Zetifi Connected Fleet Safety

Your ultimate guide to building a best-in-class fleet safety program.

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Want your fleet's safety program to set the industry standard and give your agency’s public image a sparkling new finish?

This guide is your VIP pass to sprucing up fleet safety and improving fiscal responsibility with the rich capabilities of telematics.

The need for a data-driven fleet safety program

A sobering reality is that **87%** of collisions are due to avoidable driver error; the true sorrow lies in the fact that most of these collisions could have been avoided. Understanding the potential for government fleets to save lives, an increasing number are adopting telematics as the cornerstone of their safety initiatives.

When establishing a fleet safety program, numerous advantages arise beyond driver safety and public perception. Fleets whose staff actively engage in safety programs typically experience increased driver satisfaction and enhanced fleet safety. On the other hand, allowing a culture of poor vehicle safety to develop can lead to serious consequences. Apart from endangering lives of employees and others on the road, neglecting vehicle safety can result in increased vehicle maintenance costs and inefficient fuel consumption. These issues can progressively undermine an organization's financial health over time. Consider the following expenses borne by an employer if their driver is involved in a crash:

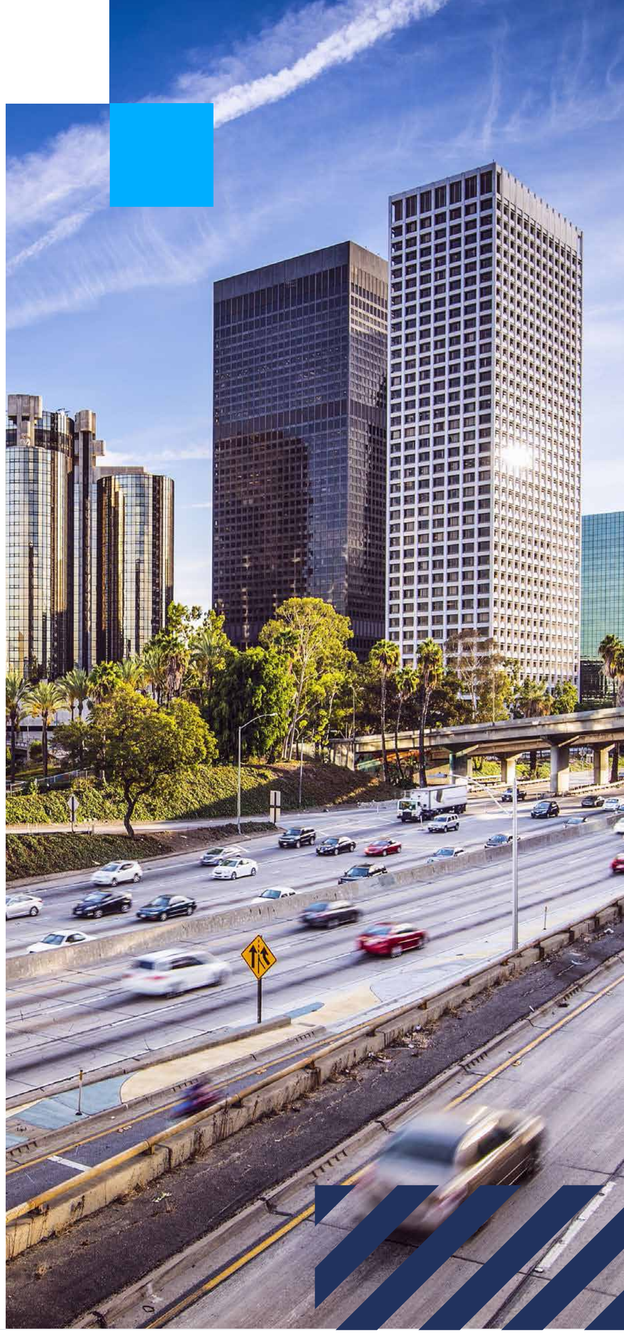
- The average collision cost is **$16,500**.
- The average cost if injury occurs is **$74,000**.
- In the event of a fatality, the average cost is **$500,000**.
- Nuclear verdicts exceeding **$10 million** have climbed over the past decade.

Based on these high expenses, implementing a telematics solution can often pay for itself. However, even more critical than the financial component is the safety of your drivers and the public. The safety numbers around car accidents indicate that:

- **51%** of traffic fatalities are caused by roadway departures.
- **29%** of traffic incidents involve excessive speeds.
- **8%** of fatal car accidents are due to distracted driving.
- **12%** of car accidents are due to cell phone usage.

Given these ramifications, no organization can afford to overlook such a significant issue that profoundly affects both their financial and personnel resources. It’s therefore incumbent on government leaders to instill a culture of safety by building a strong fleet safety program that is backed by telematics data. This will help strengthen public trust and demonstrate fiscal responsibility with taxpayer funds. By relying on a telematics platform to lay a solid foundation for your safety program, you can develop a solution that is customized to your operation’s specific needs.

If you’re wondering where the best place to start is, there’s no need to fear. This ebook is your exclusive ticket to the fleet safety premiere. We’ll address why it's essential to build your safety program on a solid foundation of telematic data, the types of insights that you can gather and how you can enrich your safety program with predictive insights. After all, if you only look in the rear view mirror, you’ll miss what’s right in front of you!



