

A stylized illustration of a fuel nozzle and hose. The nozzle is dark blue with a white trigger and a small white label. The hose is light blue and curves upwards and to the right, ending in the nozzle. The background is a solid dark blue.

THE TRUE COST OF FUELING

How a few simple adjustments can
improve your business's efficiency
and productivity.

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Uncovering the need for change

How much time does it take to go to the gas station?

New data examining over 14 million routes shows us that gas station stops take longer, are further away and happen more frequently than we think.

Furthermore, the time and distance have more implications than simply what's on the clock. Vehicle depreciation, wear and tear, tires, burning fuel to get fuel and even fraud or misuse also play significant roles in worsening the burden to get fuel.

The efficiency experts at Booster Fuels have taken a deeper look at all of the elements that contribute to the True Cost of Fueling. To do this, our researchers compiled new data from numerous trusted industry sources, including Geotab, AAA, Shell and Consumer Reports.

This has created one of the most comprehensive glimpses at what every trip to the gas station actually costs.

Whether you own a business, are in charge of operations, manage a fleet or just rely on vehicles that need fueling, you've come to the right place to educate yourself on the surprising impact that gas station trips can have and to find meaningful ways to ensure you're running your business as efficiently as possible.

CHAPTER 01

TIME'S **IMPACT** ON THE **TRUE COST** OF **FUELING**

In this chapter, we'll look at the impact that total gas station trip time has on operational efficiency, safety and cost.

Geotab, a nationally recognized telematics firm, recently published a paper on its findings related to the time fleets spend going to the gas station — what they call Total Trip Time. Geotab's exhaustive study determined Total Trip Time by analyzing 14 million trips made by 150,000 vehicles and comparing the time each route took with and without a gas station stop. The two determining factors included in Total Trip Time were found to be:

1

Off-Route Time (ORT)

Time spent off-route traveling to and from the gas station.

8 minutes

2

Station Dwell Time (SDT)

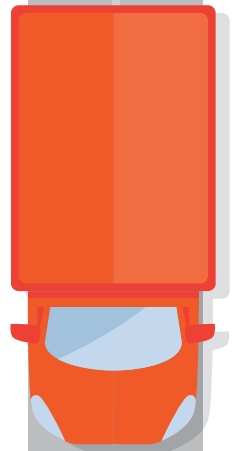
The amount of time spent at the gas station fueling.

12 minutes

THE EFFECT OF BOTH ORT AND SDT ON TOTAL TRIP TIME WAS 20 MINUTES ACROSS ALL MARKETS.

THE IMPACT OF THIS NON-PRODUCTIVE TIME ON A COMPANY'S BOTTOM LINE CAN BE MEANINGFUL.

A GAS STATION
STOP ADDS
MORE THAN
**20 MINUTES
TO EACH
VEHICLE TRIP**



The significance of time

The reality is that twenty minutes spent fueling is twenty minutes spent not actively working toward company goals, both short- and long-term. Depending on your industry, that's one more lawn mowed, a few additional packages delivered, another house call, sales call or new estimate sent.

Before you say, "C'mon, it's just 20 minutes," that time spent fueling adds up to around 31 hours per year*, per employee. That's not just a small trip. That's almost a week of paid vacation for that employee.

**31 hours of
non-productive time
is almost a week's
paid vacation per
employee.**



And if we compound that simple sum by the number of vehicles in your fleet, it adds up very quickly. If you have just 15 vehicles, that's a total of 465 hours of non-productive time per year spent refueling. That's an average of more than 58 work days or 24% of a work year spent at the gas station.

* (20 minutes X 7.7 gas station visits per month [According to Booster customer data] X 12 months) / 60 minutes = 30.8 hours

Safety: 12 minutes of exposure at the gas station

Every trip to the gas station exposes your employees to unnecessary risk, which isn't good for their long term health or for their safety and security.

According to Geotab's research, twenty minutes spent on a gas run includes a fill time of 12 minutes. For your employees, that's 12 minutes of exposure to germs (The pump handle is 11,000 times dirtier than your toilet seat*), fumes and potential direct contact with gas or diesel fuel. In addition, 20 minutes spent on a gas run includes 8 minutes of ORT. That's ample time for potential auto accidents, traffic tickets or other hazards.



Cost: \$850 per employee, per vehicle, per year

As they say, "Time is money." And going to the gas station is no different. Just think, in addition to the cost of the fuel itself, you're paying for an employee's non-productive time, too.

