

Fleet Maintenance & Technology



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ELDs Spur Adoption Of Mobile-Based Weigh Station Bypass Systems



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Mobile-Based Weigh Station Bypass Deployment Accelerates As ELD Integration Spurs Adoption

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Life can be full of choices, especially when it comes to choosing the type of equipment to run in your truck fleet. Those choices can come with a myriad of costs and benefits.

Do you go with the standard 15-liter engine that drivers may prefer? Or do you spec a smaller 13-liter engine with new technologies that deliver less, yet still adequate horsepower and torque with much better fuel economy?

Now, newer technology also provides fleets a choice when it comes to weigh station bypass.

Weigh station bypass first became available about 20 years ago using dedicated short-range communication (DSRC)-based technology. While the DSRC transponders have become much smaller over the years, they work much as they did 20 years ago: trucks run under the roadside transponder readers mounted on gantries at weigh stations. And the readers pick up radio signals that identify the trucks.

“But just as commercial mobile radio service (CMRS) technology made the hard-wired phone largely obsolete, that same technology is bringing significant changes in how weigh station bypass is delivered,” said Doug Johnson, marketing director of Drivewyze. “Wireless cellular connectivity allows truck fleets and operators to use their electronic logging devices or their smartphones or tablets as ‘smart transponders’ to obtain weigh station bypasses.”

Bypass Extends Telematics Service

ELD manufacturers see bypass as natural extension of telematics service. Johnson said as more telematics providers such as PeopleNet, Rand McNally and Zonar recently began offering mobile-based weigh station bypass service on their ELDs, fleet operators began testing it, with large fleets with more than a 1,000 trucks leading the way. (In December 2015, Omnitracs announced a partnership with Drivewyze to equip

its mobile computing platforms with its PreClear weigh station bypass service.)

“One of the reasons for this move is that telematics providers are increasingly seeing weigh station bypass as a natural extension of the service they offer,” Johnson said. “Fleets have found that with mobile-based weigh station bypass, less is more. They appreciate how CMRS technology has turned their electronic logging devices (ELDs) into smart transponders because it now means they don’t have a separate transponder to keep track of.”

Earlier in 2015, a large, well-known fleet chose Drivewyze to deliver weigh station bypass services through its ELD platform after beta-testing the Drivewyze analytics program for more than six months. That move to adopt the mobile-based weigh station bypass represents only the first of many fleets currently evaluating the technology for its full potential, Johnson said.

“The telematics data electronic logging devices collect and manage, such as engine diagnostic codes, hours of service logs or equipment error codes, provide fleets the ability to make meaningful changes to their operation,” he added. “These changes can improve not only their operational efficiency, but also their safety scores. And with those improved safety scores, drivers can become eligible for even more bypass opportunities. When fleets can leverage their investments in telematics for even greater operational efficiencies and savings, that just makes a whole lot of sense.”

Analytics Shows Bypass Value

A second reason for the greater interest from fleets are the analytics made possible by CMRS technology. Before fleets even activate its bypass service, the analytics offer fleets a much higher degree of transparency into exactly how much weigh station bypass can save them in terms of delays and avoided fuel and maintenance costs, Johnson said.

Using an advanced truck-to-infrastructure communications technology, Drivewyze established a geo-fence around each of more than 740 permanent and temporary weigh stations and inspection sites across the United States.

Using these geo-fences, the ‘smart transponder’ technology allows fleets to monitor, in a more precise way, the time each of their trucks spends pulled into a weigh station, according to Johnson. Drivewyze then calculates the costs of unplanned delays at weigh stations by using the smart transponder data and the fleet’s own cost per mile benchmarks. Or the fleet can calculate their costs using industry standard benchmarks from a 2007 study by the Federal Motor Carrier Safety Administration or a 2013 operational cost analysis by the American Transportation Research Institute.

Mobil Bypass Opportunities Double

The third reason for the move to mobile-based weigh station bypass: fleets find that as more states offer mobile-based weigh station bypass along their routes, more of their trucks can obtain bypasses. Since the service was first offered three years ago, Drivewyze has grown rapidly. Drivewyze is available at 611 sites in 35 states, more than any other weigh station bypass service available on the market. And more sites and states are added regularly.

It’s been in the last 18 months that Drivewyze users have seen the most growth in the number of locations, Johnson said. During that time, the number of states and locations offering mobile-based weigh station to all users has nearly tripled. Several states that previously initiated Drivewyze service in 2013 and 2014 added locations in 2015.

For example, the State of Florida in early 2015 doubled the number of sites offering Drivewyze service when it began allowing qualified truck fleets and operators to bypass agriculture inspection sites through the mobile inspection site bypass service. Drivewyze also brought 35 additional locations online in Mississippi and several other states in September of 2015. And as states with large Hispanic communities like Florida, Texas, New Mexico, and Colorado offered more bypass opportunities through Drivewyze, the company began seeing a greater need for Spanish language support. In response, Drivewyze started offering its bypass application and customer support in Spanish in late 2015, Johnson said.

“Growth in the number of locations has been driven primarily by the speed at which states can deploy our bypass service’s CMRS technology,” Johnson said. “Traditional bypass service equipment must be carefully sited and then installed while the stations are taken offline, often disrupting those operations.

“As the economy continues to grow, and as growing global trade increases the amount of freight trucks must carry, state commercial vehicle enforcement officers and inspectors will be under mounting pressure to do even more, but with the same or even fewer resources,” Johnson added. “Weigh station bypass will become an even more important tool for them to respond to that need, particularly given the speed at which it can be deployed. It will allow officers to concentrate their attention on the truck operators and fleets that need it, while providing more bypasses to those that don’t.

“By taking full advantage of the benefits that come from wireless cellular connectivity, mobile-based weigh station bypass can deliver states more opportunities to deploy it and safe carriers more opportunities to use it,” said Johnson.

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