CHAPTER 1

Hitting bedrock: Building a custom fleet safety program on a foundation of data

Data is the most critical component of effective fleet management because it helps organizations gain detailed facts about the ways their individual vehicles are being operated. Opportunities for positive, non-punitive driver coaching are plentiful and rooted in truth because insights from telematics data are unbiased. These learning opportunities ultimately motivate drivers to drive safer and with greater care. Safety-related fleet analytics can pertain to driver behavior, collision detection, AI-based safety predictions, vehicle maintenance schedules, engine faults, driver behaviors or collisions. These metrics enable managers to identify the best strategies for more responsible and cost-efficient fleet operations.

The proof is in the precision: How accurate data impacts a safety program's success

Given the gravity of operational decisions that government fleet managers must often make, the accuracy of the data they're studying also matters. It's no surprise that poor quality data will lead to uninformed decision-making, which can result in potentially disastrous outcomes. As agencies try to instill a culture of safety within their fleet, they will require a consistent stream of precise analytics to be successful.

With data quality being inextricably connected to a program's success, it's essential to have tools in place to reduce data noise; this will allow you to unearth key facts about your fleet that will help inform your safety initiatives. After all, there's little point in capturing 95% of your fleet's activity if the missing 5% indicates a critical event. Absent or incomplete data might be harboring an important insight you don't want to overlook when setting up your agency's fleet safety program.

Despite this, many telematics tools leave out key critical safety information, cutting corners when trying to deal with the massive amount of data generated by vehicles. This is because most rely on time- or distance-based data transmissions, which miss critical information about the vehicle, including serious infractions, inaccurate mileage or poor map display quality.

Geotab built a patented curve logic algorithm to eliminate data overload, helping our more than **one million government subscriptions** retain the highest quality metrics. It's a unique part of our platform that efficiently moves data from vehicle to server. By automatically discarding misleading or inaccurate vehicle GPS data using this capability, our roughly 2,900 government customers can be assured of analytical quality and accuracy.

When the **California Department of Conservation (CDOC)** switched to Geotab, they reduced safety violations from 30-40 violations per month to just 1 or 2. **"When we heard the pitch and what it could do, choosing Geotab was a no-brainer," said Paula Hutchinson, Fleet Administrator for the CDOC. "Specifically, Geotab was a good fit for the DOC thanks to better equipment and reporting, and the potential for increased safety thanks to improved driver feedback."** Their drivers were provided access to their own dashboards and safety scorecards, giving employees direct feedback on their driving habits and safety adherence.

An impartial witness: Unbiased fleet data as the base of your fleet safety program

The neutrality of your fleet data also plays a valuable role in an effective safety plan. Preconceived notions about your fleet or drivers might be disproven by new data that cuts through confirmation bias and provides unfiltered truth about how your vehicles are being driven. Approach your agency's fleet data with an open mind and use it as a foundation to build or revise your safety plan on.

By developing a safety program with Geotab, **Arlington County** saved more money and strengthened their compliance with regulations. Our platform provided them with accurate data on safety benchmarking, vehicle statuses, maintenance and driver logs, enabling them to lower their costs by 10%. **"Geotab is invaluable," said Ben Baldwin, Safety Specialist for Arlington County. "It's allowed us to comfortably expand our telematics project without feeling confined."**

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CHAPTER 2

Making the numbers make sense: Understanding rich fleet safety analytics

Within the realm of telematics, a number of powerful data intelligence use cases exist for government fleet safety. Telematics systems generate gigabytes of data about harsh braking, cornering, seat belt usage and other vital safety information. Each measurement and event detected from every in-vehicle sensor is made available to you in real-time. But, how are you to make sense of this wealth of data at your fingertips?

See if your government fleet is a cut above the rest with industry benchmarking

Benchmarking provides a trove of comparable fleet insights and a true north for any fleet to follow. Government agencies can use safety benchmarking to contrast their data against similar fleets, enabling them to see how their fleets are doing in relation to those that are closest to theirs in size, types of vehicles and purpose. This contextual benchmarking will give you a stronger idea of what areas of safety to improve on and fosters a more targeted, accurate approach to solving fleet safety issues.

Geotab customers implementing our Safety Benchmark tool see:

Collision rates decrease by

19.1%

Harsh braking decrease by

11.8%

Harsh cornering decrease by

5.6%

Speeding decrease by

6.4%

Win the game of fleet safety with driver scorecards

Once a benchmarking assessment has been conducted, it's important to analyze driver scorecards to further fine-tune your safety practices. Benchmarks show how your fleet stacks up to others, but on a more granular level, driver scorecards show you how your drivers are doing compared to one another. Monitor historical data around improper driving habits and work to correct these with your drivers via a positive, non-punitive style of coaching. You can also implement programs that recognize good driving habits. Absorb critical insights on a driver-by-driver basis for a rearview look at your current safety practices and use these indicators to promote a more responsible fleet culture.

The **Missouri Department of Transportation (MoDOT)** needed an efficient means of tracking their drivers' tendencies behind the wheel. Geotab enabled their fleet managers to study safety scores, driving behaviors, seat belt usage and more using the platform's safety dashboard. With the power of our solution, they're continuing to protect their vehicles and drivers in impactful new ways, saving their agency money from better vehicle maintenance and increased workforce productivity.

