

# FEE

# Fleet Equipment

BabcoX

Managing Equipment Assets

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## DETROIT'S **DD8** ENGINE

LOOKS TO POWER A VARIETY OF APPLICATIONS

INSIDE AXLE,  
BEARING EFFICIENCY  
IMPROVING TRAILER  
SAFETY

TIRE SERVICE  
ACTION PLANS:  
WHAT TO CONSIDER







## Trailer tracking

Among the many telematics platforms available to fleet managers today are several that are dedicated specifically to trailers, and trailer tracking in particular. So why is investing in telematics for trailer tracking worth it for fleets? And what can these telematics platforms do for them? *FE* asked around.

"Telematics platforms provide valuable information on trailers' past and upcoming maintenance and stops throughout the day, help verify deliveries, and can even measure the temperature in refrigerated trailers," says Jenny Shiner, marketing communications manager for GPS Insight.

"When looking at utilization reports, it's common to learn that certain trailers are used far more frequently than others, and some trailers are never used," she continues. "Gaining access to this information allows a business to decide if they should right-size their fleet by eliminating these unused trailers altogether. Fleet right-sizing reduces the cost of owning and maintaining these under-utilized assets, which can really add up over time."

Another benefit of trailer tracking, Shiner notes, is theft recovery, which can have substantial ROI for fleets in the event that a trailer—especially one carrying expensive cargo—is stolen.

"One of our customers, Advantage Transportation, was able to recover a stolen trailer that was carrying more than \$500,000 worth of products," Shiner relates. "Including the trailer, they were able to prevent taking a loss of more than \$700,000. Using trailer tracking offers more than just peace of mind through dots on a map. It can save significant costs that beset a business if their trailers are stolen."

"The ability to pre-check vital systems such as brakes, lights and tires will enable fleets to ensure that critical maintenance areas are ready to go before dispatch," notes Gerry Mead, executive director of innovation for Phillips Industries. "Fleets will be able to use the advanced prognostic abilities to extend maintenance cycles and get more time and miles from components. They will have the ability to ensure the right truck couples to the right trailer so movement is authorized. Having an overview of systems helps fleets ensure that a driver's clock is not wasted. All of this equals more revenue opportunities."

Mead touts TrailerNet technology by Phillips Connect Technologies, which brings together various component suppliers and reports data to one single network. "This one reporting system allows a fleet to go to one source for all of its unit reporting needs," Mead explains. "This one source of telematics data reduces efforts and ensures their trailers critical systems are operational. This will ensure maximum utilization of their trailing assets by ensuring readiness before their driver gets on site."

intrusion (PCI) in any overlap impact without adding significant weight and/or cost. Passenger compartment intrusion is the collapse or partial collapse of the passenger seating area of the vehicle as the result of a collision.

"In addition, we engineered the rear impact guard so it wouldn't negatively affect the operation of the trailer in any way," he notes.

While safety is paramount, it is also important for fleets to avoid adding weight to their trailers. Lane notes that with traditional materials, such as conventional steels, the design Wabash chose would have added a significant amount of weight. But, he says, Wabash used specialty high-strength steel in their RIG-16 design that actually reduced the overall trailer weight by more than 100 lbs.

Lane goes on to note that Wabash spent more than two years in R&D—including conducting nine crash tests—before introducing the RIG-16 to the market.

"Since there were no defined,

measurable test requirements for an offset collision, we chose to focus on eliminating PCI," he says. "We began with design and computer simulations for initial verification of concepts before committing resources to physical crash testing for validation testing."

"The combined experience of IIHS [Insurance Institute for Highway Safety] testing and Wabash National's R&D efforts clearly demonstrated that a rear impact guard's ability to balance strength, deflection and passenger compartment intrusion is highly dependent on trailer design," Lane notes. "For example, in our nine iterative crash tests we used the same trailer to conduct each test without having to make trailer re-

pairs, only replacing the rear impact guard after each test. Not only were we successful in developing a solution that prevents passenger compartment intrusion of a vehicle in an offset collision, we did it in a way that maintains the structural integrity of the trailer itself."

Stoughton Trailers introduced its rear underride guard in June of 2016, and it is now a standard feature on Stoughton's dry van trailers and its PureBlue refrigerated trailer line.

"The new guard was targeted to provide a design that would provide further protection relative to a greater potential for offset impacts. The rear portion of the trailer was re-evaluated to provide optimal