

**WHITE PAPER: SPIREON FLEET & ASSET INTELLIGENCE**

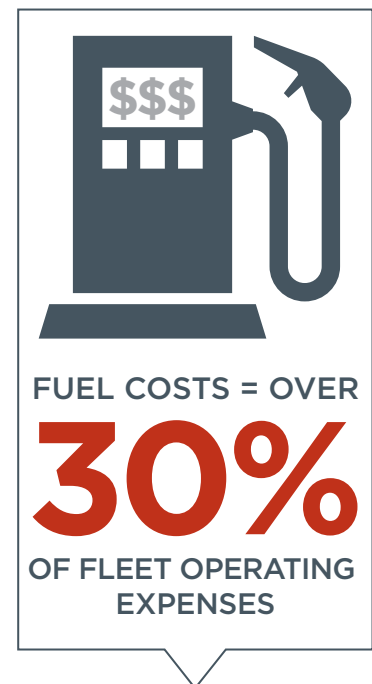
# Find the Savings in Your Fleet

Smart businesses are always looking for ways to reduce their operational costs. For many of those businesses, the most obvious place to start is fleet operations. That's completely understandable, given that fleets account for a significant chunk of business spending. Along with the cost of purchasing and maintaining vehicles, companies are seeing more of their profits consumed by fuel prices, more expensive equipment, risky driver behaviors, and expanding liability. It's no wonder more companies are looking to reduce the operating costs and increase the efficiencies of their fleets.

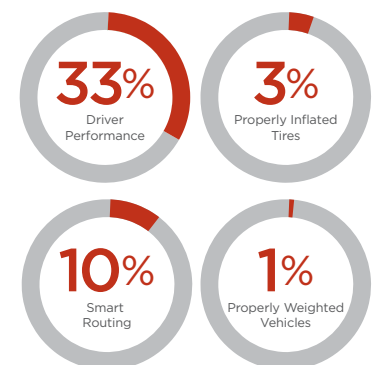
Cost reduction in fleet operations is a constant battle — one that requires constant vigilance and complete visibility. Only by seeing exactly where you're spending — and losing — money, can you begin to keep more of it. This need for increased insight into fleet operations is driving more companies to invest in telematics systems. Beyond simply tracking vehicles' movements and locations, the best telematics systems provide a wealth of vehicle data and analytics that translate this raw data into actionable business intelligence. Armed with increased intelligence, fleet operators have the visibility they need to identify and capture opportunities for increasing efficiencies and reducing costs.

Today's fleet operators need to stay competitive. In this white paper, we introduce ways companies are using telematics to expose waste, lower costs and drive productivity. We also discuss the key features and functionality you should be looking for in your telematics system to ensure the greatest improvements in fleet efficiency and cost management.

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## POSITIVE IMPACTS ON FUEL EFFICIENCY:



\*Source: <http://www.dat.com/blog/post/54-of-Drivers-Are-Detained-3-4-Hours-Per-Stop>

## DO MORE WITH THE VEHICLES YOU HAVE

One of the largest and most apparent costs for fleets is the vehicles themselves. The estimated total cost of ownership for a light-duty vehicle runs between \$5,000 and \$8,000 per vehicle, per year. The larger your fleet, the greater the cost of ownership. For this reason, many companies are looking at reducing the size of their fleets. Removing just 10 light-duty vehicles can save upwards of \$80,000 annually. Right-sizing your fleet — making sure you only have the vehicles you really need to get the job done — can result in significant costs savings for your operation.

The challenge comes in knowing how many vehicles you can safely eliminate from your fleet while maximizing the utilization of the remaining vehicles. Remove too many vehicles, and you may fall short of customer demands. That's where having the right telematics system in place becomes crucial.

Your telematics system should automate the maintenance process and help you prioritize vehicle repairs based on active diagnostic faults and other in-depth engine-derived information.

