



# YOUR COMPETITIVE EDGE: EFFICIENT CONSTRUCTION ASSET UTILIZATION

Commercial construction is a competitive, head-to-head industry, where managing margins can make the difference on winning bids. Data-based asset utilization is critical to ensuring your company remains a force.

Investing millions of dollars in vehicles, equipment and other assets is core to commercial construction companies' business. However, inefficiently deploying those assets across jobsites diminishes the return on those investments and sacrifices profitability.

The infographic consists of a dark blue background with a white box on the left containing the main statement. To the right of this box are four horizontal blue bars, each containing a bullet point. The main statement reads: 'Improper asset allocation impacts nearly every aspect of conducting and growing business.' The four bullet points are: '▶ Profit margins suffer when assets are underutilized or idle.', '▶ Project timelines are unnecessarily lengthened.', '▶ Buy-versus-rent equipment management decisions are costly.', and '▶ Bids are lost due to inflated job cost estimation caused by inaccurate utilization data.'

### Harness additional power with telematics data

Telematics is the science of tracking and communicating with assets on the move. The result being a collection of data that reveals true asset utilization and performance—powerful information if you put it to use. The right telematics solution delivers the data necessary to ensure your company gets its money's worth from investments in fleet assets. Your company paid for the assets; make each one work as hard as your operators.

### Better maintenance, better utilization

Operating an asset strictly in accordance with its operating design is the foremost way to reduce its total cost of ownership. Using the asset as intended translates into better reliability, lower energy consumption and consistent operator compliance—all of which extend the asset's useful life. Moreover, assets that are regularly, proactively maintained with the basics such as lubrication, alignment and worn part replacement also have higher degrees of uptime. They also prevent reduced operating speed and loss of quality. Telematics technology notifies your maintenance teams that repairs could be needed—before they're needed—to reduce the total cost of ownership for each worksite asset.

### **Accurately schedule preventative maintenance.**

Many construction companies schedule maintenance according to a calendar schedule. However, these fleets consist of varying types of assets—front-loaders, excavators, bulldozers, forklifts, cranes, trucks—and not every asset needs maintenance on the same schedule. Performing maintenance according to a schedule instead of individual asset need results in two problems.

Assets receive maintenance too frequently, resulting in wasted resources.

Assets receive maintenance too late, potentially resulting in poor working condition.

Telematics-based asset monitoring automates and streamlines the process of tracking every hour an asset’s engine runs, and measures equipment output in real time. With this data, you can customize the maintenance calendar for each piece of equipment based on usage instead of a pre-determined calendar date.

Meter data is pulled directly from the asset’s engine control unit (ECU) and transmitted wirelessly to a **web portal**, where it can be accessed online. When there’s a problem, appropriate personnel receive online alerts in real time. Also important, the solution tracks nitty gritty data points so fleet technicians and jobsite employees don’t have to. Fewer interruptions, lower repair costs, streamlined maintenance workflows.

### **Ensure consistent, proper inspections.**

Occupational Safety and Health Administration (OSHA) requires that all operators inspect construction equipment and vehicles prior to use. At the beginning of each shift, all vehicles that will be used must be inspected to ensure they’re in safe operating condition and free of apparent damage that could lead to an accident. All defects must be corrected before the vehicle is placed in service. OSHA penalties for other-than-serious posting requirements in January 2019 were \$13,260 per violation—avoidable fines that add up quickly. The cost of not conducting compliant pre-trip inspections continues to rise significantly and impacts your bottom line. Capturing **inspection information electronically** takes compliance, preventative maintenance and operational efficiency even further by:

- ensuring inspections are done properly
- eliminating the need for paper
- enabling efficient maintenance workflows
- reducing costly fines
- assisting in the collection of meter data
- eliminating manual work order entries

Making sure assets are inspected as required contributes to jobsite safety, increased vehicle uptime and ensured compliance—all of which are critical to maximum asset utilization.

### **Recovering assets quickly**

If an asset’s location and availability are known, it can be used. If not, it can’t. Sometimes assets are left behind or stolen, especially when a construction fleet’s inventory numbers are in the hundreds or even thousands, and is comprised of various types of small and large assets. Sending someone to search jobsites and conduct “yard hunts” is a waste of resources. The time spent looking adds up, particularly when the asset is a critical item that’s holding up work. On the other hand, not sending someone to search means the asset—and the investment in it—might be lost. Telematics location data enables faster **asset and equipment recovery** and avoids unnecessary replacement or rental expenses.

