

# 4 Vehicle Tracking Secrets That Will Boost Your Fleet's Performance

*Turning telematics data into fleet performance improvements*

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## Introduction

As a fleet manager or owner of a fleet operation, assessing and measuring your fleet's performance can be a huge challenge. And an expensive one.

On a daily basis, fleet managers deal with a laundry list of issues. Just a few include: high costs, inefficient workflows and processes, vehicle maintenance, safety protocols, Hours of Service (HOS) Compliance, dangerous drivers, high fuel consumption, delays. The list goes on and on.

Optimizing your fleet is a process that leads to a tangible, measurable ROI — but only with a solution that puts your exact needs at the forefront. With the right software, hardware tools and techniques, you can provide clear and actionable data across every vehicle in your fleet.

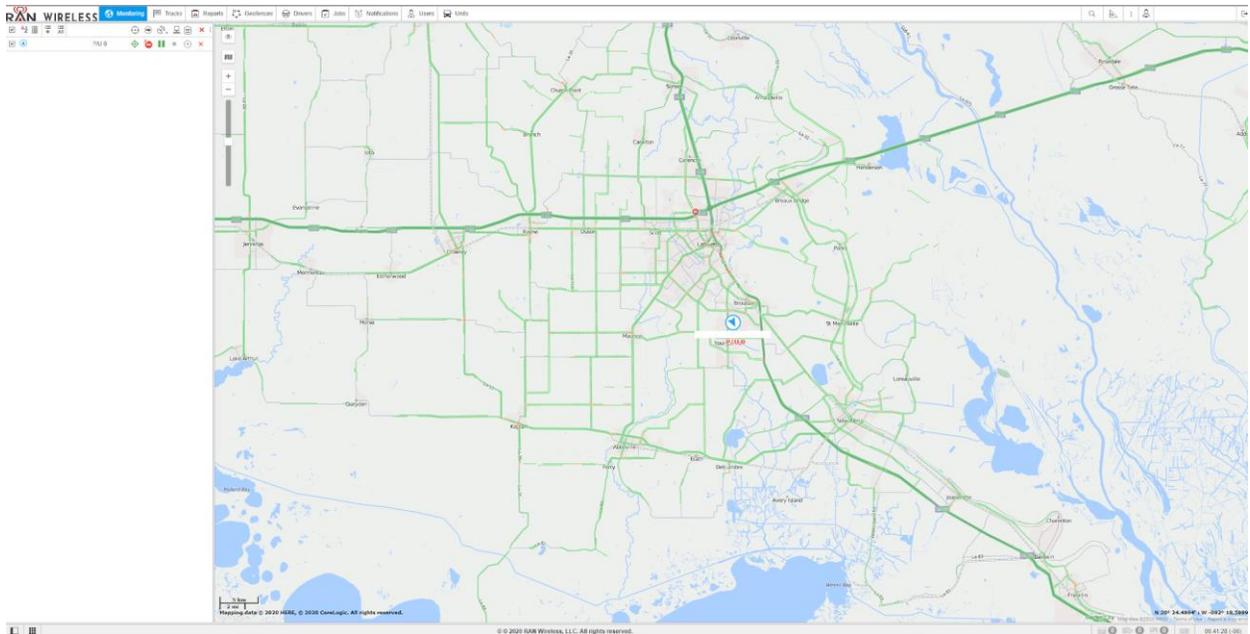
In this whitepaper, we'll discuss the 4 secrets that have proven to boost fleets' performances and dive into why they work. We'll dig into the types of data you can generate from tracking your fleet's performance and how to turn that data into insights you can use right now. Finally, we'll look at the types of software you'll want to consider for optimizing your fleet and providing a solution to the challenges you're facing.

