Vehicle telematics (technology that wirelessly transfers data on and off a vehicle) is an increasingly important feature of today’s increasingly digital, connected and automated fleet.

A feature.

Telematic data enables lifesaving safety systems. It also helps automakers proactively identify potential defects and pinpoint resolutions.

**Why do automakers collect telematics data?**

Short answer: vehicle telematic data = occupant and vehicle safety, and customer convenience.

Long answer: vehicle telematic data supports the proper functioning of a vehicle and its onboard computer systems. It produces information that affirmatively improves safety, can help support compliance with government safety rules, and enables a range of (optional) connectivity and personalization features for customers.

*Yes, your vehicle is generating and transmitting certain safety data. That’s by design.*

*No, your car isn’t spying on you.*

**Auto Industry → Early on Privacy**

Back in 2014, the auto industry created a voluntary (and ahead of its time) set of Privacy Principles with significant and specific obligations for automakers related to transparency, choice, respect for context, data minimization (only collecting what is necessary), data security and accountability.

These industry-wide standards require even greater protection for particularly sensitive data, including location information (where a vehicle goes), biometric information (physical or biological characteristics), and driver behavior information (how a vehicle is driven).

Automakers are prohibited from using this sensitive vehicle data for marketing purposes or from sharing this vehicle data with third parties – without consent.
These principles are in effect TODAY and enforceable by the Federal Trade Commission (FTC), the government’s top consumer protection agency.

The auto industry also continues to support Congressional enactment of a federal privacy law with consistent protections for consumers across the country and consistent rules for automakers that build a product operating across state lines.

**Telematics → Occupant and Vehicle Safety**

Yes, data relating to the operation and functioning of a vehicle and its components may be collected by some automakers from vehicles to support the development and improvement of cutting-edge vehicle safety systems.

What kind of vehicle safety systems?

It’s a long list: Lane keeping assist. Blind spot monitoring. Crash avoidance systems like Automatic Emergency Braking. Pedestrian detection technologies. Automated safety features like parking assist. Highly automated driving systems. All features in modern vehicles and important to protect drivers, passengers and other road users.

Also on the list: technology that can help detect impaired or distracted driver or a child left unattended in the backseat of a vehicle. Some companies are even working on technology to detect *in real time* if a driver is experiencing a medical emergency while behind the wheel.

**Telematics → Safety Recalls**

Vehicle telematic data can be useful to government regulators like the National Highway Traffic Safety Administration (NHTSA) which oversees motor vehicle safety. The agency has acknowledged the value of this type of data for emergency response and to fulfill its safety mission.

*Letter to automakers (June 13, 2023) NHTSA wrote:* “…[T]elematics-based safety features could facilitate better emergency response in the event of a vehicle crash. Telematics data can also be an important source of information for safety oversight and field performance monitoring by the authorities and vehicle manufacturers.”

*NHTSA uses telematics data too:* “NHTSA often utilizes telematics data in its investigations, and the inability to obtain these data from vehicles with this capability undermines the agency’s ability to fully examine safety-related issues. In addition, some vehicle manufacturers have the ability to fix safety problems by remedying recalls through vehicle telematics, which will be lost if those systems are disabled.”
Telematics → Connected Services in the Vehicle

Data may also be collected and used to enable connected services in vehicles. These are optional convenience services enabled (and disabled) at a customer’s instruction. Think of a subscription service or the manufacturer’s app for roadside assistance or the ability to remotely start and warm the vehicle on a cold day from your phone.

Get specific. What kind of data is collected and how is it used?

Auto companies may be collecting operational and functional data from onboard computer systems and sensors. For example, the codes sent between the electronic control unit (basically an onboard computer) that controls the brakes and the electronic control unit that controls the transmission. Or the data transmitted from a sensor on the bumper to the vehicle’s Automatic Emergency Braking system.

Automakers may use this data to monitor how these technologies perform in order to support improvements or enhancements in next-generation systems. This sort of data can also help a manufacturer identify potential warranty issues or situations that may require a safety recall.

Companies may also collect data about where and how a vehicle is driven to improve advanced and automated vehicle features. Higher levels of vehicle automation rely on artificial intelligence trained with real world data. The ability to develop, enhance and integrate these safety systems depends on access to this type of vehicle data.

