



How to tackle unpredictable fuel costs and increase fuel efficiency with telematics

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For many companies, fuel consumption and related costs are a top priority. Fuel remains one of the largest expenses for fleets, with [fuel accounting for 60% of total fleet operating costs](#). In fact, fuel is often the number one expense fleets track.

As [gas prices fluctuate](#), there is even more pressure on managers to control costs while still maintaining operations and keeping customers happy. This is where technology can help. By connecting to telematics, fleets can clearly see where their dollars are going, and identify and limit wasteful behaviors.

If you are looking to get a quick understanding of how and when fuel is consumed and if fuel is being wasted, T-Mobile® for Government has partnered with Geotab to offer a ready source of detailed and historical information on fuel trends.

Included in the fleet management solution are a number of free reports and dashboards designed to help you increase fuel efficiency and manage fuel costs. Here are our top three recommendations.



Fuel and EV Energy Usage Report

The **Fuel and EV Energy Usage Report** in MyGeotab summarizes fuel economy, distance traveled, and monthly fuel usage across a chosen time period. The report can be filtered by vehicle or time period.

This free report helps fleet managers identify the fuel efficiency and performance across the whole fleet or specific vehicles. You can examine the fuel economy of your assets and determine the action needed to improve efficiency and manage costs through improving driver behavior or targeting maintenance.

Options ▾ Sort by: Asset ▾ Fill Up EV Charging Report ▾

Fuel and EV Energy Usage Show Help

Device	Fuel economy/Electric e...	Fuel used	Energy used	Date	Distance
'babyMover					
1 'babyMover	15.76 MPG (US)	0.31 gal		10/01/21 12:00:00 am – 10/01/21 11:59:59 pm	5 mi
2008 Honda Civic Grandtheft					
1 2008 Honda Civic Grandtheft	36.39 MPG (US)	1.36 gal		10/01/21 12:00:00 am – 10/01/21 11:59:59 pm	49 mi
2 2008 Honda Civic Grandtheft	28.41 MPG (US)	0.54 gal		10/02/21 12:00:00 am – 10/02/21 11:59:59 pm	15 mi
3 2008 Honda Civic Grandtheft	40.26 MPG (US)	0.39 gal		10/03/21 12:00:00 am – 10/03/21 11:59:59 pm	16 mi
4 2008 Honda Civic Grandtheft	8.72 MPG (US)	0.03 gal		10/04/21 12:00:00 am – 10/04/21 11:59:59 pm	0 mi
2009 Subaru Forester					
1 2009 Subaru Forester	24.72 MPG (US)	2.83 gal		10/01/21 12:00:00 am – 10/01/21 11:59:59 pm	70 mi
2 2009 Subaru Forester	24.21 MPG (US)	2.60 gal		10/02/21 12:00:00 am – 10/02/21 11:59:59 pm	63 mi
3 2009 Subaru Forester	16.82 MPG (US)	0.24 gal		10/03/21 12:00:00 am – 10/03/21 11:59:59 pm	4 mi

A sample of the Fuel and EV Energy Usage report.

A photograph of two men standing outdoors in front of a red fire truck. The man on the left is wearing a green button-down shirt, blue jeans, and a green baseball cap. He is pointing at a tablet held by the man on the right. The man on the right is wearing a denim jacket over a light blue shirt, dark pants, and a dark blue baseball cap. They both appear to be focused on the tablet. The background shows the side of a fire truck with various equipment and ladders.

A fill-up event is defined as anytime fuel is added to the vehicle. The report will show you a brief summary, including total fuel added and total cost, for the time period you select.

This valuable fleet report can point you to unmatched fuel transactions that need further investigation. You can also use this telematics data to validate fuel transactions.

Fill-Ups
Total items 88

Date	Address	Device	Driver	Fuel used
babyMover				13.05 MPG (US)
10/01/21 11:08:18 am		babyMover	Unknown Driver	13.05 MPG (US)
2008 Honda Civic Grandtheft				33.57 MPG (US)
10/04/21 4:38:36 am		2008 Honda Civic Grandtheft	Unknown Driver	33.57 MPG (US)
2009 Subaru Forester				24.69 MPG (US)
10/05/21 8:19:42 pm		2009 Subaru Forester	Unknown Driver	24.69 MPG (US)
2012 MBLS				17.12 MPG (US)
10/03/21 1:49:11 pm		2012 MBLS	Unknown Driver	17.12 MPG (US)
2018 Ford Edge SEL				15.33 MPG (US)
10/02/21 10:45:33 am		2018 Ford Edge SEL	Unknown Driver	15.33 MPG (US)
2018 Lincoln MKX				17.59 MPG (US)
10/01/21 9:55:31 am		2018 Lincoln MKX	Unknown Driver	13.43 MPG (US)
10/07/21 10:16:10 am		2018 Lincoln MKX	Unknown Driver	18.24 MPG (US)
Zarabety				29.44 MPG (US)