## How does fleet management software work?

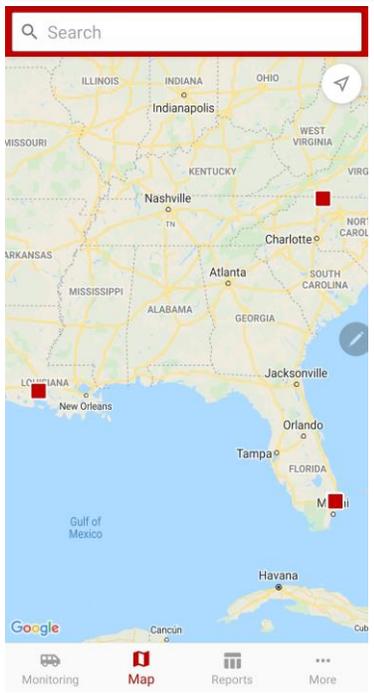
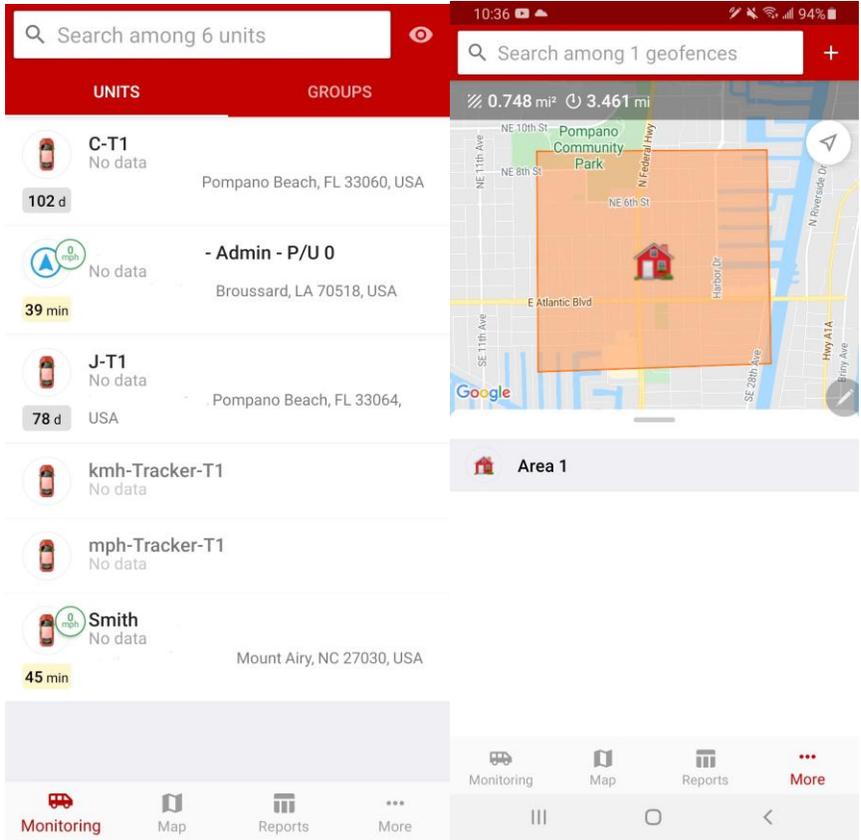
At the heart of a fleet management software solution are tiny telematics devices that connect to a vehicle's diagnostics port. Installation methods can differ, but most come ready to "plug and play". So you don't need a mechanic or special expertise to install them correctly.



These telematics devices track and collect standard vehicle data like distance traveled, speed, harsh turning or braking, GPS location, bearing, idling, and fault codes. From the vehicle, the data usually gets sent to a web-application through a cellular connection. The application will organize the data into a set of user friendly reports used by management to make decisions.



Many solutions also include a mobile application to provide more accessibility to the vehicle data. It follows the same process of receiving and organizing the data into useful reports for users, and connects via Bluetooth, USB or a cellular connection.