Look for a system that allows you to see exactly how many vehicles you need to maintain your service level agreements and customer satisfaction. The system should help you identify vehicles that are underutilized so you can either redirect them to customers with higher demand, or eliminate them from your fleet altogether. Your system should also provide dispatch with increased visibility, allowing them to identify the most efficient routes and improve vehicle utilization. This in turn enables you to do more with fewer vehicles and ultimately streamline your fleet.

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## DEPRECIATION Expenses

### FULL-SIZE VANS

Average Monthly Miles: 2,241  
 Average Months in Service: 55  
 Average Cap Cost: \$21,924  
 Monthly Dep. Cost in CPM: \$0.15  
 Depreciation Dollars/Month: \$336.21



### TRUCKS (CLASS 1-2)

Average Monthly Miles: 2,177  
 Average Months in Service: 52  
 Average Cap Cost: \$22,387  
 Monthly Dep. Cost in CPM: \$0.13  
 Depreciation Dollars/Month: \$297.55



### SUVs

Average Monthly Miles: 2,183  
 Average Months in Service: 33  
 Average Cap Cost: \$22,694  
 Monthly Dep. Cost in CPM: \$0.16  
 Depreciation Dollars/Month: \$348.43



SOURCE: Automotive Fleet

## MORE COST-EFFECTIVE MAINTENANCE

Purchasing vehicles costs money. So does maintaining them. But while preventative maintenance may be a significant expense for most businesses, it's also a prime opportunity for cost reduction. Proper tire inflation, maintenance and alignment for example, can lower fuel consumption as well as extend tire life. The same goes for proper servicing of filters, fluid levels, hoses, lines, belts and wiring. The key is to perform these maintenance tasks on the right vehicle, at the right time.

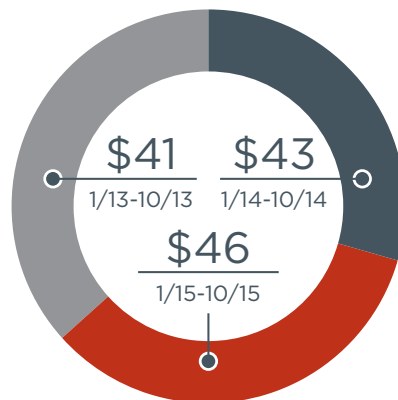
With an effective telematics system in place, your company can stop engine issues before they turn into costly repairs, vehicle downtime, and even before you see the engine fault codes. The simplest vehicle repairs can be very costly to your bottom line and multiples quickly with each vehicle you have on the road. You can enter maintenance schedules into your telematics system and get alerts when regular maintenance is due so you minimize vehicle downtime.

Your telematics system can also be an effective tool for preventing vehicle abuse that may lead to costly repairs. By alerting drivers of behaviors that exacerbate vehicle wear and tear, you will be able to train your drivers to understand the impact they are having on the performance of their vehicle, as well as their safety.

By pro-actively focusing on predictive maintenance, you'll be able to work with service technicians to pinpoint problem areas. Targeting your repairs will help you realize savings. More proactive and effective maintenance helps you avoid unnecessary and costly repairs, extends equipment and vehicle lifespan, reduces vehicle downtime, and increases fuel savings. All of which benefit your bottom line.

Proper tire maintenance and alignment can lower fuel consumption and related costs as well as extend tire life.

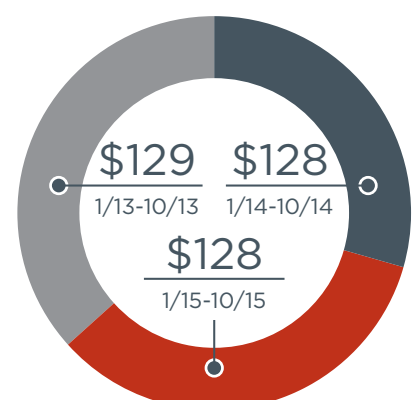
### AVERAGE Cost Per PM



■ The average months between oil changes continued to increase in 2015. Likewise, the mileage intervals have increased due to greater usage of longer-lasting synthetic oil and extended OEM recommended service intervals.