Booster Fuels' customers pay their employees an average rate of \$18.70/hour plus benefits, meaning each trip to the gas station costs an additional \$8.10*. Before they switched to Booster, they were visiting the gas station an average of 7.7 times per month. That adds up to almost \$850 per employee, per vehicle, per year.

For a fleet of just 15 vehicles, the average employer wastes \$12,750 on non-productive fueling time annually.

How do we stop this vicious cycle?

First, consider identifying gas stations that are closer to assigned routes and only use those locations. Cutting down on the time it takes to get fuel is instrumental in promoting greater efficiency, safety and profitability. Something else to consider is having fuel delivered. Mobile fuel delivery removes a trip to the gas station altogether by fueling vehicles in off hours, helping businesses reclaim 100% of the time and money lost from trips to the gas station. A simple decision like this can immediately translate to more time to devote to the company's essential functions.

*The Healthy Workplace Project Study by the Kimberly-Clark Corporation (2011)

*\$18.70 per hour x 1.3 (assuming a 30% premium for benefits, per the US Bureau of Labor Statistics) / 60 min per hour x 20 minutes (ORT+SDT) = \$8.10

CHAPTER 02

THE **IMPACT** OF **DISTANCE** ON THE **TRUE COST** OF **FUELING**

Depending on where you conduct business, the impacts of time and mileage for trips to the gas station can be more than you think or way more than you think. This revelation impacts everything we've already mentioned in terms of time lost, but the additional mileage also burns valuable fuel, adds unnecessary vehicle wear and tear, and increases CO₂ emissions.

Using Fuel to Get Fuel

You've gotta spend money to make money, right? The same is true for burning gas to get gas. But just how much of an effect do average trips to the gas station have? Based on a compilation of multiple data sources, every truck in your fleet burns over 13 gallons of fuel every year just to fill up*.

Wear and Tear

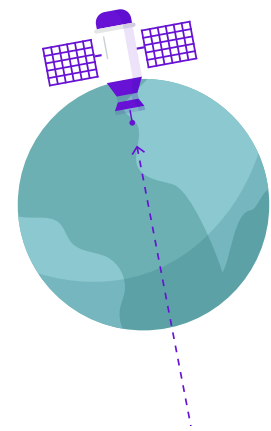
Depreciation is one of the biggest factors in calculating the true cost of vehicle ownership. According to Geotab's study, in a cross section of top US markets, drivers travel an average of 17 additional miles per month off route. That's more than 200 extra miles of wear and tear on any given fleet vehicle annually. To put that in perspective, that's like traveling the distance between Earth and the International Space Station.

And when we apply the cost per mile in depreciation, we see that the annual cost due to off-route travel is \$50.09**. Furthermore, maintenance costs represent an additional expense. That's another \$17.83 per vehicle, per year***. For a fleet of just 15 vehicles, these costs add up to over \$1,000 of unnecessary costs per year.

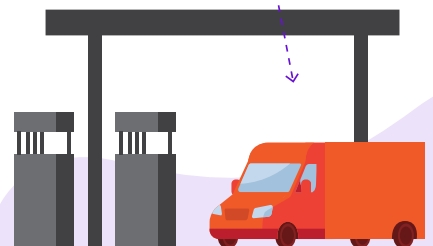
*203.28 off-route miles per vehicle, per year (Geotab) / average of 15.33 miles per gallon (Consumer Reports) = 13.26 gallons per year.

**24.64 cents depreciation per mile (AAA) X 203.28 miles off route per year (Geotab) = \$50.09.

***8.77 cents per mile (AAA) x 203.28 miles off route per year (Geotab) = \$17.83.



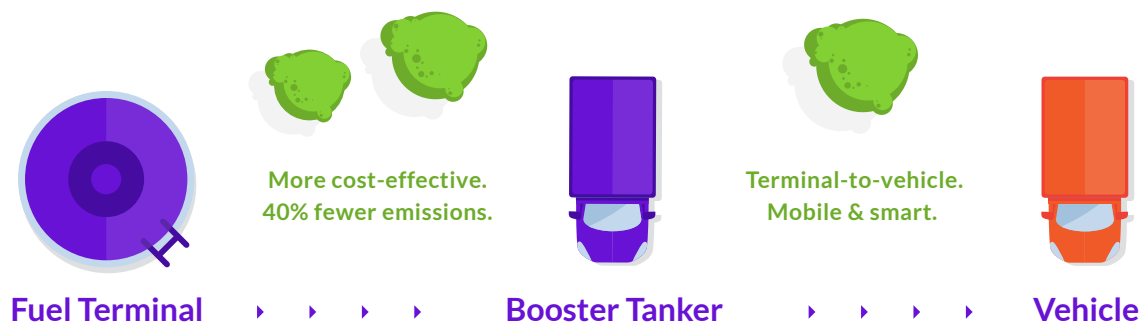
Annual off-route mileage per vehicle is equivalent to taking a joyride to space.