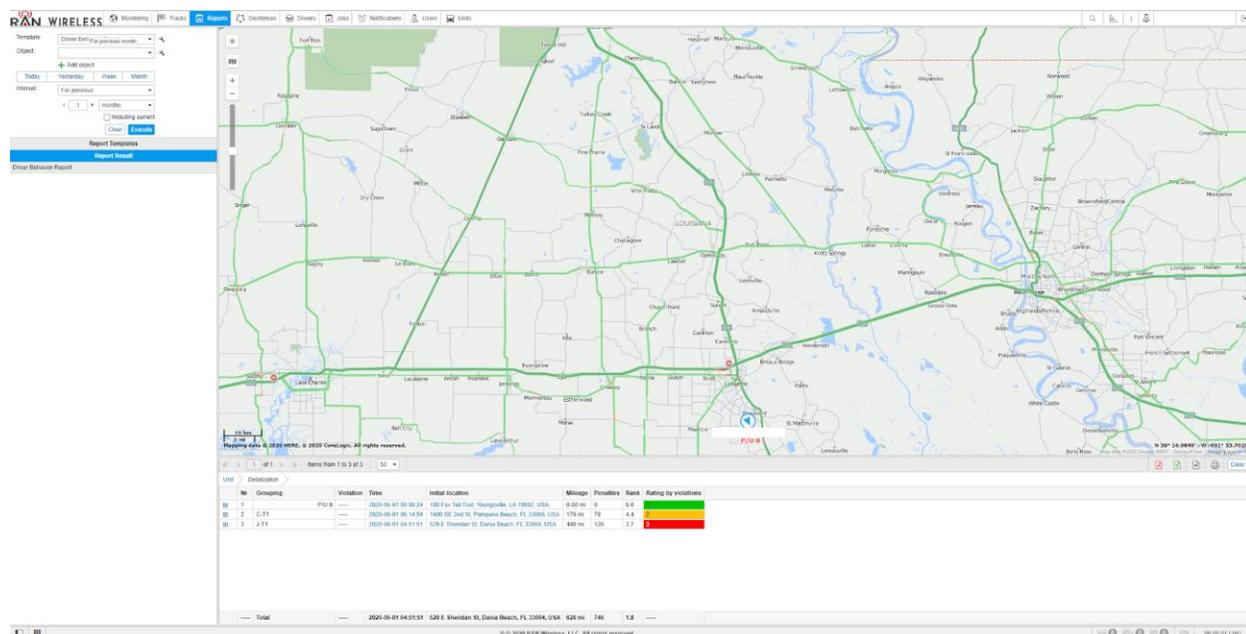


**Secret 1: Use a Reliable GPS Tracking Device/Company**

*Summary: When looking for which GPS tracking device company to use for your fleet, it's important that you pay attention to several key factors. Data from GPS telematics devices should enable you to lower the overall costs of your fuel, customize what data you get, send that data to your customers, and make better decisions with the new information you're receiving.*

## Lower fuel costs with improved driver routes

One of the most effective ways fleet managers can lower costs is to use software to figure out the most efficient driver routes. Analyzing how well your past routes have performed over time can help you spot where fuel might be getting wasted. Based on that analysis, you'll be able to better predict departures and arrivals for clients. You can also plan the most fuel- and time-efficient driver routes for future deliverables.



*Takeaway: It's best to search for fleet management solutions that truly understand what you need. Solutions providers who understand the process you go through on a very granular level can help you get the best results quickly. For example, RAN Wireless's fleet management solution provides to-the-second driver performance data. You'll be able to see how closely drivers are sticking to their scheduled deliverables, keep track of arrival and departure times without having to make any phone calls, and update driver routes based on live traffic feeds.*

## Behavioral customization

Fleet management solutions allow you to configure your system based on rules you've deemed important to track. These rules could have stemmed from past issues (like a driver with a heavy foot), or from simple behaviors you believe could be optimized (like avoiding traffic to save fuel).

The main benefit here is you have the flexibility to set your own guardrails for what data you want to collect and analyze. For instance, you could allow a slightly higher degree of 'speeding' for drivers on cross-country routes. Software is robust enough to consider the context of what happens in your business. And with the right solutions provider, you can accurately set the system up to conform directly to your business's contextual factors.

## Comparing Planned Driver Routes vs. Actual Driver Routes

It's critical to understand the routes drivers are actually taking, and if those routes match what you had planned. With fleet management solutions, you can go back and compare your plans to the route your driver took on the road. This lets you learn where your plans might be falling short and figure out whether your driver was able to stay on track and make deliveries on time. With this knowledge, you'll be able to adjust future plans for routes based on the information you're gathering.

No	Trip	Started	Initial location	Final location	Duration
47	Parking	09-Jun-2020 12:54 pm	307 NW Main St, Bunkie, LA 71322, USA	307 NW Main St, Bunkie, LA 71322, USA	0:10:26
48	Trip	09-Jun-2020 01:04 pm	307 NW Main St, Bunkie, LA 71322, USA	I-49, Bunkie, LA 71322, USA	0:11:13
49	Parking	09-Jun-2020 01:15 pm	I-49, Bunkie, LA 71322, USA	7941 Interstate 49 South Service Rd, Opelousas, LA 70570, USA	0:19:01
50	Trip	09-Jun-2020 01:34 pm	7941 Interstate 49 South Service Rd, Opelousas, LA 70570, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	0:36:29

