Telematics is making fleets of different sizes, compositions, and functions more efficient across the board. Benefits include improved up time and better utilization.

Since arriving on the scene more than a decade ago, telematics has more than proven its usefulness in making fleets efficient and productive. That being said, telematics is not a one-size-fits-all solution. While many fleets use telematics for many of the same productivity gains, no two fleets use the technology exactly the same way.

**Addressing Fleet Safety**

For Crescent Services LLC, an oil and gas company headquartered Oklahoma City, safety has been almost synonymous with its implementation of telematics.

“The main thing we incorporated was to customize our programming based on parameters — such as harsh braking, speeding, or seat belt use — and have weighted them based on what’s important to us, and each week produce a report for each driver. We’re able use it to garner competition between drivers while also being stewards of safe driving habits in the communities we operate in,” said Justin McLaren, DOT and compliance manager for Crescent Services LLC. “It has helped us reduce the number of occurrences we’ve had, and the severity of those incidents has also been reduced.”

The safety focus is critical. McLaren said, because of the number of miles that are being driven. In addition, because many of these miles are produced in rural settings, driving to and from the jobsite is among the most dangerous parts of a driver employee’s day.

Beyond safety, McLaren has implemented a preventive maintenance program based on engine hours.

“In our industry, there are many times during the year that you may have that vehicle...
parked and started and idling, and you have oil changes set up for every 3,500 miles, and you may have had hours when the vehicle is idling running toward that mileage that isn’t being counted, so we were able to set up a plan for engine hours,” McLaren said. This has helped the fleet at the end of its lease and minimized the number of catastrophic failures.

C&C Group, a family-run construction services company with offices in Kansas and Missouri, realized it had little visibility on what was going on with its vehicle fleet. After the owners’ daughter was in a non-business related accident with one of the company’s vehicles and was saved because she was wearing her seatbelt, company leadership learned about telematics and saw it as a way to help make the fleet safer. Chad Cillessen, chief information officer for the company, explained that safety is top priority at the company, so taking advantage of telematics to improve safety was a good fit. It has been using a telematics system for two years.

Seat-belt use is now monitored in C&C Group’s pickup and van fleet, Cillessen said, and was one of the first steps the company took in taking advantage of telematics. Overall, safety initiatives like monitoring speeding were crossed off the “to do” list. But, what the company really took advantage of was being able to dispel accident complaints from other drivers on the road.

“We get phone calls every once in a while about a driver cutting them off and it always became a ‘that’s what he said, she said’ scenario, but now we can ask them where they were and check and see if that vehicle was actually there or not. So, it ends that conversation pretty quickly,” he said.

Cillessen added that the company was also able to protect itself from false claims of vehicle damage, in which other drivers typically try to get a free door ding fixed by C&C. “We can prove right away exactly where your guys’ trucks were at,” he said, adding that the company is more often addressing these types of claims from other drivers than actual safety hazards brought on by their own employees.

The company has also used its telematics system to track fuel consumption, and it tracks idling along with its carbon emissions.

Cillessen said that, in keeping the family mindset, C&C Group shared its idling information with all the drivers along with how their idling was saving the company money, and how management appreciated their willingness to respond to e-mails with such significant action. “And, that was another hot month, too,” he said, stating that idling dropped even more just as a result of sharing the info with drivers.

**Keeping Tabs on Assets**

Portland, Ore.-headquartered Advanced American Construction, an underwater heavy construction company, faced an almost unique issue with its fleet vehicles and assets — they’re often not readily accessible, since they’re frequently on barges. These assets have been fitted with a telematics system so that they can be tracked on the water and then at the physical job site. Most of what’s being measured are equipment hours.

On land the company has forklifts, which it also monitors when they’re running — which means they’re working properly and are performing billable hours — according to Anthony Valenzuela, asset and resource coordinator for Advanced American Construction.