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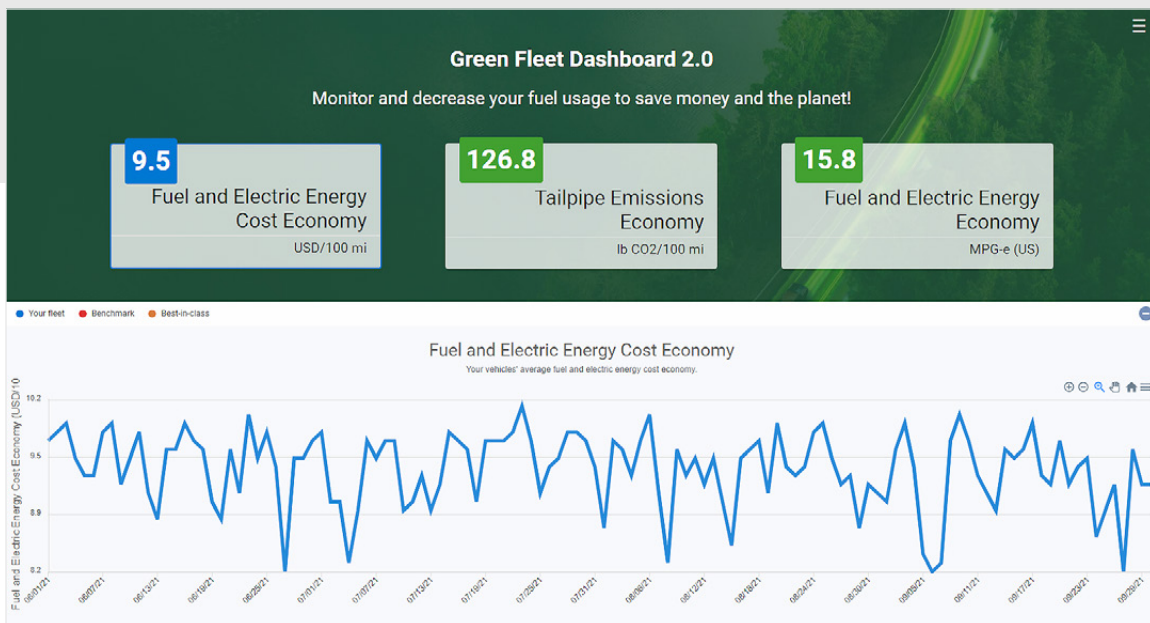
Green Fleet Dashboard

The [Green Fleet Dashboard](#) monitors your fleet's performance in improving fuel economy and reducing emissions. Available for free on the Geotab Marketplace, the Green Fleet Dashboard allows you to monitor your fleet's average fuel energy usage, cost, and resulting emissions on a total or economy basis.

Having a holistic view of fuel usage provides excellent insight to inform fleet fuel policies and coaching on fuel-efficient driving.

Benefits of the Green Fleet Dashboard:

- View trends in average fuel and electric energy usage, cost, and CO² emissions
- Benchmark your fleet's fuel economy to other similar fleets
- Monitor the performance of battery-powered electric vehicle (BEV) and plug-in hybrid electric vehicle (PHEV)
- Track idling time, harsh driving events, and charging exceptions
- Establish ways of improving cost and emissions by analyzing idling history and patterns



The Green Fleet Dashboard 2.0 reveals fuel and electric energy cost economy trends.

Custom Fuel Reports from the Marketplace

Beyond the reports included within the platform, fleets can also access a variety of customized reports available for purchase through the Geotab Marketplace, including:

1. Weekly Idle Cost Trend Report:

Track idling costs over time with trend analysis and monitor the effectiveness of efforts to reduce wasted fuel use.