Sustainability

Every trip to the gas station releases around three pounds of CO₂ into the atmosphere*, causing a brownish grey haze and smog over our cities. A fleet of just 15 vehicles contributes almost two tons of CO₂ into the atmosphere every year. In addition, each trip opens your drivers up to contributing to the surprising total of fuel spillage at gas stations across the U.S. Researchers at Johns Hopkins University found that the average gas station spills 40 gallons of fuel annually**.

It may seem like an impossible task to reduce wear and tear on vehicles and promote sustainability because, at first glance, stopping at the gas station seems vital for business. Planning ahead and strategically choosing gas stations along routes will instantly pare down on any vehicle's wear and tear. Unfortunately, this doesn't dampen the environmental impact. To address environmental concerns, employees may undergo training for cleaner filling protocols with fleet safety classes. The most radical option to boost sustainability is to entirely replace a diesel or gas fleet for an electric one. This would eliminate trips to the gas station and have an immediate and positive impact on the environment.



But if switching to an entirely electric fleet is not a viable option, there's another way to both immediately erase additional vehicle wear and tear and reduce CO₂ emissions. On-demand mobile fueling services offered by companies such as Booster Fuels provide fuel delivery in 100% carbon-neutral mini-tankers, direct from the wholesaler to the customer. Doing so cuts the traditional dirty supply chain — which is how much of the pollution actually takes place — in half. Plus, mobile fueling offers fresher fuel without trips to the gas station, supporting dirty fueling supply chains or chances for negative environmental impact. The result is the guarantee that company vehicles are always fueled with fewer wear and tear miles added to fleet vehicle depreciation.

*2.2 off-route miles (Geotab) / 15.33 miles per gallon (Consumer Reports) x 20 lb/gal (FuelEconomy.gov) = 2.87lbs of CO₂

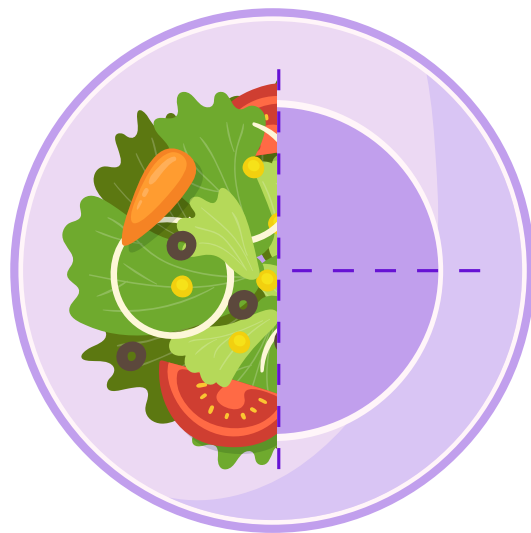
**Johns Hopkins's "Small Spills at Gas Stations Could Cause Significant Public Health Risks Over Time" (2014)

CHAPTER 03

HOW **FREQUENCY** ADDS TO THE **TRUE COST** OF **FUELING**

Eighty-five percent of vehicles have half a tank of fuel when drivers stop for gas, according to Geotab's study. This means that drivers are stopping too frequently to fill their tanks, exacerbating all of the metrics we've explored in this analysis so far.

Imagine refilling your buffet plate when it's still half full of food. That doesn't sound very efficient, does it?



Luckily, there's an easy solution: instructing your drivers to wait until the tank is one-quarter full before refueling would cut every one of these inefficiencies in half.

However, having fuel delivered by a mobile fuel delivery service would be a greater step toward efficiency and reducing paid downtime by 100%.

Having fuel delivered removes unnecessary trips to the gas station. It enables fleet vehicles to always be at the ready. Detailed reporting puts fuel consumption tracking in the hands of fleet managers and other business stakeholders, empowering them to use fueling data to make informed decisions to better optimize routes and unlock efficiencies.