“The biggest thing for us is just knowing where something is,” Valenzuela said. The company operates a fleet of Ford F-150, F-250, and F-350 models, and uses the telematics system to monitor their location, where they’re being driven, driver behavior, and what jobs the trucks have been assigned.

Billing is one of the biggest benefits of having implemented a telematics system three years ago, according to Valenzuela. “Knowing that the truck was there for a specific time, so we can bill for that, has been a big benefit,” he said.

Maintenance is also tied to its telematics system for its trucks and other assets. “We rely on our telematics system 100 percent on the maintenance,” Valenzuela said. “It allows us to keep up on our maintenance so we don’t have any breakdowns.”

**Stopping Theft**

For Omaha, Neb.-based ServiceOne, the benefit of using telematics was almost immediate.

Shortly after the company implemented its new telematics solution, one of its vans was stolen. Using the telematics tracking
feature, police were able to recover the van within 15 minutes, according to Gary McCollum, operations manager for ServiceOne.

The fleet consists of a mix of Mercedes-Benz Sprinter vans, Chevrolet vans, and Nissan NV models.

For its day-to-day operations, McCollum said he uses the telematics system to monitor the fleet’s maintenance needs. “In the past, you just kind of guessed when it was time for an oil change and hoped the drivers would call when the mileage matched the sticker in the window,” McCollum said. “Now we get reports from the system when it’s time.”

More important — particularly for the Sprinters, which can have higher maintenance costs — the engine data that the telematics system captures can help determine either if the maintenance can be done using generic parts or if a specialized Mercedes-Benz part is necessary, which can help save on maintenance costs and downtime.

McCollum gets engine codes sometimes prior to them being displayed on the instrument panel.

“Now we get those e-mails and we can take proactive action,” he said, minimizing damage and avoiding larger, more expensive repairs.

Dispatching has also become more efficient. McCollum said that, throughout the day, dispatchers can monitor both location and the number of parts on the service vans. This helps to route technicians who have the materials nearest the job site. McCollum said he is in the process of updating the dispatching system within the telematics systems, which should make the fleet even more efficient, because its routing and job dispatching interfaces will be overlayed.

Cutting idle time was one of the big unexpected gains that the fleet derived from using a telematics system. “When it was winter time, we found that they were idling way more than they should, and idle time will just kill you on your gas mileage,” he said.

**Eliminating Idling**

Singing Hills Landscape, in Aurora, Colo., provides commercial landscaping installation and maintenance in the greater Denver area.

The company’s leadership knew that its vehicles were idling excessively, especially while crews loaded up equipment and materials.

“I would notice one of our trucks pull past me into the yard, and five minutes would go by with the engine still running,” said Blake Lehr, asset manager for Singing Hills Landscape.

He figured if the crews left the vehicles running in the yard, they were most likely leaving them running at job sites, too. Singing Hills also wanted to find a way to verify and improve efficiency of routes taken to job sites to help decrease miles driven and fuel costs. In addition, Singing Hills knew that there were a lot of unknowns that a fleet tracking software would help the company uncover.

Singing Hills compared a few different fleet tracking solutions to see which would fit its needs best. Company leadership determined the company needed an interface that was user friendly. They were also interested in finding a solution that was web-based so managers could access the software from anywhere, anytime.

Since implementing its telematics system, Singing Hills has been able to take control of engine idle time. “We found out that, on average, our crews were idling for a total of around nine hours a week, which translates to 4.5 gallons per week and approximately 16 gallons of wasted fuel a month,” Lehr said. The company reduced idle time by 63 percent by coaching drivers, and has saved roughly $1,000 annually in fuel.

Using its telematics systems, Singing Hills has also been able to improve driver behavior by reducing speeding incidents by 37 percent. The company also ensures that its drivers are taking the most efficient routes to job sites.

Singing Hills has been able to solve other business challenges it was unaware of before implementing its telematics system, such as improving crew productivity. After multiple receipts were turned in from the same home-improvement store in one day, Singing Hills set up landmarks around these locations to see just how frequently their crews were picking up supplies.