## Bidding based on data

An informed analysis of efficient asset utilization empowers estimators to more accurately predict asset needs—and bid for future projects more competitively. Because telematics monitor exactly how assets are used, project estimations are faster to produce, more accurate and more competitive. Building a history of accurate bidding also increases your company's reputation among potential customers, and that reputation could be the tipping point for winning the job.

## Avoiding excess rental quantities

Every construction company rents equipment and vehicles when necessary—but is every single rental necessary? Construction equipment hoarding is a common problem. Consider this scenario.

One jobsite has a backhoe a second jobsite within the same geographical area needs. However, the site superintendent chooses to hold on to it to make sure it's available when his project needs it, so he doesn't communicate this equipment's availability. The second jobsite needs to rent an identical backhoe to fill its equipment gap. Meanwhile, the available one being stored may not be used until days or weeks later.

Effective asset utilization starts with knowing where each asset is needed and managing assignments and schedules. Regardless of why a jobsite's superintendent holds on to an asset, doing so means other projects waste time and money on unnecessary rental expenses.


## Reducing owned assets

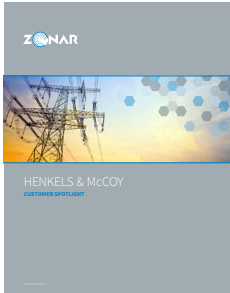
Telematics technology delivers accurate, actionable insight into if and how on- and off-highway assets are actually used minute by minute. Beyond knowing where a particular dump truck is located, telematics captures additional data, which can be used to reduce expensive fuel and idle costs throughout the course of a day. But what if you could also reduce the total number of owned assets you need to efficiently operate? Here's another scenario.

Nine Class 8 heavy-duty dump trucks are moving dirt on a major project. Each truck has to line up twice in the course of business; once to collect the dirt, and again to dump it. Both the trucks and the drivers experience idle time waiting in line. By collecting and analyzing the trucks' telematics data around location and idle times, the fleet manager sees that fewer trucks could be used to achieve the same task, minus the unproductive waiting time.

Bridging the asset information gap and maximizing asset efficiency uncovers opportunities for reducing the size of your fleet and mobile equipment, saving even more money in maintenance, tires or parts, fuel, drivers' fees, compliance fines, financing and insurance.

## Learn from competitors' success

Goodfellow Brothers			read the case study
Before telematics	With telematics	Result	
Couldn't pinpoint which trucks were being used inefficiently, nor which operators needed coaching	Used the solution's remote visibility into each asset to achieve an immediate drop in weekend usage, speeding and idle times	Addressed inefficient truck activities for a cost savings of \$56,000 annually	

Henkels & McCoy			read the case study
Before telematics	With telematics	Result	
Recovering only 20 to 25 percent ROI on technology investments through fuel tax credits	Tracked and recovered fuel assets with real-time performance data such as GPS location, metered runtime, idle time and fuel usage	Increased ROI on its technology investment from 20 to 150 percent through fuel tax credits	

## Choosing a telematics provider

Because construction fleets have so many varying types of assets, they have unique needs beyond over-the-road vehicles. When it comes to telematics, these mixed fleets need rugged devices to withstand the elements and software solutions that are customized for their distinct use cases with efficiency and ROI in mind. To learn more about what to look for in a provider, read our white paper, [Telematics for Vocational Fleets](#).

## About Zonar

Founded in 2001, Zonar has pioneered smart fleet management solutions throughout vocational, pupil, mass transit, and commercial trucking industries. Zonar helps fleets of all sizes maximize the use of their assets with solutions dedicated to improving compliance, efficiency, maintenance, ridership visibility, safety, and tracking. Cloud-based services with open APIs drive Zonar's smart fleet solutions by making it easy for fleet owners and managers to stay connected to their fleets and drivers and operators to dispatch. Headquartered in Seattle and owned by technology company Continental, Zonar also has a Technology Development Center in downtown Seattle, a regional office in Cincinnati, and a distribution center outside of Atlanta.

For more information about Zonar, go to [www.zonarsystems.com](http://www.zonarsystems.com).

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