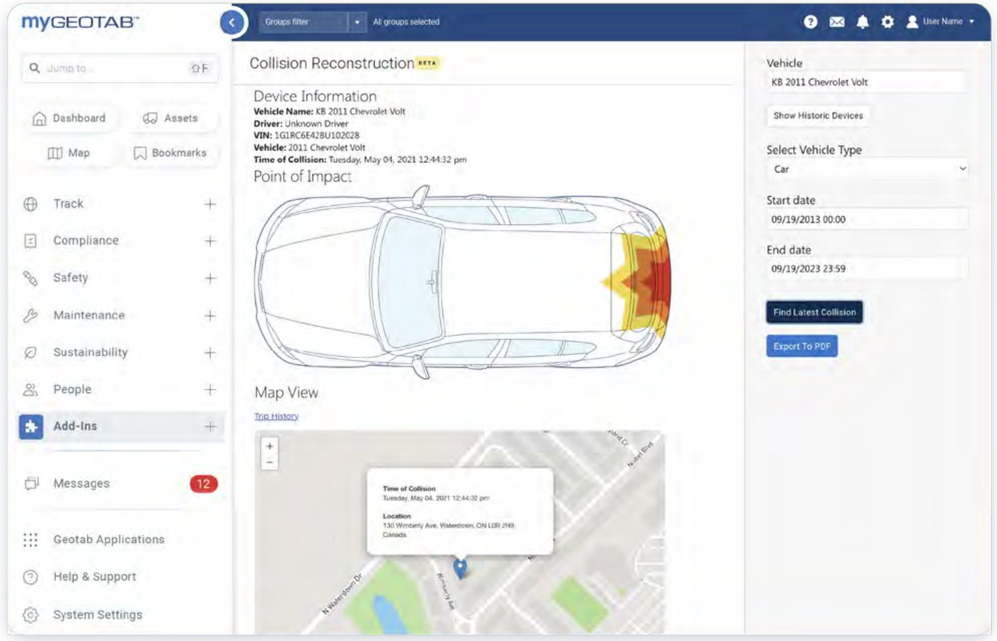
While the general public might think most collisions occur during high-speed pursuits, those in the field know that several behavior-related hazards increase the risk of collisions and associated injuries—from not wearing a seat belt to speeding through intersections or being distracted by using in-car electronics.

Telematics data provides a window into driver behavior, providing police fleet managers with information about seat belt usage, speeding, or harsh cornering and braking by officers. Using this driving behavior data, supervisors and fleet managers can identify opportunities to coach drivers on safer driving practices. Data-driven safety programs can help protect your officers on the road. Leveraging the actionable insights from telematics data, police chiefs can reinforce the need for safer driving habits among officers and help adjust safety-related behavior to reduce the risk of collisions or lawsuits.

Limiting liability

Police officers have roughly double the rate of motor vehicle crashes per million vehicles driven compared to the general public. To protect officers from facing liability claims when a collision occurs, it is essential to rebuild as much information as possible for insurance purposes. Collision reconstruction with telematics can significantly help limit an officer's liability.

Telematics also makes it possible to gain a broader perspective by looking at the historical driving patterns for a specific officer or vehicle. All this information can help explain why a collision occurred while protecting the officer from unnecessary litigation.