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No	Activity	Started	Initial location	Final location	Duration
51	Parking	09-Jun-2020 02:11 pm	108 Fox Tail Trail, Youngsville, LA 70592, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	3 days 23:47:28
52	Trip	13-Jun-2020 01:58 pm	108 Fox Tail Trail, Youngsville, LA 70592, USA	1250 Albertson Pkwy, Broussard, LA 70518, USA	0:19:59
53	Parking	13-Jun-2020 02:18 pm	1250 Albertson Pkwy, Broussard, LA 70518, USA	Sweetland Ave, Broussard, LA 70518, USA	0:14:59
54	Trip	13-Jun-2020 02:33 pm	Sweetland Ave, Broussard, LA 70518, USA	Unnamed Road, Lafayette, LA 70501, USA	0:20:35
55	Parking	13-Jun-2020 02:54 pm	Unnamed Road, Lafayette, LA 70501, USA	Unnamed Road, Lafayette, LA 70501, USA	0:24:00
56	Trip	13-Jun-2020 03:18 pm	Unnamed Road, Lafayette, LA 70501, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	0:27:43
57	Parking	13-Jun-2020 03:46 pm	108 Fox Tail Trail, Youngsville, LA 70592, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	1 days 14:37:20
58	Trip	15-Jun-2020 06:23 am	108 Fox Tail Trail, Youngsville, LA 70592, USA	I-49, Opelousas, LA 70570, USA	0:41:18
59	Parking	15-Jun-2020 07:04 am	I-49, Opelousas, LA 70570, USA	I-49, Bunkie, LA 71322, USA	0:15:58
60	Trip	15-Jun-2020 07:20 am	I-49, Bunkie, LA 71322, USA	401 Walnut St, Bunkie, LA 71322, USA	0:09:09
61	Parking	15-Jun-2020 07:29 am	401 Walnut St, Bunkie, LA 71322, USA	401 Walnut St, Bunkie, LA 71322, USA	7:20:46
62	Trip	15-Jun-2020 02:50 pm	401 Walnut St, Bunkie, LA 71322, USA	I-49, Bunkie, LA 71322, USA	0:12:43
63	Parking	15-Jun-2020 03:03 pm	I-49, Bunkie, LA 71322, USA	1371 Nash Dr, Opelousas, LA 70570, USA	0:20:50
64	Trip	15-Jun-2020 03:24 pm	1371 Nash Dr, Opelousas, LA 70570, USA	3031 Louisiana Ave, Lafayette, LA 70501, USA	0:19:26
65	Parking	15-Jun-2020 03:43 pm	3031 Louisiana Ave, Lafayette, LA 70501, USA	3031 Louisiana Ave, Lafayette, LA 70501, USA	0:09:25
66	Trip	15-Jun-2020 03:53 pm	3031 Louisiana Ave, Lafayette, LA 70501, USA	801 Savoy Rd, Youngsville, LA 70592, USA	0:32:20
67	Parking	15-Jun-2020 04:25 pm	801 Savoy Rd, Youngsville, LA 70592, USA	801 Savoy Rd, Youngsville, LA 70592, USA	1:45:33

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No	Activity	Started	Initial location	Final location	Duration
68	Trip	15-Jun-2020 06:10 pm	801 Savoy Rd, Youngsville, LA 70592, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	0:09:11
69	Parking	15-Jun-2020 06:20 pm	108 Fox Tail Trail, Youngsville, LA 70592, USA	108 Fox Tail Trail, Youngsville, LA 70592, USA	12:12:16
70	Trip	16-Jun-2020 06:32 am	108 Fox Tail Trail, Youngsville, LA 70592, USA	I-49, Washington, LA 70589, USA	0:44:31

## Avoid delays with urgent customer requests

You want to give your customers outstanding service, but so do your competitors. So what can you give your customers to keep them coming back to you again and again?