SOURCE: Element

### AVERAGE Cost Per New Tire



■ Car replacement tire pricing for 2015 was flat compared to 2014. A key reason for the stabilization in replacement tire prices is less volatility for the commodities used to manufacture them.

SOURCE: Element

## FUELING MORE SAVINGS IN YOUR FLEET

For companies operating fleets, fuel price volatility presents a serious challenge in planning fuel budgets. With fuel costs accounting for over 30% of most fleets' operating expenses, finding ways to control those costs can be paramount.

With the ability to track fuel fill-ups against miles driven, you'll be able to eliminate bad behavior — conserving fuel in the process.

In an effort to lower fuel costs, some companies are downsizing vehicles — trading them in for smaller ones. Others are looking to purchase bulk fuel when the price is right. Still others are implementing fuel-saving automotive technologies, replacing current vehicles with alternate fuel options such as hybrids, electrics, NGVs (natural gas vehicles) and light-duty trucks that operate on cleaner-burning diesel.

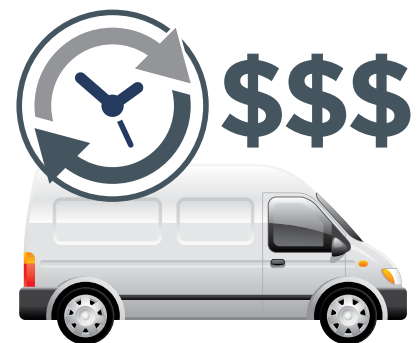
While these strategies do improve fuel consumption, they also require a significant investment of time and money — offsetting any short-term fuel-related savings you might generate. A more immediate way to reduce fuel costs is to reduce the number of miles driven by fleet vehicles. But without visibility into vehicle routes and actual miles traveled, controlling mileage-related costs becomes close to impossible.

That's where telematics once again comes into play. Your telematics system should integrate with a fuel card so you can manage where and when your drivers are filling up and identify which routes your vehicles are taking, alerting you to out-of-route miles driven. You should also have the ability to track fuel fill-ups against miles driven to identify any fuel misuse issues and eliminate those behaviors — conserving fuel in the process. The right telematics system will give you the visibility you need to make your vehicles as fuel efficient as possible.

One of the most important ways a telematics system can help reduce fuel costs is by allowing you to pro-actively manage driver behaviors, such as excessive idling and speeding that impact fuel consumption. According to the EPA, drivers can impact fuel economy by as much as 33%. Behind-the-wheel behaviors such as

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## FUEL Economy



**ONE HOUR  
OF IDLE TIME  
PER DAY**

=

**26  
MILES**  
DRIVEN ANNUALLY

hard accelerating and braking, inconsistent speeds, cornering and excessive idling not only wear out engines, but also burn through fuel.

Take a look at idling alone. One hour of unnecessary idle time per day can equal 26 road miles during a year. That same hour of idling consumes one gallon of gas — and it doesn't take long for a driver to accumulate that. A telematics system will allow you to track idling time per driver, so you can identify the primary offenders and encourage drivers to turn off their vehicles when parked. With that simple behavior change, you'll quickly see the savings add up.

To modify driver behaviors that are impacting your fuel economy, look for a telematics system that comes with a driver performance program. This program should equip your drivers and fleet managers with the real-time visibility and tools they need to perform ongoing coaching that will change behavior and result in decreased fuel consumption and less vehicle wear-and-tear. It's also important to educate your drivers on the impact of their behaviors on MPG efficiency and performance. For more about driver performance programs, read on.





## SAFER DRIVING MEANS MORE SAVINGS

While helping save fuel costs and reduce vehicle wear and tear, driver performance programs can also have significant impact on another major cost center for fleets: accidents. Fleet-operating companies spend hundreds of thousands of dollars each year on vehicle damage, repairs and downtime as a result of accidents. When injury is involved, accident-related costs can soar to millions of dollars in liability claims.