By the way, this improves safety for all road users (not just occupants of vehicles with these features).

And for connected services, companies may collect data to support the proper operation of those services. For example, if a customer subscribes to a service that provides periodic vehicle health reports, the automaker may collect data about the vehicle’s health (mileage, fuel level, tire pressure, etc.) to provide the customer with these helpful vehicle health reports.

Yeah, but I heard automakers are tracking everywhere I go. Why?

GPS data supports a variety of advanced safety features. For example, some automated features may use precise location information to identify the lane on the road where the vehicle is traveling. These features need to understand where a vehicle is at any given time – to prevent it from veering into the wrong lane.

And automakers are increasingly offering drivers and passengers location-based connected services that require access to real time location data.

This could include features that help efficiently navigate to a destination, that automatically send emergency responders to the scene of a crash, or that help vehicle owners locate a vehicle if it’s been stolen.
But I heard automakers go beyond that and collect data on my weight and vital signs. True?
Yes, some automakers may collect this type of information. But why? Again, to inform the proper functioning of the vehicle and its system.

This is important. Think about the context.

Here’s an example: weight information can activate sensors that notify the vehicle to issue a seat belt warning or control the inflation of an airbag. Sensors that monitor the subtle movement of a chest going up and down (indicating breathing) can detect a child left in a hot car. Heart rate monitors in a steering wheel or a seat belt can sense if a driver is experiencing a medical emergency or in need of emergency services following a crash.

This doesn’t mean automakers are collecting Jane Doe’s personal weight. The collected information isn’t connected to any specific or particular individual... just an unidentified individual in the vehicle at a moment in time.

Also important context... this sort of data generally stays on the vehicle. More on that later.

I heard automakers are constantly recording me in my vehicle. Why?
No, not recording every movement. But yes, modern vehicles are increasingly equipped with cameras – inside and outside the vehicle. Again, think about the safety applications.

In-vehicle cameras may support occupant safety features, like systems to warn a driver when they are distracted, drowsy or inattentive, or to detect a child left unattended in the backseat of a vehicle. These cameras can also support new theft prevention features, allow parents to set controls (like limits on speed and audio volume), or allow drivers to start a vehicle without a key fob.

This is important: in-vehicle cameras don’t capture all images all of the time. They may start recording only when a particular feature is active.

For example, the camera supporting a driver engagement monitoring system (a system that makes sure the driver is paying proper attention to the roadway) might “kick in” when the driver activates an advanced driver assistance system. And an occupant safety camera system might “click on” when the driver exits the vehicle.

Exterior vehicle cameras support advanced crash avoidance features and higher levels of automation. When these features are in use, the vehicle constantly monitors the roadway for vehicles, pedestrians and other objects. Think of the cameras as the vehicle’s ”eyes.”

Some vehicle features also require microphones. This includes hands-free systems so drivers can make phone calls, send voice-to-text messages or change the radio station – allowing drivers to keep focused on the road. Microphones also support (totally) voluntary connected
services for drivers to connect with a LIVE operator for navigation assistance or with first responders following a crash or other emergency.

**So is all of this data transmitted off the vehicle to automakers?**

No. Not all of the data is transmitted off the vehicle to the auto company. Some of it stays on the vehicle. For example, camera data that supports driver engagement monitoring or occupant detection systems generally stays on the vehicle. Same for the weight data that helps control the inflation of the air bag.

**Context, context, context**

Automakers are complying with privacy principles – TODAY. Principles enforceable by the FTC.

Automaker privacy policies are publicly available online with information about how vehicle data is collected and used. Yes, some of these policies might be a little confusing, accounting for incidental collection and inferences drawn from, for example, where the vehicle may have traveled.

Blame the lawyers, but that’s to ensure manufacturer compliance with notice obligations in the growing patchwork of state privacy laws on health information, biometrics, and others. (Again, a single federal standard is urgent). Pay close attention to whether the privacy policy says “may collect” instead of “is collecting.”

*Telematic data enables lifesaving safety systems, allows automakers to proactively identify defects and pinpoint resolutions, and helps comply with government regulations.*

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