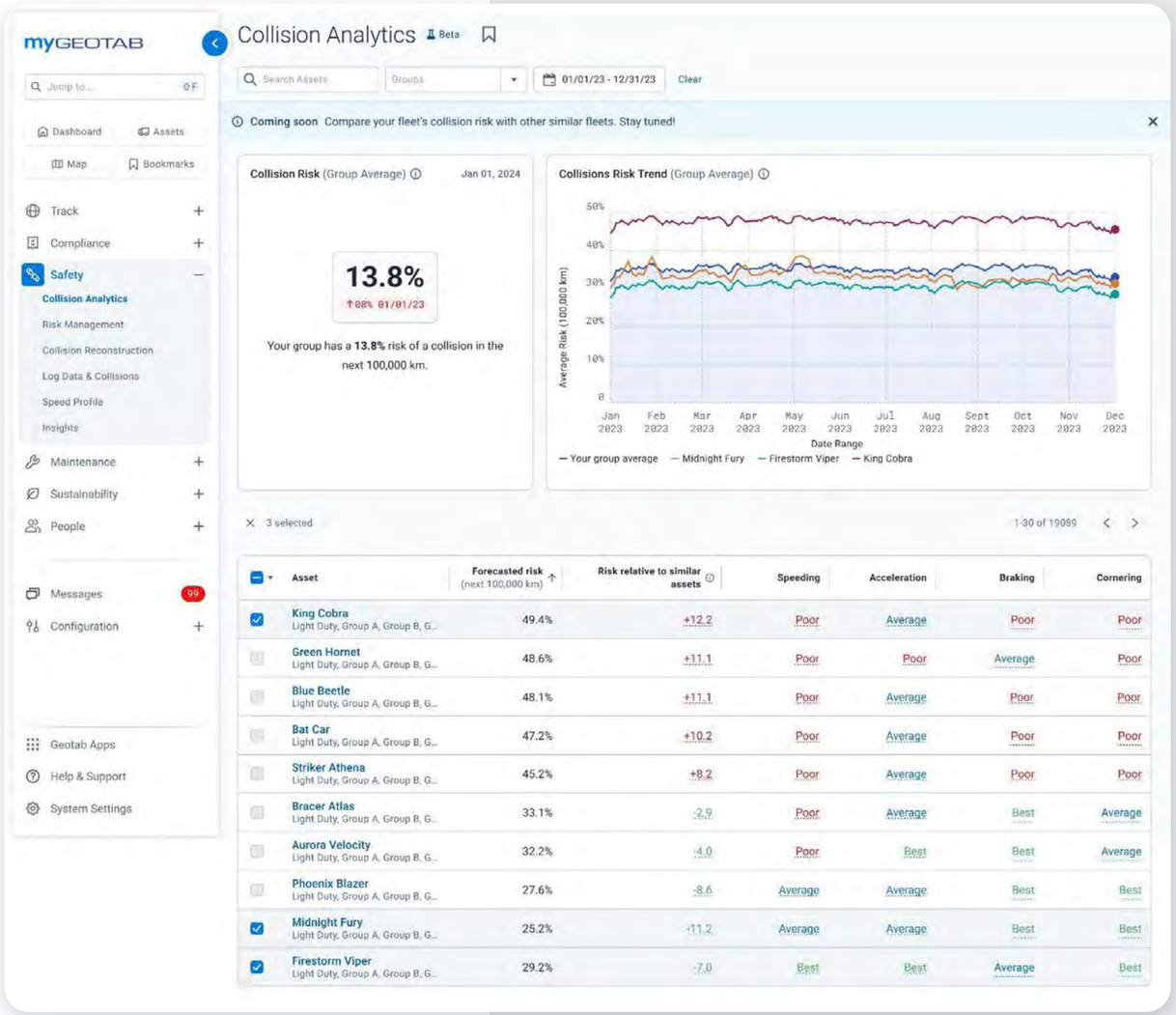
Telematics data can depict the events before, during, and after a collision. This enables officers to go beyond eye-witness testimonies from bystanders and get additional facts with collision reconstruction data like:

- GPS location with map coordinates and satellite view
- Speed and acceleration data
- Engine speed before the collision and at the time of impact
- Vehicle systems in use, e.g., lights and sirens

MyGeotab Safety Center

By using Geotab, you'll have access to a personalized, easy-to-read Safety Center, delivering insights and enabling quick analyses to help organizations find the right solutions. It includes:

- **Collision metrics:** accurately tracks collision rates and contributing factors to aim for zero accidents
- **Machine learning model:** trained to understand questions posed by real-world fleet professionals, offering insights that reflect everyday fleet operations
- **Benchmarking and KPIs:** displays key performance indicators, comparing fleet performance to industry standards
- **Risk assessments:** forecasts collision risks and trends, allowing targeted preventive measures
- **Driver-specific analytics:** identifies high-risk drivers and factors like speeding and harsh braking
- **Iterative development:** continuously adds new features, enhancing dashboard capabilities throughout 2024
- **Predictive safety modeling:** integrates advanced sensor data to refine risk assessments and improve safety strategies



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Identifying proactive measures for enhanced data security and privacy

In an era of frequent data breaches and privacy concerns, securing sensitive information is crucial, particularly for municipal operations like police departments and vehicle maintenance services.

Geotab and T-Mobile for Government are committed to robust security measures that protect against external threats and uphold strict data privacy controls.

Tailored data access for municipal departments

Within a municipal setting, different departments have varying needs for access to fleet data.

Geotab understands the unique data requirements of each department, ensuring sensitive information such as vehicle locations or patrol routes are secure. For example, while the police department may require access to real-time location data for operational security, vehicle maintenance services are granted access only to data pertinent to fleet performance and maintenance schedules.

