

# Quartix

Real-Time Vehicle Tracking

Reducing the costs of  
operating a busy fleet

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# The return on investment of vehicle tracking: A high-mileage example

Reducing fuel and maintenance costs can be a fast way to make savings if your fleet vehicles are regularly driven for long hours. Companies operating in the logistics and haulage industry or passenger transport will likely find that fuel and vehicle maintenance are two of their biggest business expenditures.

So how exactly can a vehicle tracking system help a business transform its fleet operations and drive down fuel and maintenance costs? We will explain a few methods in this step-by-step guide.

One of the more obvious uses of vehicle tracking is to help your business identify instances of excess fuel consumption and undue vehicle wear and tear. Once these problems are pinpointed, a vehicle tracking system can help you monitor progress and bring about change. Aspects such as driver behaviors, mileage, vehicle utilization and time management can all be measured and altered to produce better outcomes that ultimately save your business money.



## Optimizing fleet mileage

If your fleet travels in the region of 50,000 miles per year with up to 20 vehicles, it is possible that your annual fuel expenditure is \$400,000 or thereabouts. In short, it's a huge amount of money.

Making routes more efficient is the first step to reducing fuel consumption. But to do this, you need to track the routes that are currently being taken and understand how your vehicles are being used. Are you confident that your employees are taking the quickest routes to a destination, and that they are only making business trips in your vehicles? This is where vehicle tracking comes in.

The Quartix vehicle tracking system only needs to help you reduce your fleet's mileage by 48 miles per vehicle per month to give you a return on your investment. In our above example of 50,000 miles per year, this would only require a 1.2% reduction in annual mileage. Depending on how much fuel is currently being wasted, and how many unnecessary miles your business is accruing, a vehicle tracking system could help you reduce fuel expenditure by a far greater percentage than this. A study by Frost & Sullivan estimates that vehicle tracking can drive down a business' fuel use by as much as 25%.

- ✓ Detailed route maps showing your driver's trips will help you to eliminate any crossover journeys.
- ✓ Daily driver timesheets will enable you to check that all trips have been made for business purposes.
- ✓ Geofencing zones can be set up to ensure that vehicles only visit the areas they are required to for work.
- ✓ Live traffic updates let you direct your drivers on the most efficient routes and avoid them having to make detours.

The savings go beyond fuel consumption. Fewer miles mean less vehicle wear and tear. Another by-product of reducing the number of miles driven is more available employee time and more resource - the wider efficiencies created will allow your business to reap further financial rewards.



## Monitoring waiting times

Are your drivers often left waiting at delivery sites? It's a common annoyance for many industries, which is why many will charge for that time lost, if excessive, in the form of demurrage. But translating lost time into a monetary figure and claiming it back is not always simple.

Let us say your driver is waiting at a disposal site or a depot for two whole hours one day. How much money would this waste? Maybe your driver's wage is \$30 per hour. But what could your business potentially have earned, had those hours not been wasted? If this happens frequently, the costs soon add up and your business performance is likely to suffer.

Vehicle tracking can help you keep track of waiting times, so that you can chase customers and suppliers that put your productivity to a halt. With an accurate record of waiting times against each location, it is a much easier task to reclaim that cost for your business. Moreover, the Quartix vehicle tracking system can tell you if your driver left the engine idling for a large portion of that time they were waiting, using unnecessary fuel.

When vehicle activity is captured automatically, your business is armed with constant proof of events. If the evidence is hard to argue with, you can expect the compensation for your financial loss to be successful and hassle-free.



