GEOTAB®

How local government agencies solve fleet challenges with telematics





A solution for government fleets of every size and function

From the smallest municipal fleets to the largest, most diverse state fleets, Geotab is helping government agencies achieve their goals of safety, sustainability and efficiency. The range of possible telematics implementations is limited only by agencies' needs, but the broad focus areas include the following.

First responders

Under constant pressure to reduce response times while still protecting employee and citizen safety, emergency fleet management is a delicate balancing act. Geotab offers Active Tracking, allowing dispatchers to follow emergency vehicles in realtime, and can integrate with sirens, lights and other emergency vehicle equipment.

Winter operations

Optimizing winter maintenance fleets means using the fewest vehicles and smallest amount of material necessary to keep roads safe and clear. Geotab automates lengthy workflows, streamlines dispatch and monitors material usage.

Water utilities, power utilities and sanitation

Managing utility fleets is inherently challenging because they're often moving between job sites, often in relatively harsh conditions. Geotab delivers complete visibility and tracking of the mobile workforce, offering a rugged telematics device designed for reliability in challenging environments.

Smart cities

The future of urban planning lies in connected devices. Vehicles equipped with telematics are ideally positioned to be smart city sensors, and Geotab enables governments to use their fleets to make cities safer, more efficient and sustainable.

Car sharing and motorpools

The car-sharing trend in government fleet management is growing alongside next generation shifts such a electric vehicles and self-driving cars. Geotab fleet tracking and digital key solutions provide vital data and access/management tools to effectively run a shared fleet.





Geotab Public Works

Geotab Public Works is a scalable solution that makes it easy to manage fleet performance, effectiveness and compliance. From salt spreaders and snowplows to street sweepers and waste management trucks, fleet managers can know exactly where and how each vehicle is operating.

- Captures and analyzes information from the controller for detailed material usage monitoring
- Provides real-time route completion tracking for compliance and public accountability
- Allows real-time visibility of all assets for efficient dispatching



Geotab Keyless

Geotab Keyless offers secure vehicle access for pooled and shared fleets – even when vehicles are out of cellular coverage. Built on top of Geotab's telematics platform, it's a scalable digital key solution that's compatible with all vehicles that have a key fob.

- Ensures convenient, secure keyless access
- Offers protection features such as starter inhibit functionality
- Integrates with shared mobility reservation software solutions

Geotab at work

New York City Fleet Size: 30,000

Using telematics to achieve Vision Zero

New York City first adopted telematics to increase fleet efficiency in areas such as fuel economy, dispatch and route optimization. Then they launched Vision Zero – an initiative to eliminate all traffic fatalities and severe injuries – in 2014. Telematics data has played a critical role in the success of this ambitious program.

- Monitors fleet drivers' behavior to create custom scorecards and driver education
- Delivers information about road quality (potholes, cracks) that affect safety
- Assesses the before/after safety profile of street improvements and redesigns

New York has seen a 75% reduction in fatal traffic events over 5 years.

"We are currently tracking 22,000 vehicles real-time using telematics to monitor their speed, location, acceleration, braking, and by doing that prevent crashes from taking place."

Keith Kerman, Chief Fleet Officer, Deputy Commissioner, Department of Citywide Administrative Services





Madrid City Council Fleet Size: 19

Capturing critical data for a new EV fleet

As part of a larger initiative to promote cleaner urban transport, Madrid City Council incorporated EVs into its fleet. With Geotab, they gathered key data to better understand EV fleet operations and compare it with regular combustion vehicle fleets.

- Delivers insight on charging sessions to help eliminate charging during peak hours
- Detects under- or over-used vehicles to right-size the EV fleet
- Correlates climate condition data with average energy consumption

The fleet of 19 EVs has reduced CO2 emissions by 60%.

"Working with Geotab has allowed us to realize that you cannot manage an electric fleet without telematics technology. The real and remote data are key to be able to analyze the state of each vehicle and improve in terms of efficiency and sustainability."

