



## Five Reasons you Need to Track Heavy Equipment

**ORBCOMM** 

Without doubt smart heavy equipment tracking systems deliver savings through increased equipment productivity, reduced operator errors and efficient care and maintenance. But if your heavy equipment operates in remote areas, is your tracking system is delivering on its promised value? Fleet-tracking devices that communicate over satellite deliver the same benefits of their cellular counterparts but offer increased visibility in even the most remote regions.

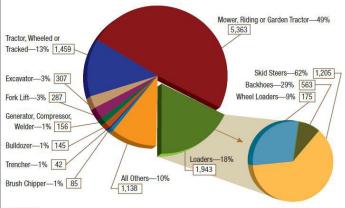
## 1 EQUIPMENT SECURITY

Satellite-based tracking devices are able to monitor the location of heavy equipment even when they are in remote areas like mines, construction sites and oil & gas fields.

Like their cellular counterparts, satellite-based tracking devices can locate misplaced or stolen equipment or track equipment being used during off-hours or in unauthorized areas.

Heavy equipment theft is a big problem in the US. The National Crime Information Center has recorded more than 10,000 thefts of construction and farm equipment in 2012.

### **Types of Equipment Stolen**



#### NOTES

- 1. The chart represents 10,925 theft reports submitted to NCIC in 2012.
- The inclusion of landscaping equipment—mainly commercial riding mowers—reduces the percentage of all other categories.
- 3. The top five types of equipment account for 86% of all losses. In 2011, the top five represented 81% of all thefts.
- 4. "Tractor" is a broad category, including compact, utility, and agricultural tractors.
- More than 50 types of equipment make up the "All Other" category. They include graders, scrapers, wood chippers, and rollers. Unidentified construction and farm equipment represent the majority (more than 500) of the "All Other" category.

National Crime Information Center

### 2 ENGINE ALERTS

Do your operators sometimes push the equipment? Using heavy equipment at or beyond its specified limits not only risks the safety of employees, but also puts additional wear and tear on the equipment that increases maintenance costs. By receiving engine and other equipment alerts immediately (even where there is no cellular), you can meet your health and safety obligations, coach equipment operators and reduce costly equipment failures.

"Say we had an oil-line blowout and the operator was not aware, if you run that engine for just 2 to 3 minutes in a full-load environment, you're going to burn that engine up. In our case, due to telematics and everyone's alertness, we turned what would have been a catastrophic failure and a major engine overhaul into a minor repair. We probably saved in the neighborhood of \$15,000 to \$18,000 on that one incident."

Michael Brennan, CEM, fleet manager for Manatee County, Florida. Source: Construction Equipment Magazine

## 3 PREVENTATIVE MAINTENANCE

With telematics tracking devices, equipment maintenance scheduling can be based on accurate engine usage hours and automatic service alerts; No more unnecessary maintenance based on recommended schedules. Tracking devices can also inform you of any mechanical problems that need urgent attention so they can be corrected before they cause unnecessary downtime, leading to lost revenue or costly fixes.

#### **How Fleet Managers Use Telematics Data**

	43.8%
Record machine operation data, such as hours, fuel,	etc.
	38.8%
Schedule preventive maintenance	
35.	0%
Fault codes and machine health	
31.9%	
Do not use data at this time	
28.8%	
Geo-fencing or location	
25.0%	
Calculate machine utilization	
11.9%	
Integrate into equipment rate and job costing report	S
3.8%	

Monitor emissions compliance

Remote monitoring solutions that include satellite as a communication mode provide the realtime events and statistics on equipment usage and location that are vital to help control operating and maintenance costs.

### 4 LOWER CAPITAL COSTS

Do your employees have favorite pieces of equipment? The problem is that they experience greater wear and consequently need to be maintained or replaced sooner compared to the rest of the fleet. By accurately tracking the usage even when working in remote regions, you ensure that you spread the wear and tear across every piece of equipment and reduce or defer capital investments until you really need to make them.

#### **Average Prices for Construction Machinery**

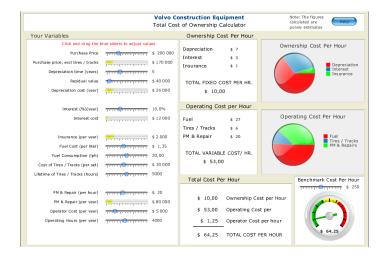
	2011 Average Price	2014 Average Price	2017 Average Price
Graders	\$316,776	\$316,776	\$350,408
Front-End Loaders	\$117,642	\$130,132	\$142,654
Bulldozers	\$332,731	\$368,056	\$403,473

According to IBISWorld, prices for construction machinery have risen at an estimated annualized rate of 3.4%.

# 5 LOWER FUEL AND OTHER OPERATING COSTS

Ongoing costs can add up so it is important to save wherever you can to increase profitability. Continuous monitoring of equipment and alerts using satellite-based tracking devices can warn you of events like fuel theft,

excessive idling, rough driving and other events that eat into operational budgets. It can also help you accurately



Telematics systems like the one offered by Volvo can give you a complete picture of how much it costs to operate equipment. The ability to add data, even when equipment is operating in remote areas, provides the most complete picture for fleet owners.

track overtime hours and ensure that you are being billed accurately for equipment use, even when you are working in remote areas.

Remote monitoring solutions that include satellite as a communication mode provide the real-time events and statistics on equipment usage and location that are vital to help control operating and maintenance costs. They are also instrumental in tracking lost and stolen equipment, especially in areas where there is no cellular connectivity.

#### **ORBCOMM Heavy Equipment Devices & Solutions**

**The PT 7000** is a ruggedized cellular or dual-mode construction equipment tracking and monitoring device, enabling complete visibility and more efficient operation of heavy equipment by providing access to real-time data and analytics. The device provides accurate and timely status and position information along with key operational metrics so OEMs, dealers and end users can proactively manage their construction fleet in even the most remote areas of the world.

**FleetEdge** is a powerful web application and the telematics solution of choice for some of the world's top heavy equipment manufacturers. It is specifically designed to provide heavy equipment managers access to location data, operational status as well as analytic, predictive and diagnostic tools for every asset in their fleet. The data is transmitted from versatile tracking devices via ORBCOMM's multiple satellite or cellular networks for complete asset visibility and control.

#### For more information, visit www.orbcomm.com

ORBCOMM Inc. (Nasdaq: ORBC) is a leading global provider of Machine-to-Machine (M2M) communication solutions and the only commercial satellite network dedicated to M2M. ORBCOMM's unique combination of global satellite, cellular and dual-mode network connectivity, hardware, web reporting applications and software is the M2M industry's most complete service offering. Our solutions are designed to remotely track, monitor, and control fixed and mobile assets in core vertical markets including transportation & distribution, heavy equipment, industrial fixed assets, oil & gas, maritime and government.

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