Predictive insights that will outshine any crystal ball

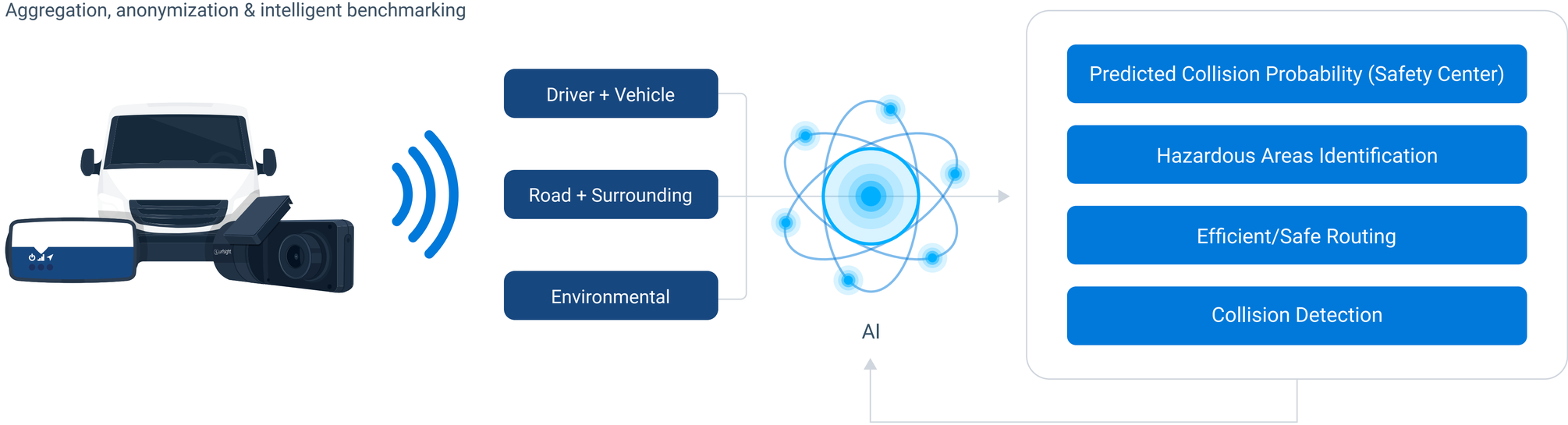
The next step in building a better fleet safety program for your agency is to look forward using predictive analytics. While scorecards are a powerful tool for analyzing what's already happened, if you only look in the rear view mirror, you're going to miss what's coming at you. That's because scorecards are static and not as dynamic as the real world; they leave out important factors, such as:

- Is the vehicle in a safe operating condition?
- What is the surrounding environment? Are employees typically driving at night or up and down slopes?
- What are the weather conditions usually like?

Looking forward with predictive insights, fleets can better anticipate risks and challenges before they happen. For instance, Geotab's AI-based risk model provides risk forecasts based on driver behaviors, frequented roadways, and environmental data, enabling a proactive approach to safety. By using Geotab's Safety Center alongside other MyGeotab tools, fleet managers can transform their safety programs from reactive to proactive, optimizing overall fleet performance and safety! See the model below for a visual explanation of how various fleet data are pulled into Geotab's AI-based predictive model and used to enhance safety.

Continuous learning contextual insights

Aggregation, anonymization & intelligent benchmarking



Government fleets can save money and better protect individuals by shifting their safety programs to become more anticipatory and proactive, rather than reactive. With Geotab's predictive insights, agencies can study calculated forecasts and risk levels based on individualized driving characteristics. Predictive collision rates with our platform are figures indicating collision risk over the next million miles or kilometers traveled. They're calculated based on both prior fleet data and other similar fleets' analytics. Predictive collision forecasts can be measured against actual Safety Center rates and metrics powered by Geotab Data Connector (GDC).

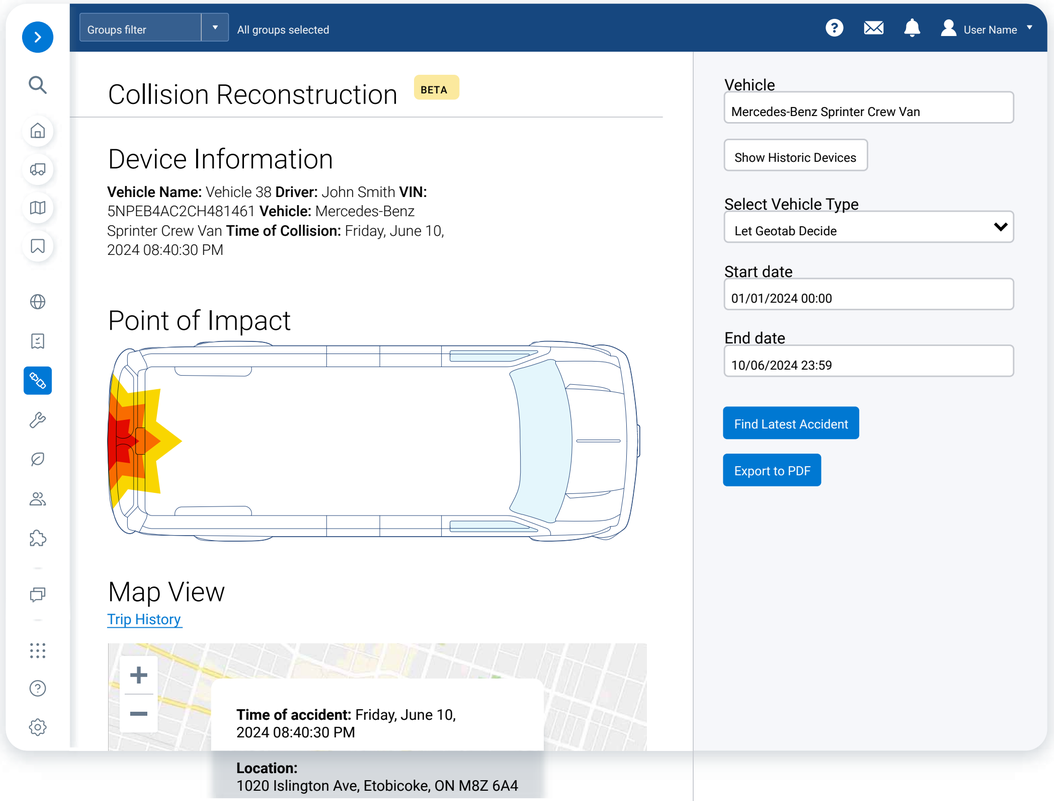
Fleet managers are empowered to preemptively limit safety risks by analyzing these insights and working to reduce them before incidents happen. Fleets equipped with risk analytics from the start can better mitigate possible dangers in advance, rather than exclusively trying to correct poor driving behaviors after the fact.

