



# Ultimate Guide to Asset Tracking & Management

Answer these 15 questions as you research asset tracking systems to better understand utilization; reduce waste; and optimize the resources of your business.



**GPS Trackit**  
Fleet Intelligence Simplified™





## Why You Need Asset Management

When you're looking for an asset, you need to pinpoint it quickly so it can be deployed to the job site. GPS tracking technology provides this connectivity.

It helps you keep tabs on heavy equipment, truck trailers, generators, and even unpowered property such as trash containers or larger office equipment.

Construction firms can locate and increase utilization of their equipment, which is known as "yellow iron," with once daily or more frequent location pings. The trackers gather engine data from the machine to help reduce maintenance costs with oil and fuel level data and diagnostic codes for parts failures.

Trucking and transportation companies monitor their trailers to track deliveries, maintain cold-chain compliance, and boost security.

Tracking of smaller equipment and unpowered assets helps avoid duplication at job sites and allows financial personnel to complete accurate inventories of depreciating assets that will come into play at tax time.

Asset tracking technology also helps businesses that rely on medium-duty trucks with auxiliary equipment and power take-off (PTO) devices. These businesses – such as construction, tree trimming, and waste management – can gather ample data on the use of the cranes, booms, towing rigs, and other equipment installed on the truck. Some of the benefits of asset management technology include:



Locating  
lost assets



Increasing  
utilization  
of equipment



Reducing  
downtime  
with preventive  
maintenance



Improving  
security of  
assets



Compiling or  
consolidating  
asset inventories



Speeding  
recovery  
of stolen  
assets

## Finding the Right Solution: 15 Questions to Ask

While GPS vehicle tracking tends to garner the most headlines, asset tracking provides another layer of intelligence around other crucial resources to heighten productivity and eliminate waste.

**Let's go over 15 questions to ask during a process that leads from initial research to a final decision.**

### Monitoring Heavy Equipment Assets

# 1

*Question 1: What type of construction equipment can I monitor?*

Monitoring heavy equipment is the most robust form of asset management beyond tracking of on-road vehicles. The category includes earth-moving machines, quarrying equipment, and fork lift trucks. It can also include agricultural equipment, such as tractors. Leading manufacturers include Caterpillar, John Deere, Komatsu, and others.

*Question 2: Which data will I receive from my heavy equipment?*

# 2

The tracking device provides location, allows geofences, and gives maintenance data such as oil level and fault codes. Asset managers can set up alerts for equipment moves and after-hours usage to deter theft and help recover missing assets.

*Question 3: What powers the tracker while it's mounted to the machine?*

# 3

The onboard battery can last up to 5 years, and some modules, like the GL500 asset tracker from GPS Trackit, include tamper sensors that alert the fleet manager if someone tries to pry it off.

# 4

*Question 4: Will I be able to collect data if the equipment is located in an area with spotty cellular coverage?*

Equipment trackers usually include chips that provide connectivity over cellular networks or satellite systems. Satellite connectivity, which can come with higher priced data plans, allows you to gather data even if the tracker can't connect to a cellular signal.



## Robust Tracking for Smaller Equipment Assets

*Question 5: What kinds of equipment would be included in this category?*

5

Smaller equipment such as generators can also be tracked using tracking technology. Companies in the oil and gas industry are primary users of this form of asset tracking to support monitoring of pumps and other equipment located in remote locations.

6

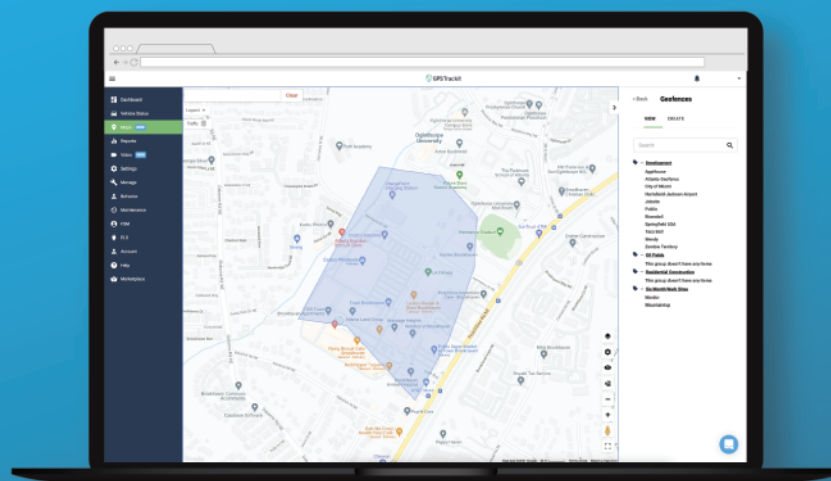
*Question 6: What kind of data can I collect?*