CHAPTER 04

THE **IMPACT** OF
FUEL MISUSE AND **FRAUD**
ON THE **TRUE COST**
OF **FUELING**

Some of the hidden costs of going to the gas station that many fleet operators don't take into account involve employee fraud or crimes committed against their employees.



According to the Shell Oil Company's "Fraud Matters" report, over half of U.S. Fleet managers think fraud relating to fuel and fuel cards is a significant issue. Additionally, 38% of U.S. fleet drivers admit they've seen another driver act fraudulently at work. Trips to the gas station could also expose employees to the potential for crime: physical harm and credit card skimming. According to Visa®, new technologies have made it much easier for thieves to skim credit cards at places like gas stations*. The U.S. Secret Service finds about 30 skimming devices every week at gas pumps, with each device holding the information of about 80 cards.

So, how much are companies losing when employees have their gas card skimmed or make the mistake of using their card to purchase snacks, fill non-company vehicles, or put premium in a company vehicle that takes regular? A fleet with 15 vehicles loses an average of \$1,000 every year to fraud of various types**. Business owners are effectively withdrawing more than a thousand dollars of hard-earned money and putting it on their doorstep with a sign that says, "Free!"



The U.S. Secret Service finds about 30 skimming devices every week at gas pumps, with each device holding the information of about 80 cards.

*Visa's "Visa Security Alert: Cybercrime Groups Targeting Fuel Dispenser Merchants" (Dec 2019)

**\$0.1567 fuel per mile (AAA) * 15k miles *.03 (Fraud rate according to a survey of 500 fleet managers conducted by Booster Fuels) *15 vehicles = \$1,057.73

According to a survey of Booster customers, 71% of respondents had terminated an employee due to theft on a fuel card. To further complicate things.

Once the offending drivers are let go, you'll lose your investment in their training. This also makes finding and training a new employee necessary, which (you guessed it) costs more money. To reduce the incidents of fraud and crimes related to credit cards and fueling, managers could resolve to put a tighter focus on controlling fraud. But lack of time, driver awareness and financial resources are the biggest barriers to effectively curbing fraudulent spending.

To completely eradicate fraud related to going to the gas station and to gain complete transparency and control over fueling payments, consider taking fuel cards completely off the table and switching to mobile fuel delivery. Leading mobile fueler Booster Fuels offers secure billing that seamlessly integrates with your existing fuel card ecosystem, like Wex, Comdata and Voyager. This puts account safety into the hands of our secure platform and takes the allure of "free gas" out of the hands of employees altogether.

71%



CONCLUSION

HOW TO **REDUCE**
THE **TRUE COST**
OF **FUELING**

As you've learned, The True Cost of Fueling is significantly higher than previously thought. Drivers are spending more time at the gas station, traveling longer distances and are exposed to potential fraud, danger and health risks. When we add environmental impact, trips to the gas station are just too costly to be a modern company's fueling solution.



Fortunately, modern fueling solutions are available. Operators can implement a few small changes that may yield improved efficiency and modest cost savings.

At the same time, there's a sure-fire way to improve efficiency and reduce the cost of off-route travel: a mobile fueling service. Considering an experienced mobile fueler like Booster Fuels can greatly improve efficiency and completely eliminate the almost \$9,000 in off-route costs per year.