In 2023, fleets enabled with Geotab's AI-driven solutions and using Geotab's integrated safety features **saw a 40% reduction in collision rates– demonstrating a potential of 3,500 fewer collisions**.

Protect your people and tune up your processes with post-incident insights

No matter the tools an organization has, some level of risk will always remain. In the unfortunate event of a collision or a complaint from a constituent about a fender bender, it is critical that your telematics platform has the capability of acting as an unbiased witness by providing real-time collision reconstruction. This is the process of using telematics data to understand the events that occurred before, during and after a collision. Gathering the information to help you understand what happened and why is vital for driver training, and in a world where nuclear verdict payouts swelled to **$14.5 billion** in 2023, it can serve as a shield that protects against potential litigation.

Allan Babin, Director of Safety, Compliance and Fleet at **Cardinal Couriers**, tells the story about receiving a notification one night that a truck had been involved in a collision close to his home – he was able to arrive before the local police, use data collected by Geotab to show who was at fault and present the collision reconstruction report to indicate how and where the collision happened. **"That saved me a ton of time in court and saved me money on legal fees. It took out all of the guesswork and all of the he-said/she-said."**



CHAPTER 3

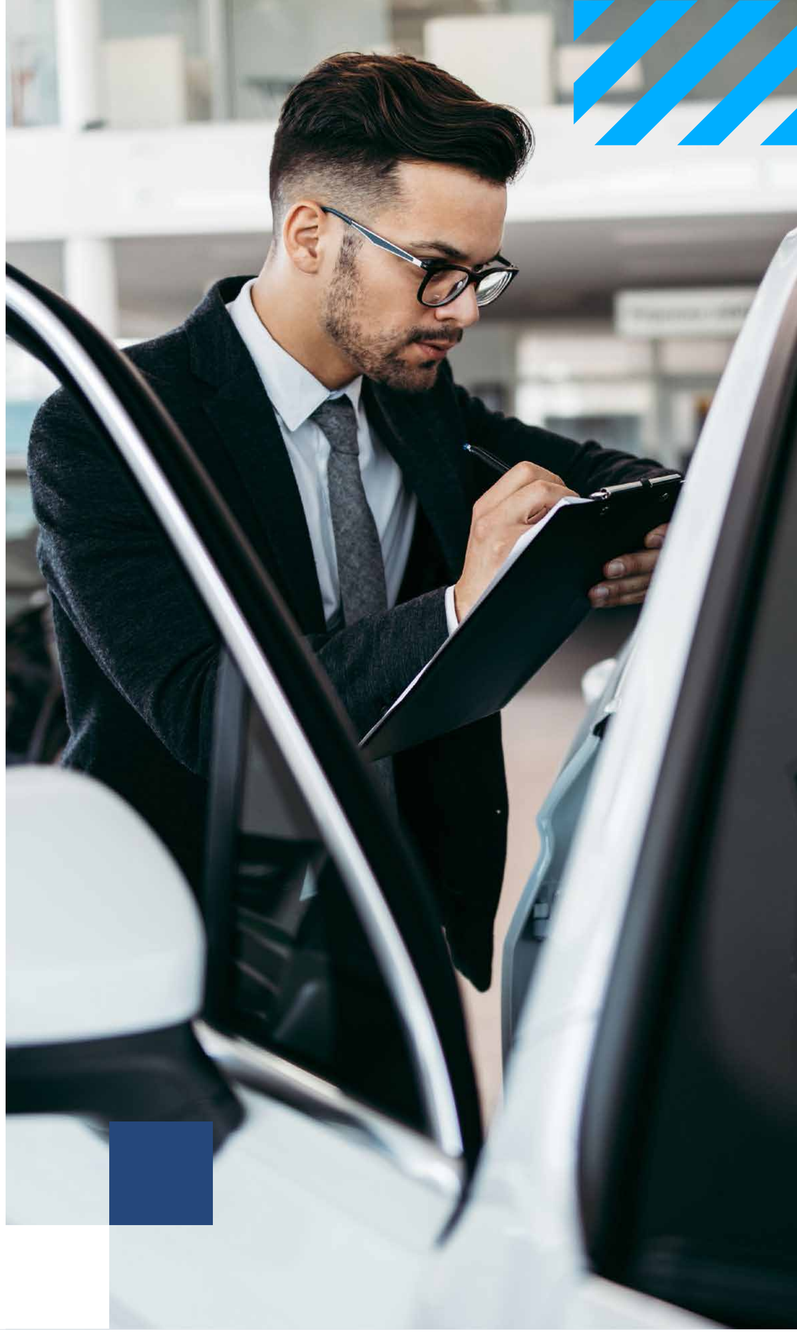
Your data is your oyster: Deciding what to do with your safety metrics

Each state and local government agency has different overarching objectives, and in turn, different safety program goals they need to achieve. Customization and automation with a fleet management solution will help you effectively reach the specific safety objectives your agency has.

