



**ROUTE
TRAX**

**INTEGRATED
GPS TELEMATICS
TRACKING AND
ELECTRONIC
LOGGING**

Buyers Guide

Vehicle fleets will be required to have GPS tracking and E-Log systems installed by December 18, 2017, according to rules announced by the Federal Motor Carrier Safety Administration (FMCSA) and the DOT. Similar regulations are expected in Canada in 2018.

WHY SHOULD I READ THIS GUIDE?

GPS telematics vehicle tracking and electronic logging (E-Log) is an ever-growing industry, with an ever-growing number of solution providers, ranging from the regional to the international in scale. For those unfamiliar with the industry, many companies seem to offer similar services. How do you choose the right one, especially since the choice will have significant financial and efficiency implications for your company?

Helping you make best choice is why we created this guide.

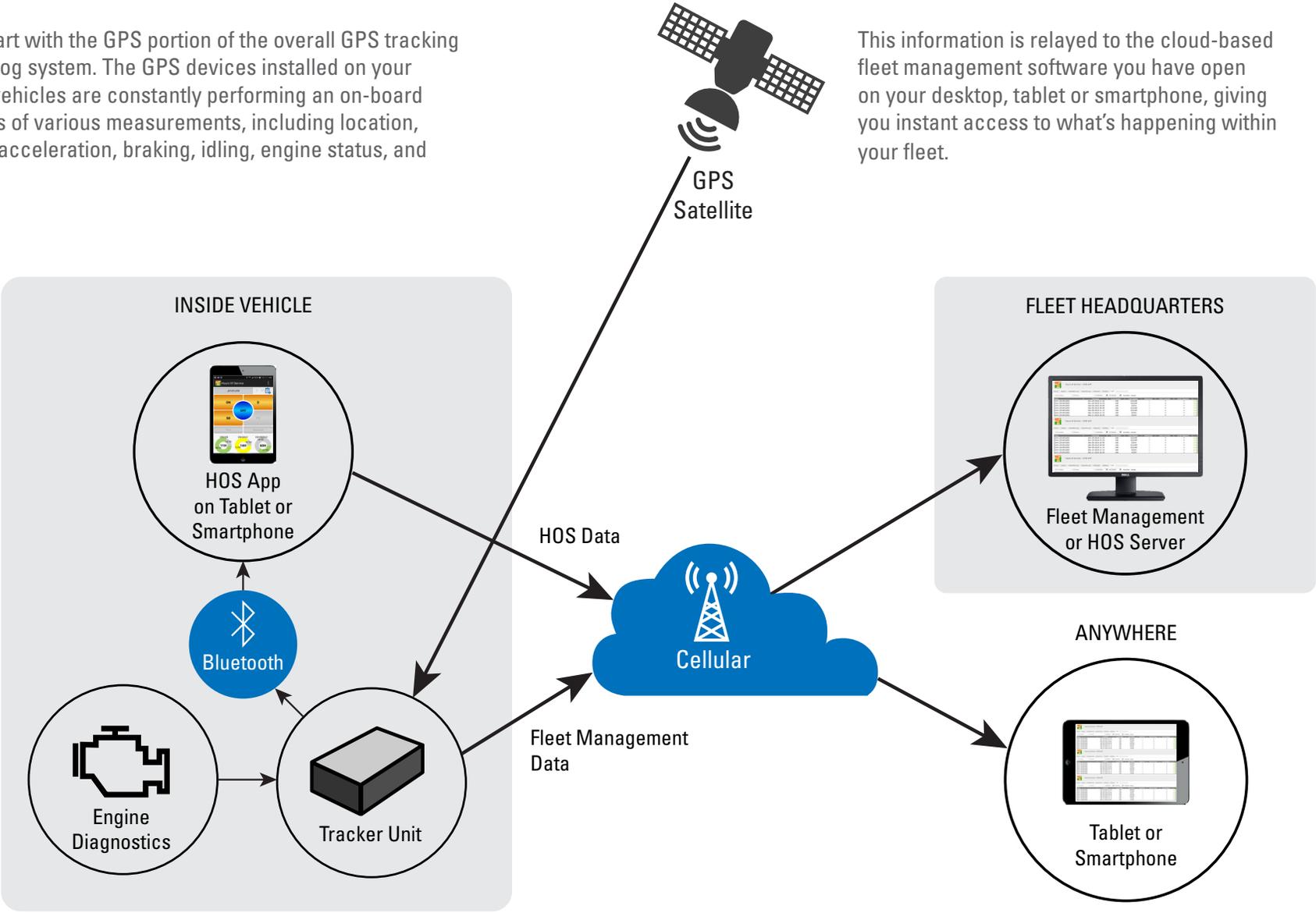
Just a few of the industries using GPS tracking