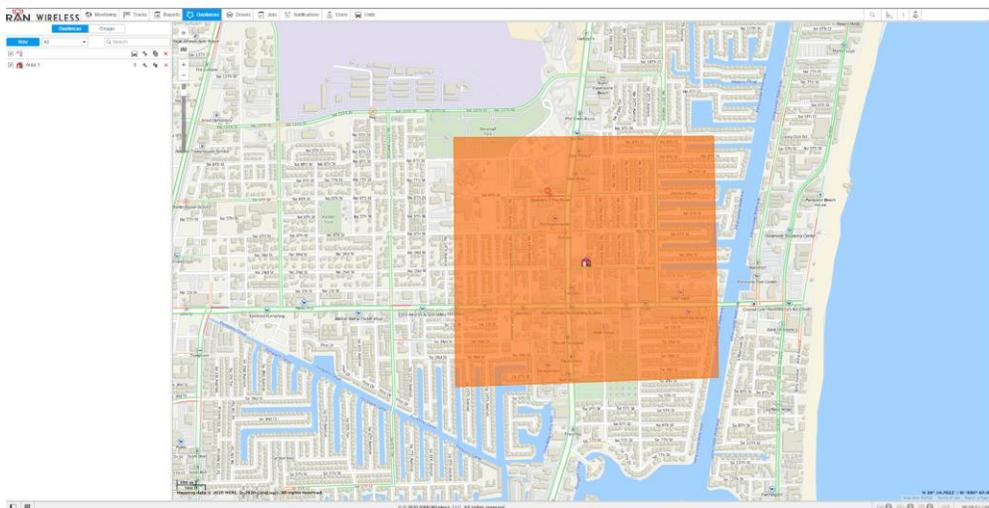
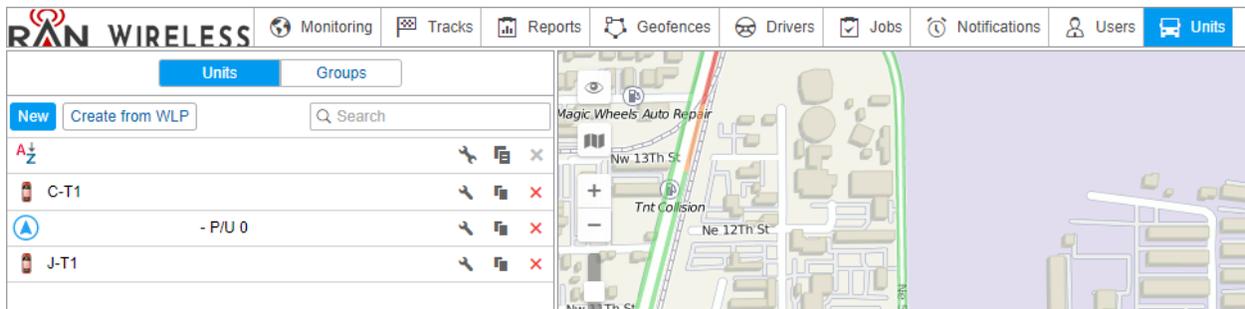
Predictability confidence.

In other words, customers want to be 100% confident that you'll deliver on-time every time, and that you'll be able to provide data for where and when your deliveries will be at any given time.

Fleet management software can help you deliver this.

For example, a daily route planner lets your drivers arrive on time and stay organized about it. Software platforms with built-in route optimization algorithms can consider millions of possible scenarios to figure out the best route for drivers to take. This way, your fleet can have automatic suggestions, based on live data, to avoid delays and stay closely on schedule.

*Takeaway:* Most GPS trackers only offer "breadcrumbs" that update vehicles' location every 5 minutes or so. While that's somewhat effective, RAN Wireless includes visibility into every vehicle's exact location every 30 seconds. You can even set predefined geofence zones that give you live alerts when one of your vehicles enters or exits a particular area. This helps you give customers the most relevant, up-to-date information possible.



**Speed up decision making with actionable, real-time data**

Using data to optimize and speed up decision making for managing your fleet is obviously useful. A flood of data without context, however, is not. That's why you need a fleet management solution that works just as well for acting on data as it is at collecting it.

Many solutions providers collect mass quantities of data for your vehicles' health and maintenance. But they don't help you capitalize on it quickly. That's why RAN Wireless collates all the data our software collects into one user-friendly dashboard. In the dashboard, you can view and analyze your data to find answers to questions you have about what's happening with your drivers out on the roads.

The screenshot displays the RAN Wireless dashboard interface. At the top, the logo 'RAN WIRELESS' is visible on the left, and navigation tabs for 'Monitoring', 'Tracks', 'Reports', 'Geofences', 'Drivers', and 'Jobs' are on the right. Below the navigation, there is a search bar and a 'New' button. A taskbar shows a 'General Report-Monthly' job with a green checkmark, a play button, and the number '7'. A configuration window for this job is open, displaying the following details:

Type:	Send a report by e-mail
Parameters:	template — - Standard Reports-Advanced, format — PDF, interval — for 30 days
Recipients:	
Schedule:	each 720 h
Last execution:	2020-07-25 16:28:48
Resource:	

The background shows a map with several location markers: 'Magic Wheels Auto Repair', 'Tnt Collision', and 'Israel Upholstery'. Street names like 'Nw 13Th St', 'Ne 12Th St', 'Ne 10Th St', and 'Ne 5Th Avenue' are also visible.