This tailored access prevents unnecessary exposure of sensitive operational data, aligning with best practices in data privacy.

Robust compliance and validation

Geotab's dedication to data security is highlighted by its compliance with international standards like ISO/IEC 27001 and FIPS 140–2 for cryptographic protections. These certifications demonstrate Geotab's commitment to rigorous security practices that safeguard client data from unauthorized access and cyber threats.

Geotab's advanced data security and privacy measures allow municipalities to leverage telematics benefits while protecting sensitive information. As municipalities adopt more sophisticated technologies, partnering with a security-focused provider like Geotab is essential.

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Pioneering advancements for law enforcement

Law enforcement today need all the technology and tools available keep their communities safe. The road to digital transformation in policing is complex to navigate, and teams are carefully weighing their options in the process.

A true game changer for more efficient policing, telematics is more than GPS or real-time tracking. Today's telematics data helps fleet managers optimize vehicle performance while keeping the community and officers safer. Telematics is a key part of every police fleet's technological journey toward increased transparency and data-driven policing.

Telematics can unlock numerous operational efficiencies:

Automated inspection reporting

Performing digital driver/vehicle inspection reports, or DVIRs gives fleet managers real-time post-trip and pre-trip inspections quickly. Immediate alerts on unsafe vehicles or equipment can be sent to accelerate repairs. Digital DVIRs also save time and resources, eliminate unnecessary paperwork, and streamline maintenance efforts.

Expedited expense reimbursements

After emergency efforts on the ground have wrapped up, police services start the manual process of compiling expenses to submit to the Federal Emergency Management Agency (FEMA). Emergency crews seek quicker reimbursement for their time spent aiding in disaster relief. With accelerated reporting of fuel usage, vehicle hours, and records of personnel on site, FEMA rebilling becomes much easier and standardized.

Objective investigations

Incident reporting becomes more fact based and evidential, with telematics accurately building a picture of events. By gaining access to vehicle speeds, braking, cornering, and acceleration data, more transparent and data-driven reporting is possible. This helps build public trust and demonstrates that teams are acting impartially. Guesswork and opinions are replaced with facts, providing transparency and accountability.

Faster, more coordinated responses

Telematics enhances coordination with other emergency response teams, boosting interoperability. Situational awareness helps emergency responders provide a better and faster service. Control rooms and dispatchers get access to real-time information to monitor locations, personnel, and have equipment properly for deploying an optimal response across teams.

About Geotab and T-Mobile for Government

Fleets require telematics solutions for various reasons: saving fuel, reducing maintenance costs, optimizing routes, enhancing safety, and automating workflows. With Geotab and T-Mobile, fleets gain these benefits and more. Geotab, an expert in fleet management, provides real-time insights using the reliable, nationwide T-Mobile network. This easy-to-install solution is designed specifically for the network, ensuring efficiency and peace of mind.

Geotab's open platform/IOX-capable solution adapts to individual fleet needs. Alongside fleet telematics, T-Mobile offers a broad range of ready-to-deploy or custom solutions to optimize your IoT strategy.

Customer service is a core value at both Geotab and T-Mobile. Because of this, fleets get a supercharged team of experts with them every step of the way—from implementation to day-to-day operations—improving efficiency while cutting costs. We deliver cutting-edge technology and dependable connectivity, optimizing efficiency, safety, and cost-effectiveness. Rely on us for comprehensive solutions to empower your fleet's success.

To Learn More:

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Visit the fleet management solutions website.

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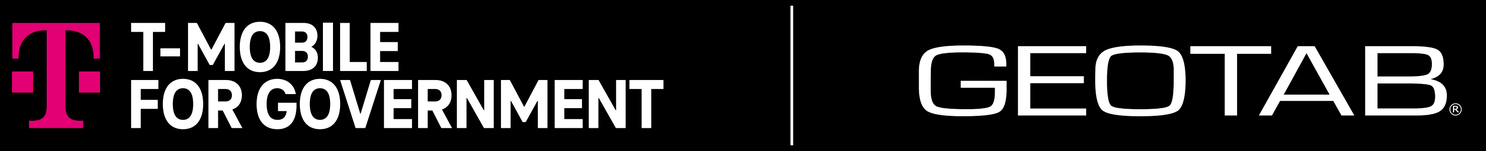
Visit the website and follow us @GEOTAB on LinkedIn.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