3. Last 3 Months Fuel Trend Report:

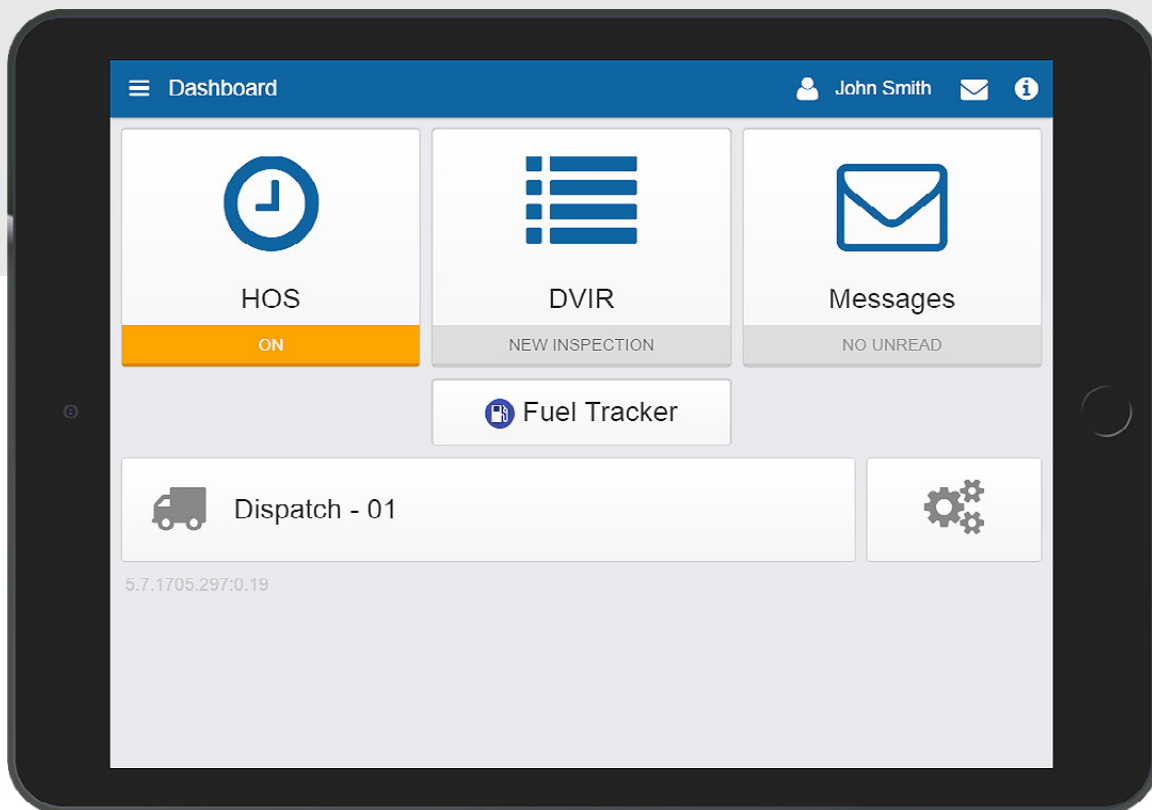
Track fuel use over a longer period to take a broader view of policy changes and efficiency improvements.

2. Average Fuel Economy Report:

Visually display the fuel economy of your fleet and assess at a glance your fuel economy performance.

4. Fuel Tracker:

A simplified way to track fuel cost, cost per fill-up, monthly fuel spending, and the fill-up location.



Fuel Tracker can be added to Geotab Drive to enter fuel purchase details.

**Visit the Marketplace to access these fuel tools and
explore integrated Partner solutions for fuel management.**

More strategies for improving fuel efficiency

Having the right tools can go a long way to improving overall performance—but it's important to make sure you're using them to their full potential. To help your fleet optimize fuel consumption, consider implementing these strategies:

Compare fuel usage trends for bigger fuel wins

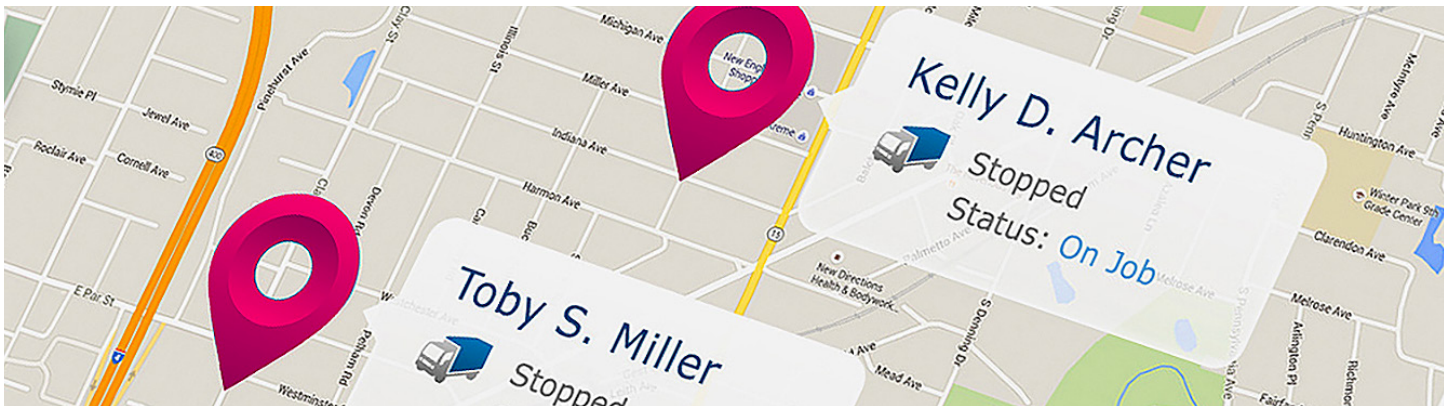
When targeting fuel usage patterns, it pays to look at the bigger picture. Fleets should be asking:

- What have [fuel consumption and idling trends](#) looked like over the last three months?
- What are the trends on aggressive driving and miles driven?

If idling, speeding, and mileage are reduced, then fuel consumption should decrease as well. This way, reviewing trend reports can help track patterns and identify anomalies or coaching opportunities.

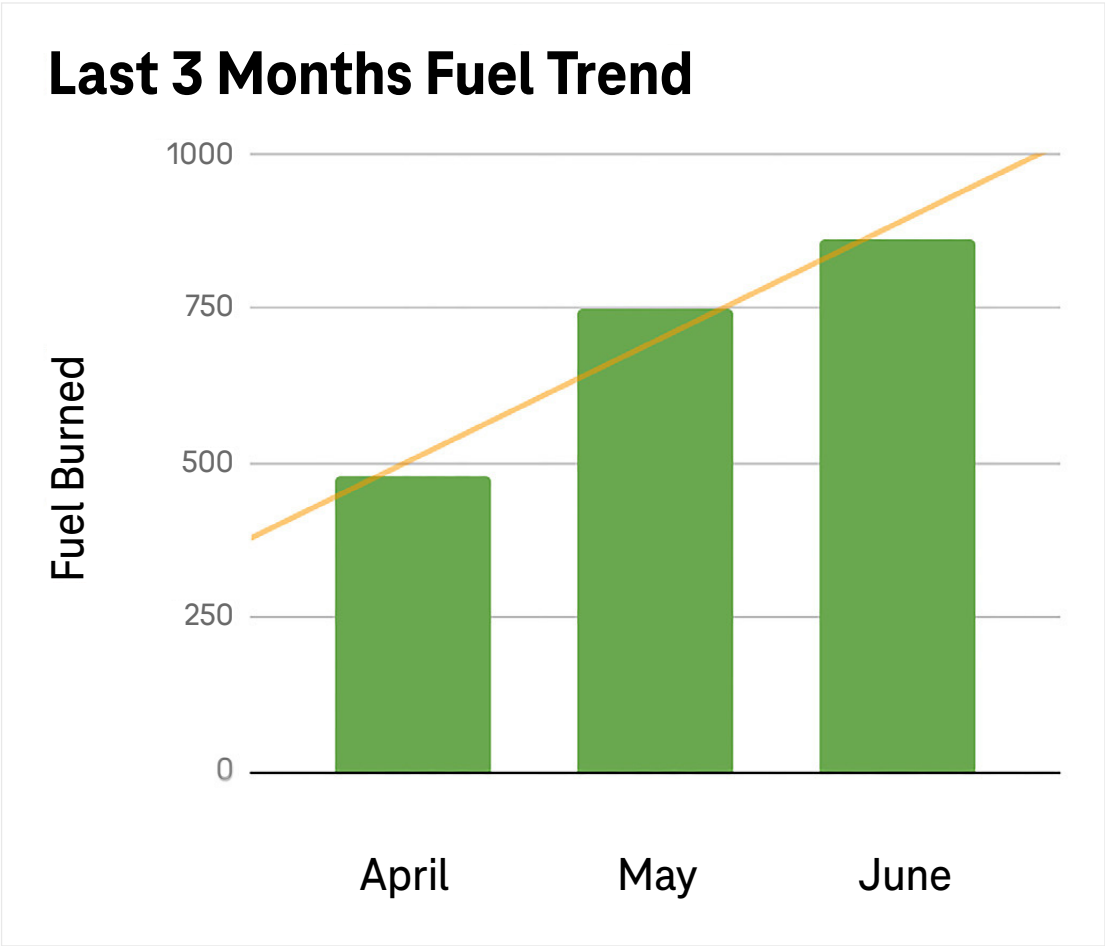
Heather Carlton, Geotab Associate Vice President, Reseller Sales, explains that addressing factors such as aggressive driving, speeding, and idling is a worthwhile effort. “Monitoring fuel usage is a good barometer of other programs that you have in place,” says Carlton.