- P/U 0		38 min 22 s ago (2020-07-31 06:14:44)	
108 Fox Tail Trail, Youngsville, LA 70592, USA			
0 mph	130 mi	3471.71 h	✖ 9
		30.120226 -91.9831385	
Sensor values:			
Ignition: On		Vehicle Battery: 12.65 V	
Unit Battery: 4.03 V		# of DTCs: 0.00	
First DTC: N/A		RPM: 0.00 rpm	
Vehicle Speed: 0.00 MPH		Odometer: N/A	
Message Code: Check in (2.00)		Engine Hours: N/A	
Fuel Level Percent: N/A		Fuel Level: N/A	
Engine Oil Temp: N/A		Engine Coolant: N/A	
Transmission Temp: N/A		Front Driver Tire: N/A	
Rear Driver Tire: N/A		Front Passenger Tire: N/A	
Rear Passenger Tire: N/A		in Motion: Off	
MIL Status: Off		Airbag Light: Off	
ABS Light: Off		Seat belt Fastened: No	
Brake Switch: Not Pressed		Oil Pressure Light: Off	
Coolant Hot Light: Off		TPMS Light: Off	
VIN: N/A		Power State: Connected	
GPS Status: 3D Fix (0.00)			
Connectivity settings:			
Device type: LMU-3030			
Unique ID:			

Here are some dashboard use cases:

- Check how many hours your drivers have while planning jobs.
- Set customized alerts to let you know if a driver is going above the speed limit.
- Tag vehicles by city or region, and filter data based on those tags.
- Set up a 'Safety Inbox' where you can find all safety incidents from video footage, then decide if you want to dismiss the event or put a driver through safety training.

## Secret 2: Optimize work hours

*Summary: Having many, many drivers can sometimes be a vanity metric for fleet owners. When trying to cut costs and make smarter use of data, it's critical to fully optimize every hour your drivers are out on the road to ensure maximum efficiency. The key factors you should pay attention to are real-time performance data of driver behavior and how that behavior impacts your overall costs.*

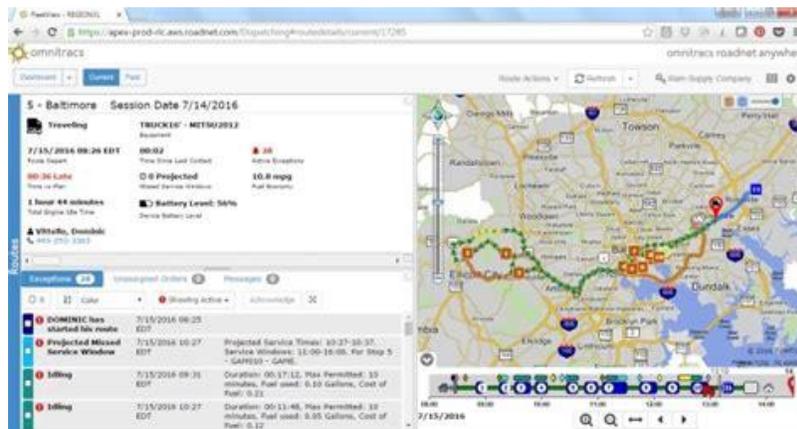
**Optimize working hours instead of expanding the team, which saves tens of thousands of dollars annually.**

When it comes to growing a profitable, sustainable fleet business, simply hiring more drivers isn't always the answer. You'll want to optimize the hours your current drivers already work.

How do you optimize your team of drivers?

To start, you can use software to see how many hours each driver spends on each job assignment. Most solutions will let you tag their vehicles to send you custom alerts if they break any rules, are late to any deliveries, or speed harshly. These tags make it easier to slice and dice your data when you're trying to dig in and evaluate your team.

For example, tagging each driver's vehicle sending data to custom dashboards for each driver would be especially useful if you run a large fleet across several geographic regions. You'd make it easier for yourself to filter and check all your data, down to the second, to track where your Southern California assets are when you're in Arizona. Essentially, you're giving yourself a birds-eye-view of your entire fleet without being confined to one location.



It also applies from an accountability perspective. Your drivers have to balance a lot of tasks too while being on the go and managing orders before, during, and after trips. Having the data there to verify that they're on track without even having to call and talk to them is a major benefit that saves you thousands of hours (and dollars) over time.