Enrique García, Technician of the Department of Climate Change for Madrid City Council

State of Utah Police Fleet Fleet Size: 4,700

Improving police vehicle utilization

The State of Utah Department of Corrections knew there were under-utilized vehicles in its fleet, but it lacked the hard data to confidently downsize. With Geotab, it was easy to access detailed vehicle usage data.

- Breaks down tracking into on-duty versus off-duty and time spent in pursuit mode
- Integrates with emergency lights, sirens and other police equipment
- Maintains a historical record of vehicle use, including individual drivers

So far, Utah has downsized its police fleet by 60 vehicles.

"Geotab gives us a clear picture to better understand cost-saving measures, and make smart decisions based on what our needs are."

Dan Black, Fleet Manager, Department of Administrative Services, Division of Fleet Operations



Sacramento County Fleet Size: 2,900

Saving money by streamlining fleet operations

Sacramento County needed reliable data beyond mileage – to help right-size its fleet and reduce operational costs. Procuring Geotab was simple, thanks to the singlesource Blanket Purchase Agreement with the State of California. As an added benefit, Geotab is approved for participating in the California Bureau of Automotive Repair's (BAR) Continuous Testing Program for smog checks.

- Uses automated smog checks to avoid downtime and cost of in-person checks
- Leverages flexible, low-cost keyless hardware add-on to enable car sharing
- Delivers TCO and vehicle utilization data to help reduce unused vehicles

Sacramento County avoids costly downtime and lost utilization and saves \$50 per vehicle with automated smog checks.

"Geotab provides us with reliable data to help us make data-driven decisions on TCO and utilization, with the goal of best business practices in fleet management."

Keith Leech, Chief, Fleet Division & Parking Enterprise at Sacramento County

Kentucky **Transportation Cabinet** Fleet Size: 5,000

Increasing accuracy in state's winter operations by eliminating paperwork

Human error is inevitable when fleet drivers are tasked with vehicle service paperwork or measuring material usage. The Kentucky Transportation Cabinet uses Geotab insights for more precise maintenance and material (salt, brine and other materials) management in winter operations across the state.

- Allows vehicle health tracking from management level
- Integrates with spreader controllers for accurate material usage measurements

Increased accuracy has led to improved record **keeping for the Kentucky Transportation Cabinet.**

"Before Geotab, we weren't doing much record keeping around how much material goes to a certain route. When we loaded the trucks, we were measuring with scoops, which are different depending on who you ask, so this will help with accuracy."

Randi Feltner, Kentucky Transportation Cabinet Transportation Engineer Specialist



Town of Blacksburg Fleet Size: 400

Moving from assumption-based to data-based decisions

The Town of Blacksburg used to rely on rough measurements and manual observation to determine how much salt its fleet used for winter operations. With Geotab, management can now make decisions based on real-time data, even in a rural area with connectivity issues.

- Enables consistent uptime by using the cellular carrier with the best coverage
- Offers IOX add-ons for monitoring material usage in winter operations
- Delivers automated, customized reporting for increased transparency

In just one year, the Town of Blacksburg has seen significant savings during snow events.

"During snow events, we didn't have the technology to show us how much salt was being spread onto our roadways. We compared the numbers this past season with previous winters and have seen significant savings in terms of materials."

John O'Shea, Safety and Special Projects Manager for the Town of Blacksburg Department of Public Works



Natural Resources Canada Fleet Size: 1,237

Assessing the viability of electrification

As part of Canada's commitment to reduce emissions from government fleets, Natural Resources Canada needed to understand the variables associated with switching to EVs. Geotab's Electric Vehicle Suitability Assessment (EVSA) provided the vital data to guide this transition.

- Analyzes detailed daily vehicle usage data to determine which vehicles were best suited to switch to EVs
- Recommends best available EV model options based on fleet requirements
- Forecasts decrease in fuel consumption and greenhouse gas emissions

The assessment identified a potential savings of \$1.3M across the lifetime of the new electric fleet and a 30% reduction in greenhouse gas emissions.

"The EVSA was a very valuable exercise. Thanks to the analysis, departments have more confidence in acquiring EVs."