A telematics system with an effective driver performance program can go a long way toward improving driver safety — in the process, decreasing speeding tickets, lowering insurance premiums, and reducing accidents that could potentially cost you millions. Look for a driver performance program that gives you the visibility you need to motivate, empower and incentivize drivers to self-manage risky behaviors such as speeding, cornering, hard braking and hard accelerating.

The best of these programs provide automated reports that allow you to manage by exception and focus on the drivers who need coaching. Provide positive reinforcement as opposed to punitive penalties. Make sure the program includes an in-cab buzzer to alert your drivers of violations such as seat belt, speeding and hard driving. This immediate reinforcement has been proven to improve driver behavior.

While equipping your drivers with the tools to modify their own behaviors, your driver performance program should also allow your fleet managers to monitor drivers' performance across a range of behaviors and identify added opportunities for improvement.

## BREAKING DOWN Insurance Cost



The average auto liability claim for property damage was

**\$3,493**

The average auto liability claim for bodily injury was

**\$17,024**

The average collision claim was

**\$3,350**

The average comprehensive claim was

**\$1,671**

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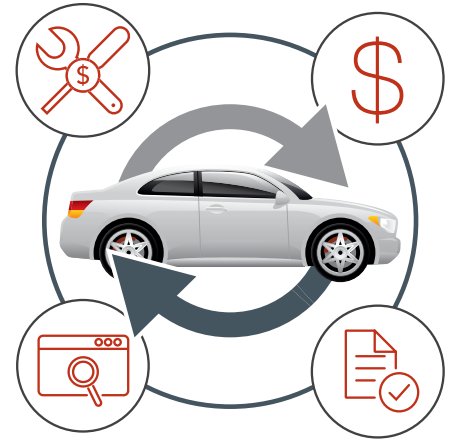
## THE CUMULATIVE COST OF INEFFICIENCY

So far, we've tackled the obvious culprits for fleet costs: vehicle purchases, maintenance, fuel consumption and driver behavior. But what about the indirect costs of operating a fleet? "Soft" costs related to overhead and administrative tasks accumulate over time and can eat away at profits. The most effective way to lower these costs is to increase overall productivity and efficiency.

Once again, the right telematics system will help you do exactly that. With increased visibility across your fleet operations, your staff will be able to make faster, smarter, and more profitable decisions. Dispatch will be able to instantly locate vehicles, point drivers to the best routes, find the nearest driver when a customer request comes in and redirect drivers as necessary. Faster response time means you'll be able to capture more opportunities and more revenue.

Your telematics system should also allow you to automate a wide range of time-consuming manual tasks — from scheduling preventative maintenance to tracking driver performance to managing fuel costs. Reducing the paperwork from these processes can help reduce administrative costs and improve operational efficiency.

By automating these tasks, you'll also be increasing your staff productivity as well as improving accuracy. Removing the human error that comes with manual tasks can also mean substantial time and monetary savings. Look for a telematics system that integrates with your other systems, such as accounting. This will allow you to consolidate your data into a central repository and eliminate the need for redundant entries. Fewer keystrokes equal even more savings.



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## YOUR TELEMATICS CHECKLIST

Yes, your fleet is one of your company's largest cost centers. But within that fleet are a myriad of opportunities for cost savings. To find those opportunities and act on them, you'll need increased visibility and access to better business intelligence. The right telematics system can connect you to the data you need to drive operational efficiencies and reduce costs.

### In summary, look for a telematics system that allows you to:

- Increase utilization and right-size your fleet
- Improve engine idle time
- Reduce out-of-route miles, unauthorized trips and fuel fraud Modify fuel-consuming driver behaviors
- Automate and improve preventative maintenance and yard checks Increase driver safety and accidents
- Drive efficiencies and lower administration costs
- Make smarter, faster, more profitable business decisions