## Preserving vehicle health

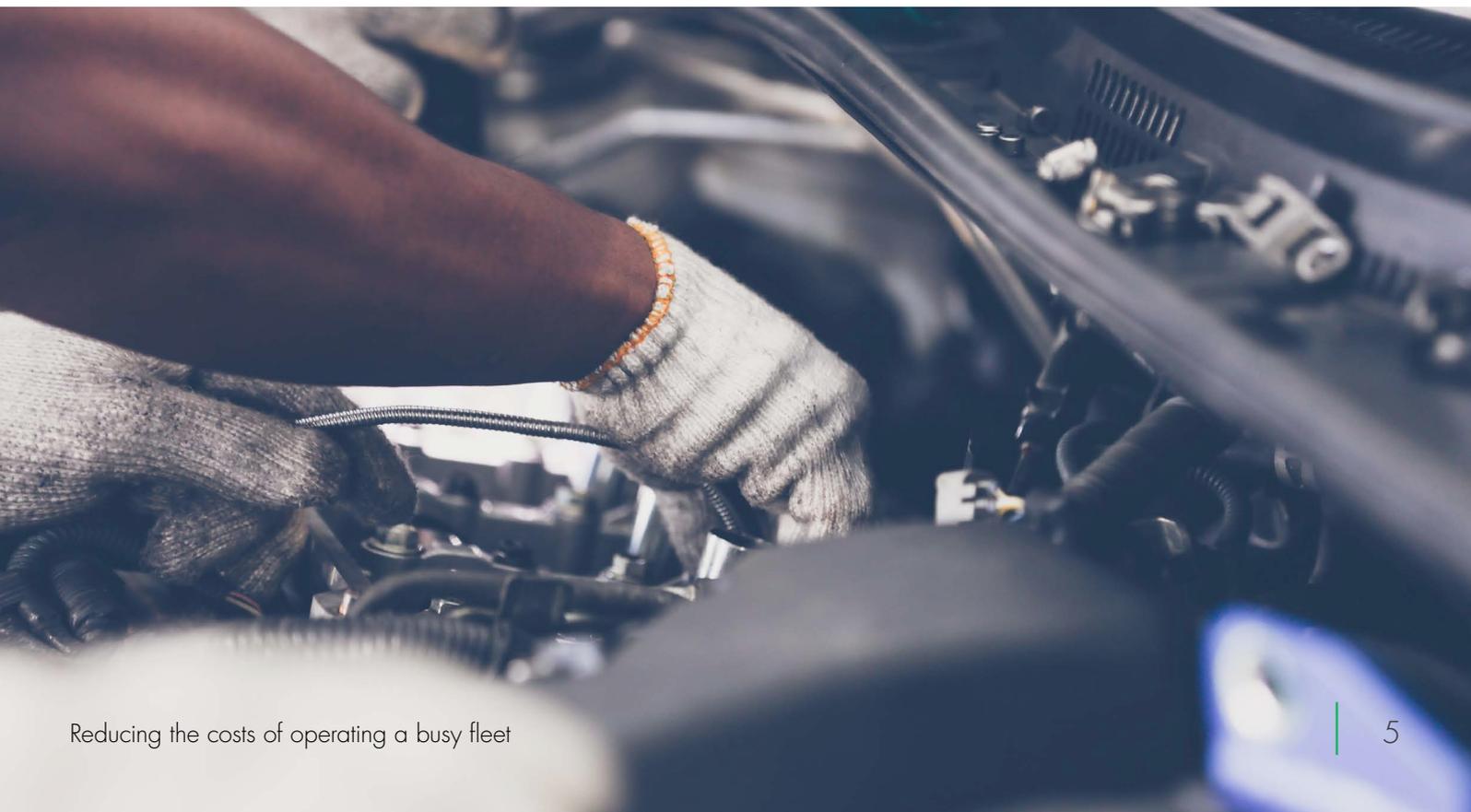
When a vehicle is used a lot every day, you quickly see the effects on the vehicle's health and notice signs of wear and tear. The extent of those effects can vary, sometimes dramatically shortening the life of certain parts and rocketing the cost of maintenance. Harsh braking and acceleration, and driving at high speeds, will certainly take toll on a vehicle's parts, perhaps most obviously on its tires.

Tires typically cost \$800 for a set of 4. A set of tires exposed to undue stress, not to mention any unfortunate collisions, will last considerably less time than a well looked after set. The Quartix vehicle tracking system helps you ensure that your drivers are navigating the roads at sensible speeds, and changing speed smoothly, thus looking after your tires. In extending the life of those tires, vehicle tracking creates substantial costs savings for your business. One less set of tires every 3.5 years alone would mean that your investment in a vehicle tracking system has given your business a return.