Asset management systems can gather live locations to support utilization initiatives, billing, and maintenance scheduling. These modules are also wired into the engine – usually with a single wire rather than the two-wire setup needed for heavier equipment. The hardware can stay powered for about 1 hour after the ignition has been turned off. Collected data can include ignition on/off and wake-up on motion.

## Truck Trailers: Traditional and Refrigerated Options

*Question 7: What kind of hardware will I need to monitor trailers? Do I need a data plan?*

7







Tracking modules for truck trailers can range from the more robust to a simpler, low-powered “slap and track” device that requires a data plan. The choice will be determined by which type of trailer is being used. For trailers with refrigeration units (“reefers”) or other specialty uses, the device will likely be tethered to the trailer. For dry van and flatbed trailers, a simpler version will work. This device can be called a Non-powered Asset Tracker and gets internal power from a long life lithium battery. These trackers can wake up on motion to deter theft – once powered up, they can provide location status about every 15 minutes.

# 8

*Question 8: My fleet transports cargo that needs to be maintained at a certain temperature? How does that work?*

Trailer temperature tracking allows a shipper to monitor the temperature of one or more zones inside the trailer, so cargo such as fish, produce, or vaccines doesn’t spoil. Sensors connected to the module provide alerts if the temperature falls below or rises above pre-set levels.

The system should help shippers comply with the FDA’s Food Safety Modernization Act – a 2017 rule that governs sanitary transportation of perishable food items.

*Question 9: Can I combine all my assets on one dashboard?*

# 9

Tracking technology now allows you to see both powered assets and non-powered assets on the same screen. The Non-powered Asset Tracker solution from GPS Trackit has this capability.



# 10

*Question 10: Can I install a tracking system at the trailer dealer?*

Yes. Many trailer manufacturers such as Wabash National Corp., Great Dane Limited Partnership, and Utility Trailer Manufacturing allow trucking fleets to add aftermarket telematics at the point of purchase. However, it is best to investigate all your options so you don't wind up with a system that provides limited capabilities.

## Collecting Data on Assets Without a Power Wire

*Question 11: What kind of hardware will help me manage assets that don't have an engine?*

# 11

Special, low-powered trackers that use replaceable, onboard batteries help asset managers track well-site equipment, cargo, waste bins, large office equipment, portable construction offices and other unpowered items.

# 12

*Question 12: What kind of features do these trackers offer?*

The devices can provide real-time GPS location or ping once per day to reduce battery drain and data transmission costs. They rely on cellular data networks to provide approximate locations based on their proximity to network infrastructure. They can trigger based on movement of the asset. Fleet admins can set up geofences to receive alerts about when the assets enter or leave certain geographical zones. The trackers can also alert when they move into proximity to pre-set landmarks.

*Question 13: Will this help me if I'm trying to create an asset inventory master list?*

# 13

Absolutely. Adding trackers will help identify the location and status of the asset, so it can be added to a master inventory. This will reduce duplicative assets that are being underutilized at one location and needed at another job site.





# 14

*Question 14: How often do these trackers need to be replaced?*

The onboard batteries of these devices usually last between three to five years. The non-powered asset tracker from GPS Trackit allows you to quickly change the long-life battery when needed.

*Question 15: What's the best way to get started on the path toward purchasing and implementing asset management?*

# 15

Do your research. Asset tracking companies are providing an array of systems. Does the company have a long track record of supporting GPS tracking, and do they provide around-the-clock support of their technology?



If you'd like to learn more about how GPS Trackit can help to improve safety, increase productivity and reduce costs tracking your fleet assets, speak with one of our knowledgeable Fleet Advisors at 866-320-5810 or get a quick Custom Quote.