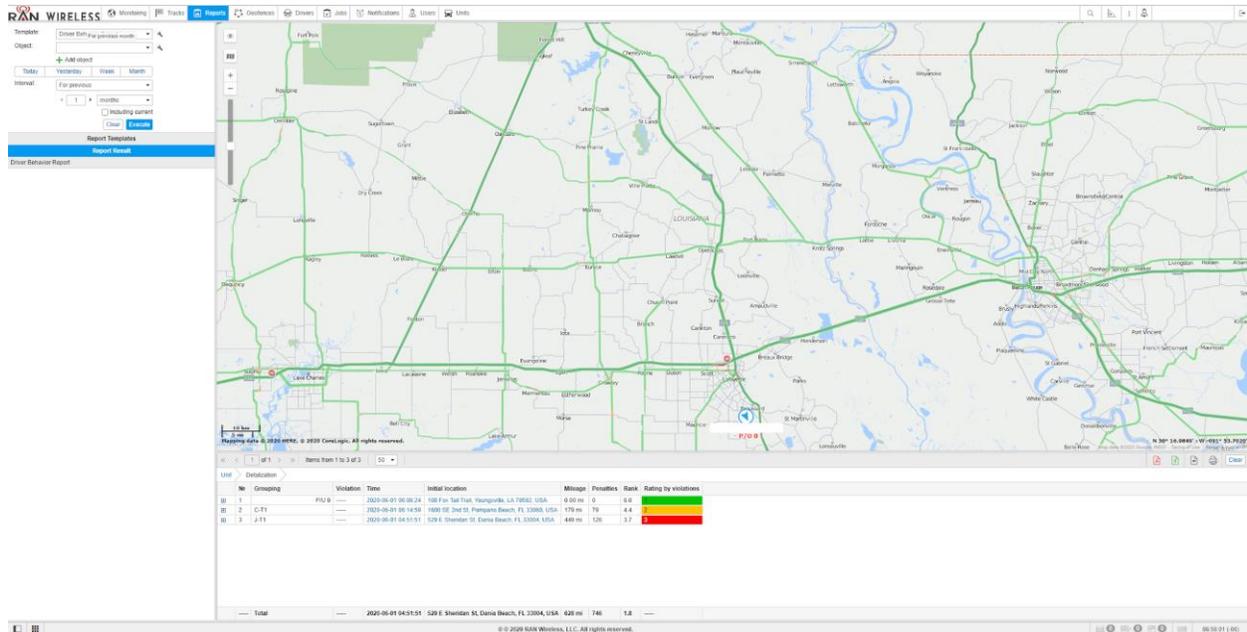
### **Secret 3: Apply Diagnostics to Track Performance**

*Summary: The only real thing that can hold your drivers accountable is data. Fleet management software gives you a system of accountability running in the background. Data from GPS telematics devices gives you the actual story of what's happening out on the road so you, the manager, can figure out where to improve performance, and identify where those performance improvements can lead to measurable cost savings.*

#### **Real-time data on driver's performance.**

Driver performance is another critical area of fleet management wide-open for optimization. It's no secret that drivers are oftentimes overworked and tired on the job. This unfortunately has led to many safety issues for drivers and surrounding vehicles.

The mindful, safety-oriented fleet manager should already be looking for ways to cut these incidents as close to zero as possible. Sensors designed to continuously monitor performance (by tracking indications of impaired driving, sudden stops and starts, speeding, etc.) can enable you to quickly see problems and correct them.



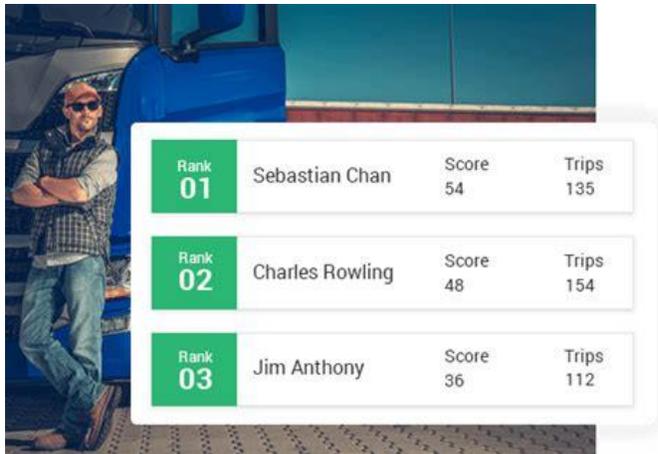
This combination of sensors and user-friendly dashboards can help the modern fleet manager improve driver performance to be safer, more efficient, and more responsible.