Tailoring your telematics solution for a perfect fit (just like your favorite shoes)

The rules engine within a telematics platform offers unparalleled tailorability for fleets of all sizes, enabling you to begin taking action in your safety program faster. With custom rules around driving behaviors, routine maintenance schedules and more, you can set reasonable expectations based on your fleet's requirements and help keep vehicles in safer condition to drive. Identify the factors your fleet safety program prioritizes the most and set up specific rules to accommodate them. Once these rules are established, you can report on activities that occur in relation to them. Stay updated on any violations (such as speeding or harsh driving events) and ultimately enhance your fleet's safety even further.

Alert functionalities additionally help you keep a keen pulse on the real-time activities of your drivers and fleet vehicles. From establishing alert notifications around zone departures, vehicle diagnostic concerns or driving behaviors that could pose safety problems, your fleet managers are placed truly in the driver's seat of better fleet management. You can also choose how often you want to receive these vehicle alerts. Managers are able to select custom thresholds, which are designated parameters indicating how harsh an event needs to be for an alert to be triggered. Strengthen regulatory compliance and improve public perception of your agency's work by staying more in tune with the inner workings of your fleet. With the power of telematics, remain updated on how your drivers are driving in real-time and coordinate a more responsible convoy.



The name of the automation game: How real-time updates help uphold safety

Predictive analytics are integral for limiting risks in advance, but sometimes issues still come up in real-time that need to be corrected. This is one of the key areas where telematics shines. With real-time safety insights, agencies can easily set up alerts to get immediate notifications about minor and major collisions, dangerous unadvisable driving behaviors like speeding or harsh cornering, mechanical failures, thefts and more. By receiving alerts in real-time, you can immediately respond to critical events. In addition, capabilities like in-cabin coaching allow supervisors to positively encourage drivers on reducing harmful driving habits whenever they occur.

Real-time interventions have been proven to help agencies avoid potential incidents and effectively guide drivers. Of course, these are only a small part of the telematics innovations that help bring your employees home safely to their families each night. According to the Occupational Health and Safety Administration (OSHA), vehicle collisions **annually cost employers over $60 billion**. The U.S. Department of Energy also reports that aggressive driving habits can reduce fuel mileage by a **range of 10-40% in heavy traffic and by around 15-30% when vehicles are moving at highway speeds.**

The **City of Austin, Texas** slashed their vehicle collision rate and kept their drivers safer during a catastrophic winter storm using the power of Geotab data. With Geotab, they were able to reduce their fleet's collision rate, which had previously been at around 600 annually. "Having real-time visibility and insights on vehicle use and driver behavior is invaluable," said Rick Harland, Assistant Director of Fleet Mobility Services. **"Geotab makes it easy to take action on the data and insights provided. That's hard to beat and makes it easy to communicate value to executives and front-line employees."**

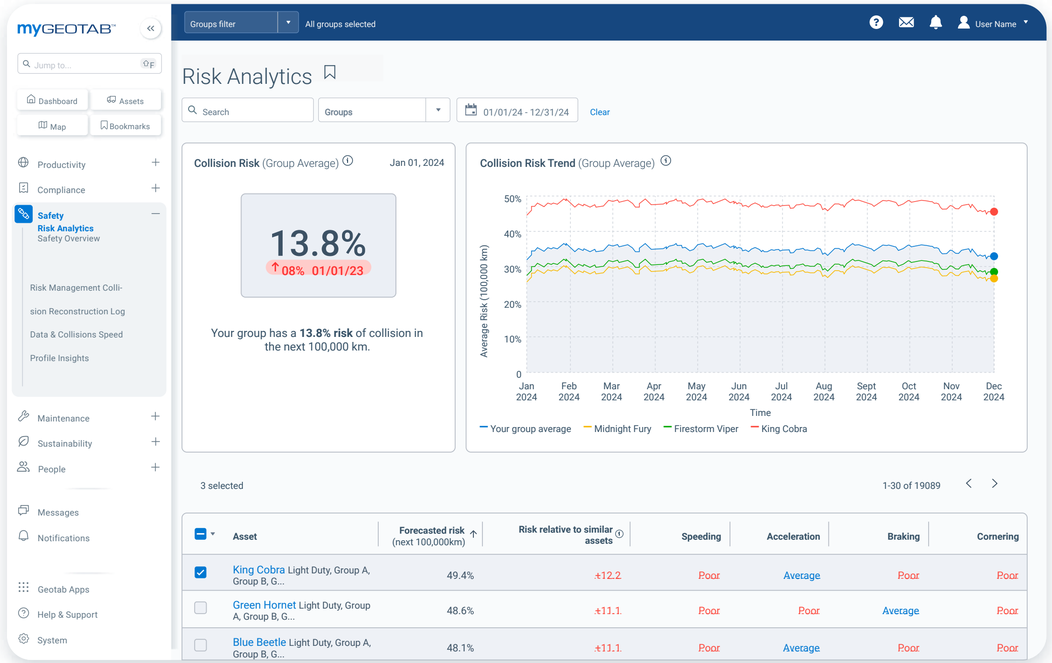
The **Franklin County Engineer's Office** in Ohio is committed to pursuing a Vision Zero future, an objective that seeks to rid the world of all traffic-related deaths and injuries. They chose Geotab to help them monitor individual drivers and their habits behind the wheel, giving them real-time insight that helped them limit dangerous driving behaviors such as not using seat belts, hard accelerations and speeding. Our individualized driver reporting helped them optimize safety in their fleet operations and make critical progress toward this goal. **"One of the selling points for Geotab was reporting," said Jeff Markusic, Fleet Superintendent for the Franklin County Engineer's Office. "The beauty of Geotab is that it can take into account that each class of vehicle has different operational realities."**