Cross-referencing different metrics can provide greater insight and doesn't [separate your data into silos](#). “It’s a great idea to put all your fuel-related reports side-by-side on the dashboard,” Carlton advises.

By watching these trend lines, fleets can also tell whether their programs are working or need fine-tuning. If you see fuel usage staying flat or increasing, it is an indicator that it’s time to review and adjust the program.



A sample graph showing a trend line for fuel burned over a period of three months.

Monitor your fleet's miles-driven statistics

Another important factor to consider is miles driven. Carlton recommends evaluating whether drivers are taking the most efficient routes, or if the fleet is dispatching the most efficient drivers to service calls. An ideal fleet management platform will provide full visibility into mileage, routes taken, and drive time.

Optimizing routes and reducing miles driven can lead to more customer visits per day. “Helping businesses maximize their productivity, use that time on the road to make money instead of spending money—that’s what we want to achieve,” says Carlton.

Capture fuel data

Information is broadcast through the electronic control module (ECM) for some vehicles, while others require a request for data. In some cases, fuel must be calculated on our end using other diagnostics like mass airflow. This all depends on the protocol in place.

Engine protocol refers to the language “spoken” by the vehicle’s engine computer module. Protocol is dependent on the vehicle’s make, model, and/or year.

The three main protocols used industry-wide supported by the platform are:

- [J1708](#)
- [J1939](#)
- [OBDII](#)

In vehicles with different protocols, the platform looks at each on a case-by-case basis and uses debug data to identify how to capture the fuel data and correctly report it. The accuracy in which we record fuel varies between 0.001L to 0.5L, depending on the protocol and how the engine broadcasts this information. For most vehicles, we are able to pull different types of diagnostics like trip, idle fuel used, fuel level, water in fuel, and more.

Matching fuel card data

To match a fuel transaction to a device, there must be at least one matching reference field from the below list:

- VIN
- Device serial number
- License plate number
- Device description
- Device name
- Comments

Fuel transactions that cannot be matched to the telematics data are highlighted in yellow on the dashboard.

Importing fuel card data

MyGeotab accommodates any fuel transaction data, as long as it is in .csv or .xls file format. Fuel card importing is not tied to any specific manufacturer.

Fuel transactions can be imported into your database via the Fuel Transaction Import Add-In or by using the API.

For more details on these procedures, please refer to the [Geotab Product Guide](#).

Ongoing developments in fuel usage tracking



Future developments include:

- Additional data to help support and develop calculations for non-petroleum vehicles when standard sources are not available (ethanol, diesel).
- Routine firmware updates that contain fuel bug fixes and improved fuel calculations.

What's next?

If you are looking for ways to cut costs, fuel consumption is one of the top areas to target.

By partnering with T-Mobile for Government, fleets gain access to powerful features to reduce their fuel spend.

Money saved on fuel can be redirected to more valuable business areas, such as product development, operations, and human resources or training.

From the [Analytics Lab](#) to the [EVSA](#), T-Mobile for Government and Geotab are working on the forefront of telematics support and experimentation, continuously increasing vehicle support and improving data accuracy.

To get more out of your fleet's fuel, visit T-Mobile.com/FleetManagement or book a demo with a fleet management expert today.