Yves Madore, Senior Officer, Transportation and Alternative Fuels, Natural Resources Canada

City of Spokane Fleet Size: 1,000

Digitizing a manual waste management operation

Until very recently, City of Spokane waste management staff filled two full boxes with paper records - including route sheets every week. To digitize and boost the overall efficiency of operations, the city implemented a joint solution with Geotab and Geotab Marketplace partner Rubicon.

- Automates previously manual processes for improved efficiency
- Saves thousands of hours of cumulative staff time
- Optimizes routes and integrates with the city's billing system

The City of Spokane is now saving up to \$25,000 per year on printing costs.

"The savings in printing and paper costs alone are in the thousands of dollars per year, plus we're reducing our environmental footprint."

Erica Jacobo, Senior Continuous Improvement Analyst for the City of Spokane

Missouri Department of Transportation Fleet Size: 5,036

Maximizing data value with a statewide telematics solution

The Missouri DOT needed to break down information silos created by multiple telematics solutions from separate vendors. By adopting a single, centralized Geotab platform, they can capture information statewide and maximize the full potential of the data gleaned from fleets across 114 counties.

- Delivers "heat sensor" map overlays for driver congestion
- Provides visibility into mobile workforce in areas such as fuel usage and driver behavior
- Enables automated vehicle location services, dispatch, and vehicle diagnostics

In 2019, MoDOT's Central **District's 225 snowplows** racked up roughly 1,000 miles per vehicle during a single snow event that lasted 48 hours. By sharing this data with senior leadership and the media, MoDOT demonstrated they were out in full force making highways safe.

"Geotab has provided us with a system to manage the safety, productivity and utilization of our diverse fleet."

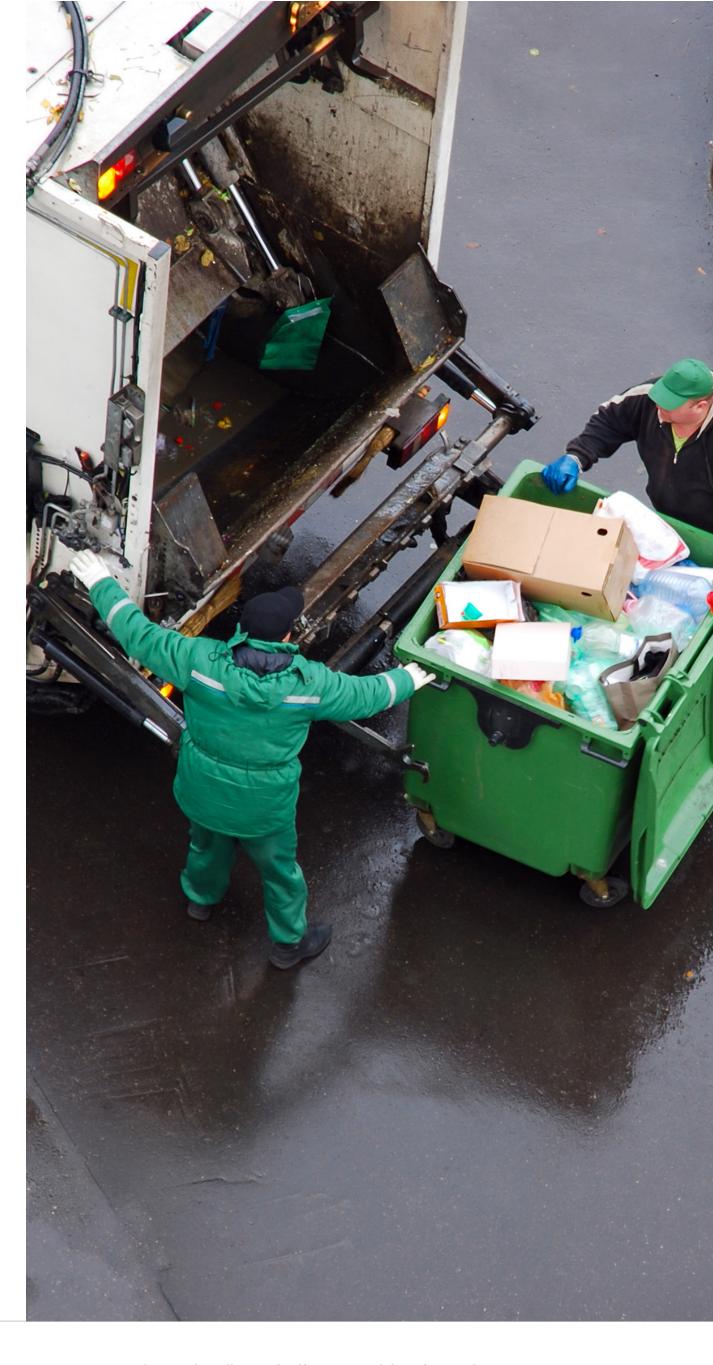
Paul T. Denkler, P.E. assistant district maintenance engineer for MoDOT's Central District and team lead for MoDOT's AVL/GPS group