Geotab data enabled commercial vehicles to drive an average of **17% more miles without experiencing a collision in 2022.**

Raise the bar on decision-making using fleet data

Combining driver scorecard data with real-time insights and predictive analytics will supply your agency with all the fleet data it needs to facilitate its safety program. Geotab's platform isn't simply about integrating and accessing your fleet data occasionally; it's about embedding it into the DNA of your agency's workflows – efficiently, effectively and tailored to your team's evolving operational needs. Using fleet data to guide internal decisions around safety, vehicle maintenance and driver scoring can assist with cost-efficiency and maintaining a strong public image. Remain accountable by using fleet technology to demonstrate prudency with both safety practices and taxpayer dollars.

If you're wondering how to get your agency started on its safety program journey with telematics, Geotab makes implementation and data intelligence easy. After procurement, use our platform's Safety Center for a one-stop view of all your agency's pertinent safety analytics. See predictive collision rates, risk analytics and driver scorecard data all from a single dashboard, then make decisions based on the holistic information presented. The Safety Center makes it easy to diagnose the state of your current safety practices and monitor changes based on new policies you put in place.

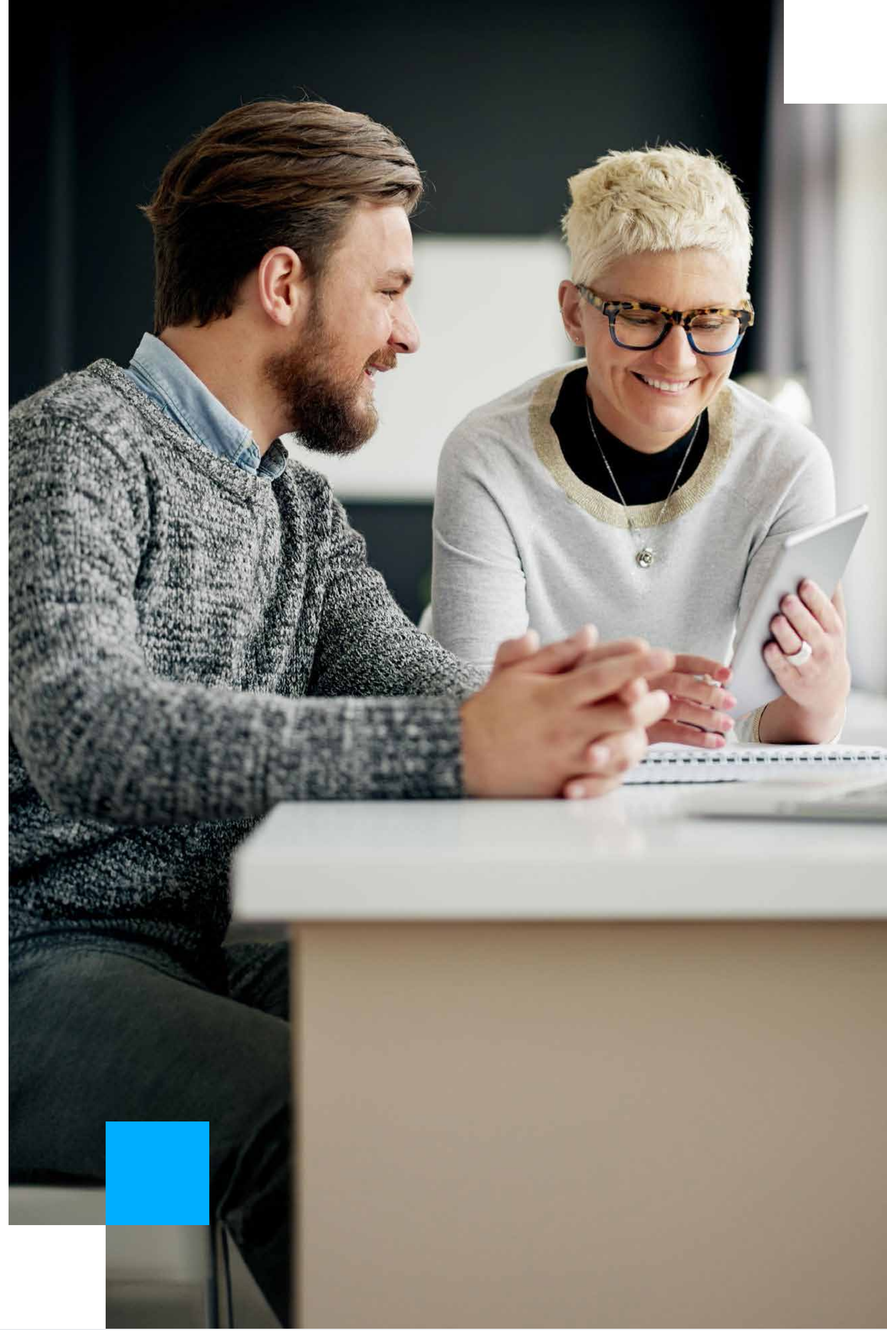


Data sharing is a breeze of a process with Geotab

In the Geotab platform, you can enhance operational decision-making by setting up different user views and access levels according to your agency's leadership hierarchy. Giving drivers access to view their own safety metrics and fleet managers or HR access to all driving data can help you set up a safety program that motivates employees at the driver level and allows supervisors to compare scores. If driver coaching is required, the GO Talk enables verbal feedback to be given to drivers in real-time while they're on the road. Lack of seat belt usage, driving through unauthorized locations, speeding or other observed unsafe driving patterns can be curbed with spoken-word intervention.