Annual Savings for Customers

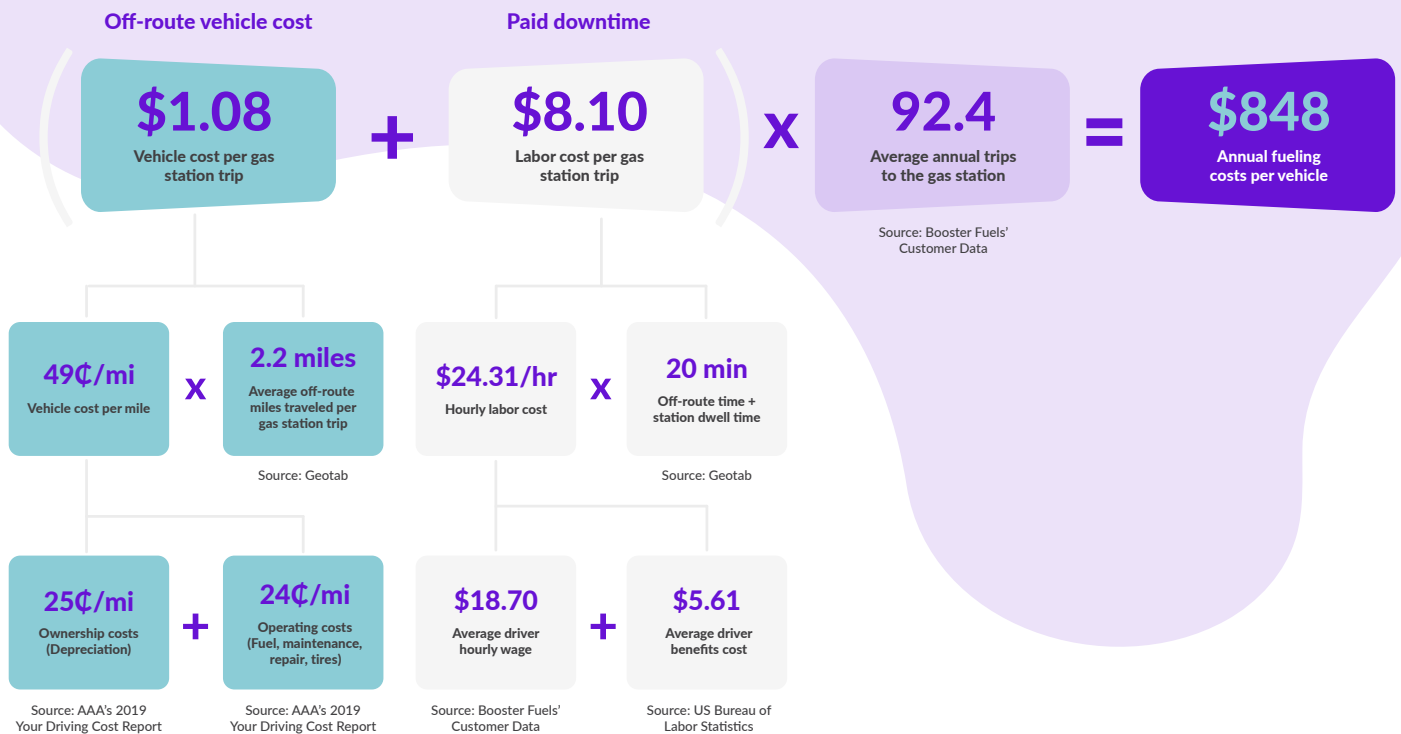
	Before Booster	With Booster
Off-route mileage per vehicle	203 miles	0 miles
Vehicle costs (maintenance, repair, depreciation, tires)	\$99.79	\$0
CO ₂ emissions per vehicle	265 lbs of CO ₂	0 lbs of CO ₂
Total trip time per vehicle	31 hours	0 hours
Labor costs spent fueling per employee	\$748	\$0
Average number of gas station visits per vehicle	92	0
Average theft per vehicle	\$70.52	\$0

The experts at Booster Fuels can help you capitalize on this opportunity to supercharge your business's efficiency and productivity today.

GET A QUOTE!

(866) 844-4006
www.boosterfuels.com

Overview: The Annual True Cost of Fueling



Included in these totals:

Input	Value	Source
Off-route distance per gas station trip	2.2 mi	Geotab Fleet refueling: The impact of out-of-route and refueling time on business (2020)
Ownership costs (depreciation) per mile	\$0.2464 per mi	AAA (fuel cost per mile) Your Driving Costs (2019)
Fuel consumption per mile	1 mi/15.33mpg = .1533 gallons	Consumer Reports Heavy-Duty Pickup Truck Fuel Economy Numbers You Can't Find Anywhere Else (2017)
Additional fuel, maintenance, repair and tire costs per mile	\$0.2444 per mi	AAA Your Driving Costs (2019)
Emissions per gallon of fuel	20 lb/gal	FuelEconomy.gov How can a gallon of gasoline produce 20 pounds of Carbon dioxide?
Off-route time	20 min	Geotab Fleet refueling: The impact of out-of-route and refueling time on business (2020)
Average annual number of gas station trips	92.4 trips	Booster Fuels Customer Data
Average annual fuel fraud per vehicle	\$0.1567 (fuel cost per mi) * 15,000 mi * 3% (fraud rate) = \$70.52 per vehicle	AAA (fuel cost per mile) Your Driving Costs (2019) Booster Fuels (fraud rate) Fleet Manager Survey (2017-2019)
Average employee benefits as a percent of total compensation	30%	US Bureau of Labor Statistics Economic News Release (2018)
Average hourly wage for drivers	\$18.70 per hour	Booster Fuels Customer Data



THE **TRUE** **COST OF FUELING**