City of Phoenix Fleet Size: 10,000

Optimizing water and waste management fleet

Aiming for greater efficiency, safety and cost-effectiveness, the City of Phoenix implemented telematics in all types of municipal vehicles (light/medium/heavy duty and electric). Now the city can combine realtime data with current business intelligence systems for more informed decision-making.

- Automates previously manual processes for improved efficiency
- Saves thousands of hours of cumulative staff time
- Optimizes routes and integrates with the city's billing system



California Department of Conservation Fleet Size: 120

Improving driving behavior and efficiency by 100%

With safety top of mind, the California Department of Conservation (DOC) switched to Geotab and saw a 100% improvement in driver behavior. Thanks to Geotab's real-time reporting, the DOC team is notified of incidents immediately and drivers can now be cued to correct their driving behavior with audible warnings.

- Enables automated monthly mileage reporting to free up resources
- Provides real-time data and customized reports
- Allows driver-centric behavioral corrections to improve safety

Once Geotab was chosen the switch happened quickly, thanks to Geotab's statewide approved vendor **contract with the State** of California. All 120 of the DOC's vehicles were equipped with Geotab devices just six months after the decision was made – well ahead of the original goal.

"When we heard the pitch and what it could do, choosing Geotab was a no brainer. Still, I was surprised at how easy the transition really was."

Paula Hutchinson, California Department of Conservation Fleet Administrator

City of Seattle Fleet Size: 4,100

Driving forward with sustainable solutions for fleet management

The City of Seattle chose Geotab to help meet their ambitious goals of cutting carbon emissions 50% by 2025 and being fossil fuel free by 2030. To start, Geotab helped the city determine which of their fleet vehicles could be swapped with EVs and provides accurate data about EV electricity use for EVs already in the fleet. The team in Seattle relies on Geotab telematics to better understand and measure the fleet's total cost of ownership and evaluate the actual utilization of takehome and other vehicles.

- Reports EV kilowatt hours (kWh) to help measure electricity as a fuel and identify savings
- Provides robust telematics data for both conventional vehicles and EVs to ensure full fleet coverage
- Identifies which fleet vehicles are best suited to replace with EVs

The data-rich Geotab system has been critical in reporting sustainability progress for the City of Seattle.

"We want to use telematics on every vehicle. We looked at other telematics providers. Nobody has what Geotab has. The real eye opener for me was the big picture. I saved \$2 million in fuel and spent only \$100,000 on electricity."

Philip Saunders, Deputy Director of Logistics and Emergency Management and the Green Fleet Program for the City of Seattle



Ministry of Transportation Ontario Fleet Size: 6,170 vehicles

Modernizing fleet management for the whole lifecycle

The Ministry of Transportation Ontario (MTO) fleet is made up of a variety of vehicle types, including over 1,000 hybrid electric vehicles. There are two primary groups of users within this fleet of vehicles: the motorpool fleet used by various ministry employees through their vehicle reservation system, and the general fleet distributed across the province through various departments. The core use cases of the telematics system for MTO are to:

- Deliver crucial fleet data to internal fleet management systems to ensure effective, well-maintained vehicle services are available to a wide range of government clients and to eliminate employee downtime during these services.
- Automate total lifecycle management for vehicles, from selection and up-fitting to rightsizing, repair and disposal. This provides the data required to perform fleet utilization analysis to identify areas of efficiency or reduction.
- Utilize driver scorecards to improve the overall safety record of government employees operating vehicles.