Safety information, real-time intervention and data sharing across departments keeps everyone always aware of what metrics are being measured. Providing drivers with individual statistics about their safety performance additionally keeps a safety-first culture top of mind throughout your entire workforce. Equip your agency with the technology needed to build a better safety program and enhance regulatory compliance, public perception and savings.

The **City of Raleigh** is changing the narrative around safety across its 4,700-vehicle fleet with Geotab. Using our platform, they doubled their fleet's global driver safety score in three months' time. **"We reduced our repair costs per vehicle, we reduced our at-fault motor vehicle accidents, we reduced our workers' comp-incurred costs," said Evan Sloan, Enterprise EHS & Workers' Compensation. "All of our departments working together, being engaged, understanding the importance of Geotab not being a Big Brother but a partner - making sure that we are doing what we need to do to be as safe as possible at work."**



CHAPTER 4

Lights, camera, action: Enhancing your fleet safety practices with ADAS and video telematics

An effective government fleet safety program can certainly be built strictly on a foundation of data, but for organizations that want to level up their safety strategies, Advanced Driver Assistance Systems (ADAS) and video telematics are available.

ADAS: **ADAS systems** help drivers maintain safe control of their vehicles by making them aware of possible issues or temporarily taking over the car's movement to prevent a collision. ADAS systems are made up of a unique combination of sensors, GPS, light detection tools and algorithms to determine when a dangerous event could be imminent, sometimes faster than human reaction time can process. Four of the most common ADAS use cases are:

- Detecting and preventing collisions.
- Helping drivers complete error-free parking.
- Maintaining proper lane positioning (lane departure systems were found to **decrease collisions by 11% and injury related traffic incidents by 21%**).
- Cruise control that adapts a vehicle's speed to the current flow of traffic.

Car manufacturers are increasingly equipping new vehicle models with ADAS systems to better protect both drivers and pedestrians. Geotab can work in tandem with these technologies to help your agency promote additional safety in its operations and boost fleet visibility.

Video telematics: One of the largest safety risks that some drivers engage in is following the car in front of them too closely. Also known as tailgating, this activity is dangerous because in the event of a sudden traffic slowdown, not having enough room to stop can result in a collision. To keep better track of how closely your agency's vehicles routinely trail those ahead of them, **video telematics** can help. Through AI dash cams, you can record road-facing video that helps you identify risky vehicle spacing patterns. If you notice that tailgating regularly occurs in your fleet, work to eliminate it by promoting more defensive driving by your employees. Additionally, using cabin-facing cameras can enable your managers to watch for and limit distracted driving in the fleet.

Geotab is partnered with best-in-class organizations who provide cutting-edge video telematics and dash camera solutions. With greater insight into what goes on in their vehicles as they're being driven, agencies are empowered to reduce dangerous driving.

In 2022, **3,308 lives were lost** due to distracted driving, according to the U.S. National Highway Traffic Safety Administration (NHTSA).

VTTI research indicates that texting while driving **increases the chances of a collision occurring by a multiple of 23**.

CHAPTER 5

Scoping out your options: How to choose a telematics provider

As an agency, it's important to know which telematics provider can meet your specific needs prior to selection. To position your agency for success when building a safety program, looking for the right technologies to help you do so starts with properly assessing the current state of your government fleet. After determining the safety challenges affecting your fleet, these are several of the most important boxes to check.

Checklist

Your must-have telematics safety features

- [ ] Industry benchmarking
- [ ] Driver scorecards
- [ ] Driver coaching
- [ ] Collision detection
- [ ] Predictive insights
- [ ] Risk analytics
- [ ] Collision reconstruction capabilities
- [ ] Real-time safety notifications
- [ ] Automated reporting features
- [ ] Camera & ADAS integration