On top of tire health, consider the wider issues such as the vehicle's brakes, servicing, maintenance, and its financial depreciation. These can all be influenced by subtle changes to driver behavior and you'll see the costs come down dramatically.

The Quartix vehicle tracking system calculates simple driver scores based on your staffs' braking and acceleration profiles. These scores are displayed on your drivers' individual records, which can be made available to them via the mobile app, so they can monitor their own progress and understand any trends. Scores are also shown across your fleet in the driver league table. Many businesses use this table as a basis for competitions or incentive programs to reward good driving.

The league table is also a useful way to identify drivers with below average scores and focus attention on coaching them to better habits. Many of our customers have drawn strong correlations between good driver scores and vehicles with lower fuel consumption and lower maintenance costs.



## Encouraging fuel-efficient driving

A 3.5 tonne van driving at 90mph can be 70% less efficient than if it was driving at 60mph. Essentially, driving at very high speeds more than doubles the amount of fuel used, only to get to destinations in slightly less time. Considering the cost of fuel, drivers travelling at high speeds will have a huge impact on your profit margins.

Quartix offers speed analysis reports to help you ensure your drivers are keeping to the legal speeds and avoiding costly fines. These reports show the average speeds travelled by vehicles across your fleet. Alerts can be set to trigger if vehicles exceed certain speeds, allowing you to address this behavior and encourage more fuel-efficient driving habits.

## Creating productivity KPIs

Making sure that your employees take adequate breaks in the day is paramount, especially if they are spending several hours on the road. And the Quartix vehicle tracking system can help you monitor this with high driver hours alerts and driver timesheets. On the flip side, the system can also highlight when drivers are taking unscheduled breaks during their working day. For businesses without a tracking system already in place, this can often be revealed as the reason why journeys were taking longer than expected.

Wasting a business' time costs more than just an employee's wage. If your staff are paid \$30 per hour and they take 2 hours per week in extra breaks, the initial cost of that to your business is \$60. This scales up to \$3,120 per driver per year. This is before other financial losses are even considered, such as the cost of completing fewer jobs in the day. \$3,120 per driver per year is just the wages that your business might be paying for, essentially, nothing at all.

The Quartix vehicle tracking system can save your business that expense, costing just 5% of that potential \$3,120 loss, per vehicle per year. If you can eliminate unauthorised breaks, then vehicle tracking offers a huge return on investment. Employees who are being tracked will be much more likely to adhere to your schedule.

Quartix utilization dashboards show you which vehicles in your fleet are stationary and which are in use. You can create KPI alerts for your fleet so that you are notified if, for example, less than 20 deliveries have been made by 2pm. There are several features of the system that can help your business to connect with its fleet operations, stay on top of workloads and keep business flowing.



## Complete visibility of your fleet

Always knowing the location of your vehicles can be an invaluable tool. You can use this knowledge to:

- ✓ plan more effectively
- ✓ make more informed decisions
- ✓ manage your customers' expectations of arrival times

In the event of an accident or a problem with a vehicle, you can use vehicle tracking to send help speedily. The Quartix system shows the precise location of a driver who may need assistance, but it also shows where the rest of your fleet are in relation to them, in order of their proximity. This enables you to send the closest driver to recover the delivery, if any goods need to be transferred, or perhaps the closest repair vehicle if you manage vehicle repairs in-house.

Setbacks such as this can cost your business time and money. The delay in productivity and staff downtime will be an inevitable loss, but there may be cancellation fees or penalties involved too. Any disruption to your daily schedule will influence your business performance, and the Quartix vehicle tracking system helps you to minimize those unwanted delays.



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As you can see, there are many ways that a business can generate a large return on their investment in vehicle tracking, and we have explored just a few. To find out just how much you can expect to save in fuel costs use our personalised [Fuel Savings Calculator](#).