State of Utah Fleet Size: 4,700

Reducing key fleet costs and increasing safety with telematics pilot study

The State of Utah conducted a one-year pilot study with Geotab to determine whether telematics could deliver quantitative and qualitative benefits in the focus areas of fuel, maintenance, collisions and utilization.

- Gathers and analyzes data on idling, speeding and other fuel consumption factors to inform driver education
- Monitors engine alerts, low-battery lights and more for targeted maintenance
- Tracks seat belt usage and driver behavior to assess safety

The average MPG increased by approximately 2 MPG, representing an 8% improvement. Annual maintenance costs decreased by \$90,000. **First-party collisions** costs declined by 21%.

"Our governor limits idling, but we couldn't know if people were doing it. I was really surprised at how much idling our drivers were doing and how easy it was to affect change."

Eric Gardner, Motor Pool Manager for the State of Utah

Arlington County Fleet Size: 475

Increasing operational efficiency and accuracy

Arlington's fleet-related jobs were often managed with spreadsheets, which required slow and frequently labor-intensive updates. The County required a wider view that offered more insight into their fleet operations. Geotab's telematics solution offered the right combination of tools for efficiency and flexibility to automate their processes.

The Geotab solution helped the County with a number of aspects across its operations including:

- Monitoring for vehicle idling, health and DVIR completion
- Driver safety and benchmarking
- Reliable fuel monitoring

The Geotab solution has allowed the County to do regular benchmarking of its vehicles. It is helping to shape employee productivity by creating a clear record of the most effective work methods.

"We can see where things stand now by looking at past history, routing and more. From an operational standpoint, Geotab has been very helpful."

Ben Baldwin, Safety Specialist for Arlington

Franklin County (Ohio) Fleet Size: 176

Achieving Vision Zero safety goals

The Franklin County Engineer's Office has a major safety priority as part of the City of Columbus' commitment to Vision Zero, a worldwide initiative to eliminate all traffic fatalities and severe injuries. Telematics helped achieve this goal by:

- Setting driver safety benchmarks
- Monitoring speed and idling
- Reporting on vehicle type and driver identification
- Recognizing opportunities for driver training

Being able to pinpoint who is driving each vehicle has allowed the team to identify those teammates who need additional help or training.

"We have gotten a really good response. We give attention where it's needed. I think the teammates appreciate it."

In addition to coaching drivers, the reporting is used to determine awards for the safest drivers.

Markusic sees this safety focus – from monitoring speeding to keeping tabs on idling – in a larger context.

"We really just want to do everything right, he says. We want to be a model for the community. Geotab has given me a really powerful tool to manage the fleet."

Jeff Markusic. Fleet Superintendent for Franklin County Engineer's Office



City of Austin Fleet Size: 7,100

Managing fleets with telematics during a once-in-a-century storm

Looking for ways to cut costs, improve efficiency and increase its safety profile, the City of Austin discovered the telematics solution from Geotab would prove to be an invaluable tool for not only achieving those goals but also helping the city battle through during Winter Storm Uri in February 2021 by assisting in tracking critical fuel supplies.