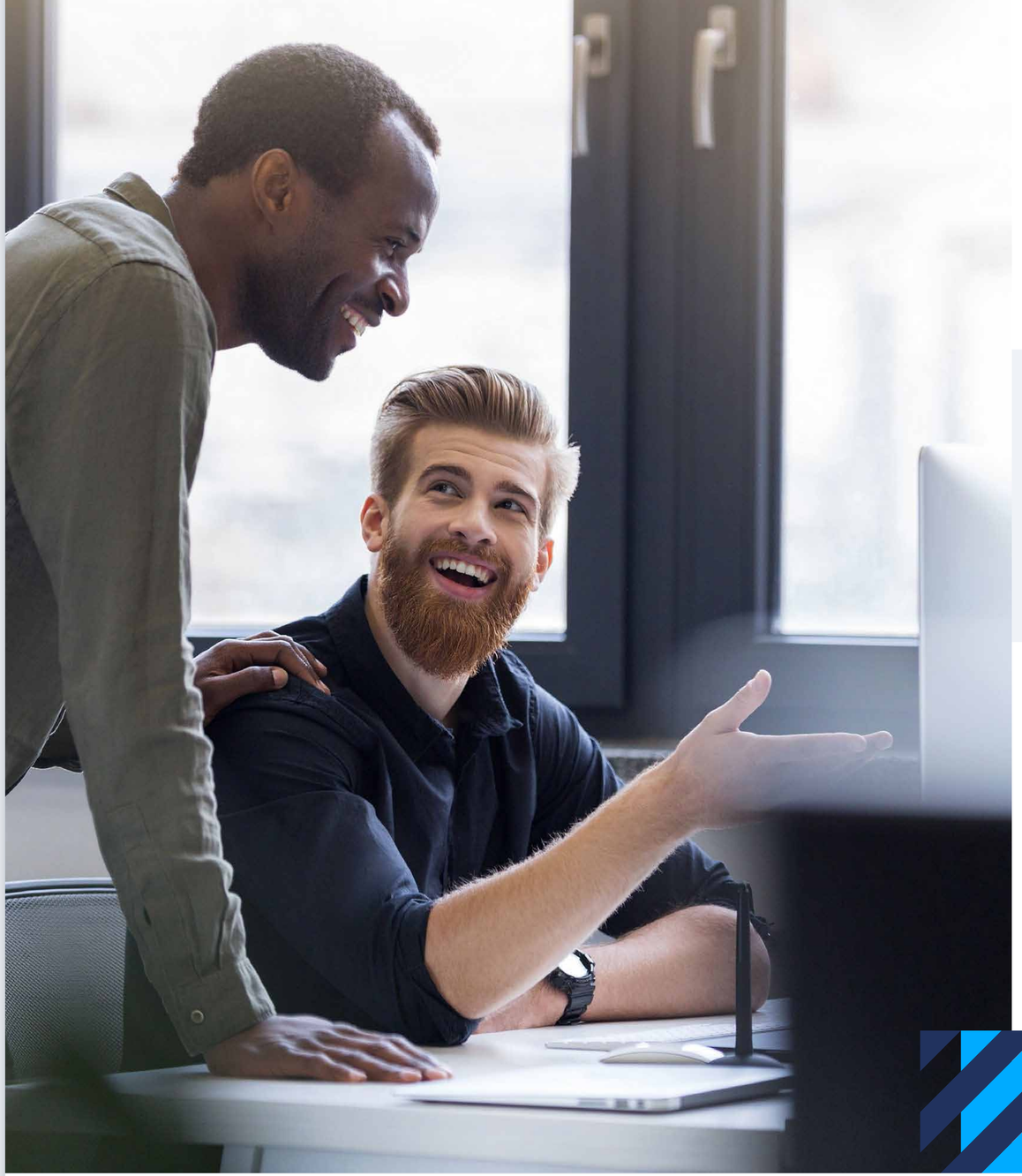
Other vital considerations

- [ ] Experience working with state and local fleets
- [ ] Purchasing agreements such as Sourcewell/NASPO or state-specific contracts
- [ ] Large ecosystem of integrated third-party solutions
- [ ] Customizable platform and configurable rules engine
- [ ] Hardware-agnostic
- [ ] Mixed asset management
- [ ] Open Software Development Kit (SDK)
- [ ] Curve algorithm
- [ ] Open APIs
- [ ] Data connector functionality

In summary, by leveraging a combination of detailed historical data, predictive insights and real-time alerts, you can effectively track the pulse of your fleet's safety both now and into the future. If you're searching for a telematics platform that factors in all of these considerations with a single solution, look no further than Geotab.

And the number one answer for a safer fleet is… Geotab

Geotab is able to fulfill all your agency's needs for building a safety program on a foundation of data. We bring over 23 years of experience as a telematics pioneer and innovator, with over four million vehicles tracked using our GPS technology. Our rich telematics benchmarks support better vehicle and driver safety across nearly **50,000 companies**. Geotab additionally uses cutting-edge predictive analytics to help government fleets diagnose and solve both granular and larger scale problems in their safety processes. Having served over 2,900 public sector customers and with over one million public sector subscriptions, we're proficient in helping government agencies leverage all the capabilities of innovative fleet technology to drive lasting success.



Our rich experience working with multiple agencies and departments at the local, state and federal levels also gives us a truly qualified perspective on how to best serve your government fleet. We're familiar with how long typical requestfor-purchase (RFP) processes can take, which is why we've secured purchasing contracts with **Sourcewell and NASPO ValuePoint**, as well as a number of statespecific contracts. These agreements help streamline telematics procurement for government entities by enabling them to bypass standard RFPs.

Geotab's single-source blanket purchase agreement with the State of California made it easy for **Sacramento County** to procure effective telematics. "The fact that Geotab provided the hardware and installation at no cost definitely helps us when pitching the solution to other departments," said Joe Trujillo, Sacramento County's Fleet Manager.

With the vast potential of telematics data, blaze a trail toward better safety for your government fleet. Geotab is ready to help you construct an impactful safety program that helps your agency meet its compliance, public trust and efficiency goals today.

Reach out to a Geotab solutions expert today to learn more about our telematics safety offering.

About Geotab

Geotab is advancing security, connecting commercial vehicles to the internet and providing web-based analytics to help customers better manage their fleets. Geotab's open platform and Marketplace, offering hundreds of third-party solution options, allows both small and large businesses to automate operations by integrating vehicle data with their other data.

The in-vehicle device provides additional functionality through IOX Add-Ons as an IoT hub. Processing billions of data points a day, Geotab leverages data analytics and machine learning to help customers improve productivity, focus on sustainability, optimize fleets by reducing fuel consumption, enhance driver safety and achieve strong compliance to regulatory changes. Geotab's products are represented and sold worldwide through Authorized Geotab Resellers.

To learn more, please visit **www.geotab.com** and follow us **@GEOTAB** and on **LinkedIn**.

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