On average, the crews made four to five trips per week, and each visit cost Singing Hills about $75 in lost labor per employee. At a minimum, this inefficiency cost Singing Hills $3,900 a year. Lehr quickly addressed the issue, and now the crews average one to two trips to home improvement stores and supply houses each week. This simple adjustment provided more efficient time management and increased productivity, which saves Singing Hills about $3,100 annually.

**Trending Data**

Being able to integrate its various routing data into its telematics system has been the big win for DISH Network’s fleet.

“The key benefit has been routing efficiencies around GPS. We converted from manual routing in 2009, so now our systems route all of our daily jobs and map all that together. The system even collects over time how efficient the employee is at different jobs and jobs in general,” said Abe Stephenson, fleet and administration manager for DISH Network.

This allows for better employee productivity. Stephenson said that he likes being able to bundle various technologies together with the company’s telematics solution, adding that he has seen a lot of synergies from integrating solutions.

“One thing I think fleets should look into is if their fleet management company
Ingersoll Rand is among the newest fleets trying telematics. The reason was simple, explained Jonathan Kamanns, Ingersoll Rand’s fleet manager. “For us it’s the next phase of maturity. From an asset-utilization and productivity standpoint, we’ve hit a lot of the low-hanging fruit, and to get to that next level of maturity, we needed a platform to do that,” he said.

Kamanns is currently testing two telematics systems across the fleet. “When we put the RFP on the block, there were specific requests we had. The system had to integrate with our collision management service. It also needed to integrate into our monthly management dashboards, which gives our managers financial information and exception information relative to fuel use, odometer disclosure, etc.,” Kamanns said. “So, for us, the telematics systems won’t increase the level of metrics, but the amount of data that goes into it. If we’re seeing 16.2 mpg across the fleet, we’ll be able to know if that’s a real number.”

One of the immediate benefits of the trial — which is ongoing as of press time — has been better control of the fleet’s data and ability to integrate data. A requirement of the RFP was that the telematics systems be able to tie into the company’s existing systems and processes, such as routing and collision notification. “Not only are we getting a lot more information, but we’re making sure that we are using the information that we need in the way we need to before we get it implemented,” Kamanns said. “We don’t know what we don’t know. We can make some huge assumptions, but the data is going to show us some things we didn’t plan for.”

Kamanns has numerous metrics that he analyzes regularly. “We rotate metrics regularly. What we provide out to the business is based on where we need to move needles or where the business needs to improve,” he said. For instance, the company has recently made a 35-percent decrease in greenhouse gases a priority, and looks to fleet to determine how this will be done. This is a metric that Kamanns will now actively monitor to help meet the goal.

“‘This is how we can leverage a technology like telematics to let companies know where they’re going,’” he said. “‘We’re going to see metrics that we’ve never imagined before. That’s the hope — we’ll pick up a rock and look at it and say, ‘Wow, I didn’t know that was happening’ or ‘I didn’t know that could be happening.’”

Stephenson said that integrating downtime tracking into the company’s telematics system has been a big win. “So you can do things like when did the vehicle arrive at the point of interest — the repair shop — and when did it leave, and you can start to measure downtime for repairs or accident repairs,” Stephenson said. “There’s some real neat synergies you can do pairing up to other types of reporting that you’ve got for your fleet.”

Accurate utilization reporting is another key benefit that DISH has realized from its telematics system. “We can see in the system if there is a strain on vehicle need beyond what our personnel count determines what they need,” Stephenson said. “It’s a real-world case scenario beyond just anecdotal accounts. We can back it up.”

While instant access to data is one of the most powerful aspects of telematics, Stephenson noted that he finds too many alerts creates a lot of “noise.” Instead, he prefers consolidated time site reporting across the enterprise and picking out the outliers or an issue that needs to be addressed. “It’s all about trends,” he said. “It’s not easy to look through all that data. Where do you draw the line on hard acceleration and hard braking for instance? You really have to get intimate with the telematics system.”