Food and beverage delivery	Moving companies
Construction	Pest control
Electrical	Security services
Plumbing	Utilities
Waste management	Contractors
HVAC	School districts
Cable /Telecom	Cleaning
Transportation	Oil fields
Landscaping	

TRACKING IN REAL TIME

Let's start with the GPS portion of the overall GPS tracking and E-Log system. The GPS devices installed on your fleet's vehicles are constantly performing an on-board analysis of various measurements, including location, speed, acceleration, braking, idling, engine status, and more.

This information is relayed to the cloud-based fleet management software you have open on your desktop, tablet or smartphone, giving you instant access to what's happening within your fleet.



WHAT FEATURES SHOULD I BE LOOKING FOR?

Drag & Drop Scheduling

No matter what the system and what the company, adjustments always have to be made, often on a daily basis.

Drag & Drop capacities allow you to:

Move a driver's location pin somewhere else on the map

- Drag appointments from one order line to another

- Change fleet assignments

- Push an appointment time

Driver Behaviour

The system can provide real-time alerts about inappropriate driver behaviour such as speeding, idling, hard braking or acceleration and cornering as well as unauthorized vehicle use and much more. These behaviors can be quickly addressed – and must be – because they can have a significant impact on costs and company reputation.

Equipment Inventory Control

Full data on every fleet vehicle can be entered and stored for fleet managers to review.

Fuel Card Integration

A fuel card can streamline accounting and eliminate unauthorized fuelling up.

Geofence Landmark Alerts

Geofencing allows you to create specific geographical regions with particular properties. You can assign vehicles to a specific region for greater efficiency, receive alerts when vehicles are entering or exiting a specified area, as well as alerts if drivers are deviating from pre-established routes.

PTO (Power Take Off)

Your system should not only send out information about vehicle location and whether it is moving or stationary. As well, for vehicles like dump trucks and cements trucks – that are often stationary – it should inform managers whether they are unloading, loading, or merely standing idle.

Real-Time Vehicle Location

Reports of vehicle location should be sent out approximately every 30 seconds. This is key to optimizing vehicle utilization, eliminating unwanted driver behaviour and carrying out rapid route adjustment, among many others.

Routing

You should be able to create a comprehensive routing itinerary, including multiple stops. Systems can also provide a route optimization tool that compares various routes and provides drivers with the shortest route to their destination(s).

Starter Interrupt

When theft or unauthorized use or other activities are suspected, a starter interrupt can be used to prevent the vehicle from starting.

Street Views

Your system should offer managers the option of seeing a street view of where a given vehicle is.

Temperature Monitoring

The system should include sophisticated sensors that can monitor temperature as an option, which is key if you handle refrigerated cargo.

Vehicle Diagnostics

Among others, your tracking unit should monitor the following: odometer, coolant temperature, vehicle speed, engine speed/RPM, fuel consumed, fuel level, battery voltage, engine hours, seat belt status, water in fuel, cruise control state, engine coolant level, transmission oil temperature, and parking brake status.

Vehicle Maintenance Reminders

Appropriate maintenance of your fleet of vehicles is one of the best ways of keeping your operating costs down. The system automatically records key metrics and schedules maintenance.

