

motive



Saving Fuel and Tracking Fleet Productivity

A Guide for Fleet Managers

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Introduction

Regardless of the price of fuel, it's essential for fleets to identify waste and reduce fuel consumption. Monitoring your fleet – whether it's rolling down the highway or idling – can help identify opportunities for improvement, leading to decreased costs and increased revenue.

Fuel expenses can consume up to 60% of a fleet's operating budget,¹ second only to equipment depreciation costs. Whether a single vehicle or thousands, the impact of fuel expenditures on bottom line revenue can be the difference between the success and failure. Understanding where fuel is consumed and how to reduce consumption will keep costs in check.

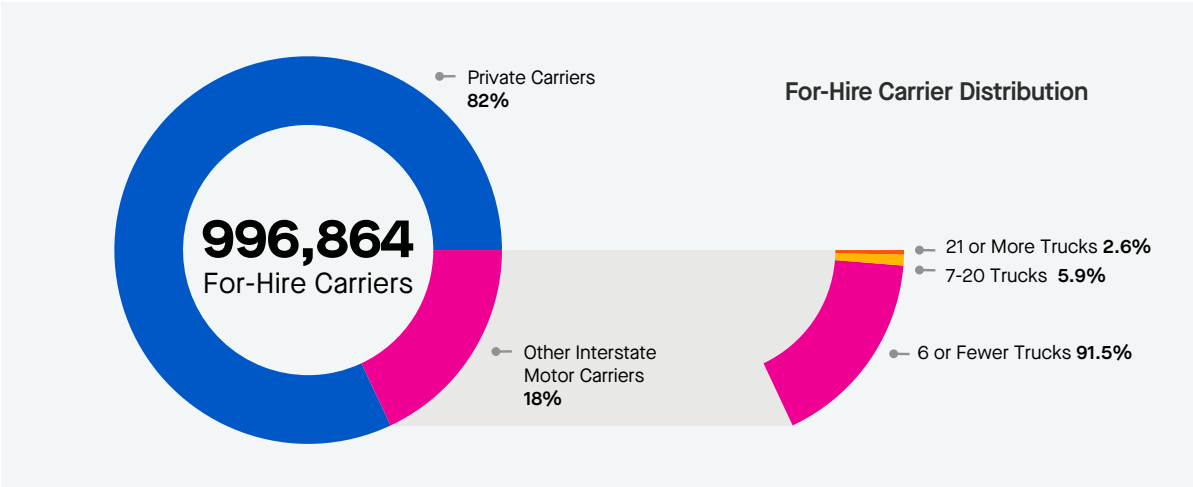
Fuel prices are always fluctuating. Over the last two years, fuel prices have dipped as low as \$2.58 for gasoline and \$2.55 for diesel in 2020² to a 40-year high in February 2022. As the war in Ukraine escalated, the U.S. imposed sanctions restricting Russian oil purchases. By reducing these oil purchases, the global oil supply was quickly diminished, causing oil prices to soar and fuel costs to rise. As of mid March, diesel prices had risen to \$4.85 and gasoline rose to \$4.10, up 75% and 45% respectively.³

¹“Containing Fuel Spend is a Top Fleet Focus Despite Price Stability” Automotive Fleet <https://www.automotive-fleet.com/346725/containing-fuel-spend-is-a-top-fleet-focus-despite-price-stability>

²“Weekly Gasoline and Diesel Prices” EPA https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_a.htm

³“Gasoline and Fuel Update” EPA <https://www.eia.gov/petroleum/gasdiesel/>

Now consider that as of February 2021, the number of for-hire carriers on file with the Federal Motor Carrier Safety Administration totaled 996,894. Private carriers totaled 813,440 or 82% of the total while 18% or 83,235 were listed as other interstate motor carriers.⁴ Of the 83,235 “other” carriers, 91.5% operate six or fewer trucks, and 97.4% operate fewer than 20 trucks.



The fact is, most fleets are low-margin, family-owned small businesses where every dollar must be spent wisely.

⁴“Economics and Industry Data” American Trucking Associations <https://www.trucking.org/economics-and-industry-data>

Average 2019 for-hire fleet consumption patterns*

300

billion miles
driven

9.5

billion gallons
of diesel fuel
consumed

9.1

billion gallons
of gasoline
consumed

*According to American Trucking Associations (ATA)

The Need for Change

As a fleet owner, you need to know how much fuel your fleet consumes and why. Here, technology can help. An advanced GPS monitoring system delivers insight into driver behavior, routing, vehicle condition, and even customer behavior as it pertains to loading and unloading times. Fleet operations issues that can drive up fuel consumption and diminish productivity can be measured and corrected.

GPS solutions help fleets monitor assets, vehicle locations, and activities in real time using cellular and satellite technology. For example, tracking systems solutions can show how long drivers remain at loading docks before moving to their next stop. This data can be useful in rate negotiations, driver training or accessorial charges for customer-caused delays. GPS fleet monitoring produces accurate and actionable data on vehicle operations including current location, location history, fuel consumption (MPG), emissions, dwell times and driver behaviors. It also delivers needed data for strategic decision making to increase asset and vehicle return on investment (ROI).