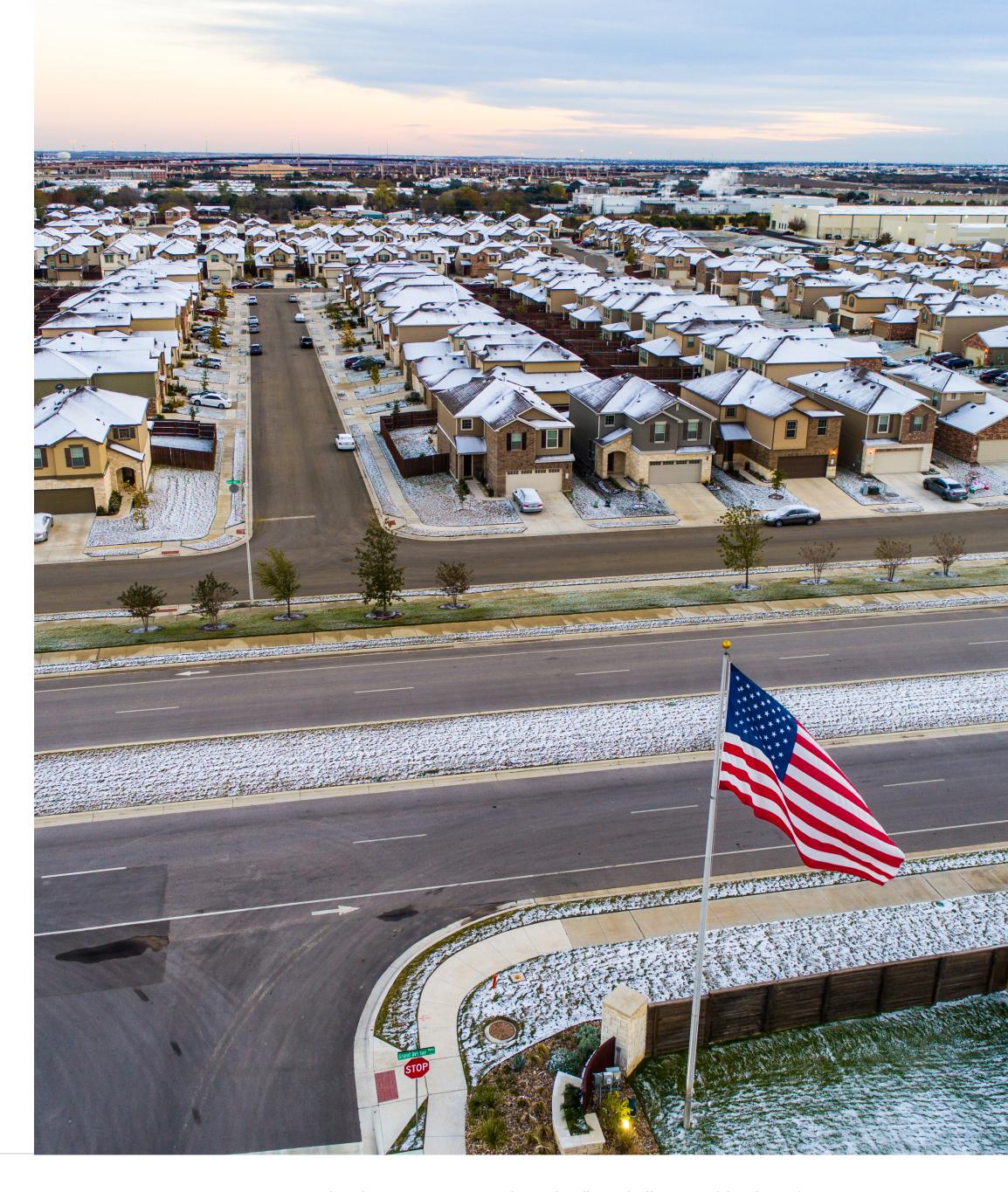
In addition to its benefits during an emergency, Geotab's solution is also helping the City of Austin tackle other operational activities like:

- Reducing accidents and influencing driver behavior
- Focusing on predictive and preventative maintenance
- Right-sizing the fleet by identifying under utilization
- Reducing greenhouse gas emissions through anti-idling data

Following Winter Storm
Uri, Rick Harland,
assistant director of Fleet
Mobility Services made a
presentation to the Austin
City Council highlighting
how telematics was
integral to successfully
meeting the challenge the
ice storm presented.

"I showed them what it looked like live, he recalls. I showed them a fuel truck and took one example of how it supported the city and private infrastructure. That story brought home the overwhelming value of telematics in a meaningful way. It illustrated the value of the system itself."

Rick Harland, Assistant Director of Fleet Mobility Services



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Discover what our data can do for your fleet at geotab.com/government