Vehicle Trails & History

One of GPS systems' most important features is the ability to review drivers' routes. Our system automatically uploads data to a server, where it can be accessed from any browser, no matter what the device. The data is also stored for review at any time, so you're not stuck at your computer all day long to monitor driver behaviour. It's also useful for reviewing billing or protecting yourself against litigation. Data should be available from the first day of system installation.

WHAT SHOULD I BE LOOKING FOR?

Electronic Logging – what is it?

Electronic Logging (E-Log) relates to two different sets of data: Hours of Service (HOS) and Driver Vehicle Inspection Reports (DVIR). In the not too distant past, drivers were required to keep paper logs of a host of daily activities, such as the number of hours driven, number and length of meal breaks and fuel stops, accidents, breakdowns, etc. It was a time-consuming process for both drivers and head office, not always accurate, and hard to verify. You had to take the driver's word for the information, because nobody was on the spot to monitor the situation.

Now all of this information is automatically recorded by an E-Log, an app that is installed on the driver's tablet. Drivers activate the E-Log before starting to drive and data is transmitted electronically for managers to view in real-time if they wish to. Obviously, this saves time, is more accurate, and is difficult to falsify.

Drivers can also send reports to inspectors should they be requested to do so.

Drivers must still make manual inspections of their vehicles, but information is entered into the E-Log and automatically transmitted to fleet managers.

This should lead to substantial savings (because of less paperwork) and safer driving because of stricter compliance with driver HOS.

What does your E-Log need to do?

Whichever E-Log system you choose, it needs to be easy to use, robust, and compliant with FMCSA and DOT regulations. Your E-Log system needs to be able to provide driver duty status and meet the following regulations.

- 60 h/7days or 70 h/8 days rules
- 11 h daily
- 14 h on duty (daily)
- Sleeper berth
- Passenger seat provision
- Personal conveyance
- 30-minute break
- Location recording for engine on and off, and every 60 minutes if moving
- Mobile device permits duty status changes only when the vehicle is at rest
- Warns driver, visually and/or audibly of any malfunction
- When the truck is stationary for 5 minutes or more, it will default to on-duty not driving and the driver must enter the proper status

Driver ID

If a company doesn't assign drivers a vehicle on a permanent basis, Driver ID allows for a variety of sign-in credentials. Thus the company can find out which driver is driving which vehicle at all times.

User-friendly design

A clean, crisp, user friendly design ensures the best possible user experience for all. Users should have no problem navigating through the system.

All features should be readily available using large buttons and print making them easy to use and highly visible.

Something like what you see below.



WHY SHOULD I INVEST IN A GPS TELEMATICS AND E-LOG SYSTEM?

For one thing, you're going to have to, in order to be compliant with regulations coming into effect December 18, 2017. But there are many more benefits that a GPS telematics and E-Log system can bring to your company.

Benefits

- Increased productivity – gain up to one more stop per day per vehicle
- Reduced fuel bills – better routing, better driving habits (no speeding, decreased idling, etc.)
- Reduced off-hour vehicle use
- Increased payroll accuracy – you can see true start and end times as opposed to relying on driver's report
- Improved company reputation – more accurate (time) deliveries; reduced incidents of aggressive/dangerous driving

ROI

The money you invest in a GPS telematics system should be treated the way you'd treat any other investment. The supplier you choose should be able to tell you the ROI you can expect on your investment.

Note: The least expensive solution isn't necessarily the best solution – you need the solution that will benefit your company the most over the long term.



OTHER CONSIDERATIONS

Reliability and durability

You should enquire of your supplier where their equipment is manufactured. Sometimes equipment manufactured off-shore doesn't stand up well to vibrations, the wear and tear, and the extreme weather conditions that can be found throughout North America.

Warranty

Your supplier should provide you with a lifetime warranty on their system. Period.

Tip

You might want to think about installing a pilot project on part of your fleet to ensure that your supplier's solution functions as promised.

CONSIDER THIS

While you're considering many solutions, we invite you to visit routetraxinc.com to view our system and the many advantages it offers.





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