A tool this essential demands that you do your due diligence before you buy. Not all GPS trackers are equal. Though you can purchase an off-the-shelf (OTS) solution, manufacturers designed these systems for personal use, not commercial applications. Most OTS products provide limited data, but rarely will these systems produce all the data fleets demand.

An industrial-grade, state-of-the-art GPS offers the features fleets need. A top-tier GPS will:

- Assist in route planning
- Capture driver behaviors such as excessive idling, speeding, harsh acceleration and hard braking to identify opportunities to coach and change driving behaviors and track progress
- Monitor vehicle operations, as well as fault codes, to ensure proper preventative maintenance is performed and address problems that may increase fuel consumption

Benefits of Better Monitoring

Operating a commercial fleet involves more than dispatching vehicles from Point A to Point B. The success of a business hinges on the ability to optimize the equipment and driver hours of service. Vehicle monitoring helps to optimize fleet operations with real-time insights that can optimize routes, track maintenance and deliver greater fuel insights.

With GPS monitoring, your fleet can collect and transmit vital information that impacts fuel use and productivity, including:

- Precise vehicle location, speed, engine idling, trip distance and more
- Fleet health data, such as engine fault codes, odometer readings, service needs and other information
- Driver behaviors such as hard braking, rapid acceleration or fast cornering

A company that monitors its fleet can gain a competitive advantage with greater visibility into fuel consumption – and driver behavior is a significant contributor to fuel consumption. Speeding alone can increase fuel use by 5% to 28%. With this knowledge you can implement measures that coach drivers to correct fuel-wasting behaviors. You also can use insights to reward drivers with good fuel efficiency to help retain drivers. Research supports that driver behavior solutions can slash fuel expenses by 10%.⁵

Advantages of GPS monitoring for fuel consumption



Precise Vehicle Location and Speed



Fleet Health Data



Driver Behaviors

⁵ “Fuel Management System: Cutting Cost and Increasing Fuel Efficiency” <https://www.fleetx.io/blog-fuel-management-system-cutting-cost-and-increasing-fuel-efficiency/>

Data collected by a GPS also gives insight into true idling vs. productive idling due to power take off (PTO) usage. The McNally Institute estimates a fleet of 100 trucks that idles for two hours a day, 275 days per year, can waste \$175,000 in fuel.⁶ MS Multi Service Fuel Card pushes that amount higher in “Idling Costs To Your Fleet Can Be Costly.” Their research reveals that when diesel costs \$4 a gallon, sitting idle just two hours a day, 275 days a year, adds up to \$220,000 for a fleet of 100 trucks.⁷

Knowing who is idling or has low MPG, and why, allows a company to address the behaviors of under-performing drivers. Data can pinpoint the most direct and fuel-efficient routes or identify the closest trucks to help eliminate unproductive deadhead miles. Monitoring routes also can help keep drivers on truck routes and reduce the risk posed on unforgiving or inappropriate roadways.

⁶ “Cost of an Idle Engine Per Hour” McNally Institute <https://www.mcnallyinstitute.com/what-cost-does-idle-engine-have-per-hour/>

⁷ “Idling Costs to Your Fleet Can be Costly” MS Multi Service Fuel Card <https://www.multiservicefuelcard.com/idling-costs-to-your-fleet-can-be-costly/>

How does Motive GPS fleet monitoring save fuel?

28%

potential fuel
waste from driver
speeding

220k

potential yearly
fuel waste
from idling

10%

fuel savings from
driver behavior
solutions

Get Help: Add a GPS Solution

Not all GPS solutions operate the same way or provide the same data. The more informed you are, the better your decision will be. Ask the following questions before adding a monitoring solution:

- *How long does it take to install?*
- *Who can install it?*
- *Does the truck need to be altered in any way (holes in cab or dash)?*
- *Is the device easy to monitor?* Data is meaningless if it's difficult to access and utilize.
- *What is the anticipated life of the equipment?*
- *How durable is it?* Consider the environmental conditions where the GPS solution will operate. This technology must function in high heat, frigid cold and other conditions.
- *How will the system software be updated in the vehicle if needed?*
- *What is the warranty on the device?* Warranty terms differ by company and product.
- *How will the system receive power?* Consider whether it receives power via cable connections, solar or dynamic power controls. Each type offers limitations and benefits.

Motive Solutions

Motive offers a comprehensive GPS solution that meets your needs, saves you money, and boosts profitability. Benefit from best-in-class, real-time GPS monitoring of assets, top-of-the-line telematics solutions and integrations.

The Motive GPS solution optimizes routes with pre-built TMS integrations and can pinpoint the closest fleet vehicle – saving miles, time and money. Motive's proactive maintenance solution helps track preventative maintenance intervals, identify vehicle defects through fault code monitoring and fuel consumption by monitoring the driver and vehicle.

To be the best you must partner with the best, Motive!