### Measuring the Impact of Driver Behavior on Fuel Consumption:

It's no secret that driver behavior is a factor that can have a major impact on fuel consumption and efficiency. Of course, drivers who are heavy on the gas and brake will have much higher fuel consumption rates overall than smoother drivers.

But how can you know which drivers you need to pay attention to right now?

Software solutions let you apply real data to verify your suspicion that a driver may be overly taxing your vehicles. And easily accessible reports with telematics data can help you evidence this when you approach them about it. Overall, the right data makes it much easier to know when to put a driver through additional training for safety and fuel efficiency purposes, and tie in new company policies with issues that you know are actually happening out on the road.



## Secret 4: Use Data to Prevent Accidents

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Businesses that rely on vehicles are by nature always at higher risk for accidents. With that comes a duty to not only keep our roads safe, but limit the financial implications of accidents as well. According to the Federal Motor Carrier Safety Administration (FMCSA), [the average accident costs \\$91,000. And that number rises to \\$200,000 if an injury occurs.](#)

Plus, fleet drivers are often referred to as "moving billboards" for your business. If one of your drivers is behaving dangerously on the road, he's putting himself and others at risk while also damaging the brand you've worked hard to build. Even when no accident occurs.

This is yet another area where fleet management software solutions can come in and help you:

- See who your most dangerous drivers are
- Simplify the process of training to quickly correct dangerous driving behaviors
- Have a record of every driver's past history to spot trends of dangerous driving and if necessary, terminate the employee
- Pull data to protect your business from lawsuit if an accident occurs where you're not at fault

## Predict and prevent maintenance costs and accidents

It's discouraging how much money fleet businesses lose every time a vehicle gets taken off the road for unexpected repairs.

Even with all the possible reasons - typical wear and tear, human error, harsh breaking, etc. - the reality is fleet managers are often caught off guard by unanticipated downtime.

To make matters worse, unplanned maintenance and downtime costs add up in a major way. You miss hours or even days of work, upset clients, spoiled cargo (if you're a hauling perishables like food & beverage) and missed driver pay and hours.

Fleet management solutions and their telematics devices can connect directly to your vehicle's port and start collecting the data you need. They'll automatically pull things like fuel efficiency, overall vehicle health, battery voltage, and coolant temperature. Then send it right to your dashboard for you to analyze. With RAN's platform, you can set automatic notifications to alert you of routine inspections for preventative maintenance to keep unplanned downtime at a minimum, and save thousands of dollars.

### **Provide timely help to drivers in a crash through better reporting**

Fleet management mobile applications let drivers quickly report accidents from the field. They can report crashes and accidents by filling out a mobile form from their phones, for example. Many applications allow drivers to collect detailed data at any accident's site to support repairs, claims and risk management. They could capture information like photos or videos of damages, time of the crash, reasons they were in the accident, and much more.

Software also makes it easier to create detailed accident reports to identify potential risks. From this data, you can pinpoint exactly where to improve your current driver training programs and optimize to make sure these types of accidents have been addressed. By doing this, you improve the long-term safety of your fleet.

Tracking the status of accidents becomes much easier with software as well. With the right tool, it becomes easier to monitor, then review, the details of all the road accidents that happened in your organization. Notifications related to each incident's progression can be automated as well, from the first claim to repairs and completion.

### **Reduce insurance costs**

Fleet driver behavior, especially those with a history of putting others at risk, can negatively impact your insurance premiums. This is another important area where installing telematics devices into vehicles can mitigate this issue.

This might be more of a priority for larger fleets than smaller fleets, but the costs associated with legal issues can quickly add up on your balance sheet.

### **Conclusion and Resources**

With RAN Wireless Fleet Management Solutions, you can use OBD telematics devices to capture and capitalize on data related to driver behavior, fuel efficiency, and a huge variety of other metrics. Putting this data into the right context enables you to find countless opportunities to optimize your fleet for cost savings and better performance.

Whether you're already using software to boost your fleet or increase the safety and compliance of your drivers, RAN Wireless has the tools to help. Leveraging RAN Wireless's Fleet Management Solutions and other resources will help you scale these opportunities to maximize the business value your fleet generates.

## **Resources**

[Fleet Management Software Functions](#)

[How does a GPS tracking system work?](#)

[Frontiers of Real-Time Data Analysis](#)

[RAN Wireless Fleet Solutions](#)

[Safety is Good Business](#)

**Ready to work with RAN Wireless? [Book a free demo today](#) and see how we can change your fleet's performance forever!**