

# Get More Work Out of Your Work Trucks

Five steps for increasing fleet productivity.

By Bob Johnson

**M**aximizing fleet productivity starts with getting the most out of your vehicles. To a large degree, the best approach is driven by the type of fleet you operate and its drive cycles. In many cases, you may find that different techniques are required for individual groups of trucks within your fleet.

## Right-Sizing Your Vehicles

Making sure that you are using the right size vehicle for each application is a good starting point for optimizing vehicle productivity. If your trucks are fully loaded at the start of the day, but have to come back for a second load before the end of the shift, you may want to consider using larger trucks. This could save time and reduce total vehicle mileage. On the other hand, if your trucks start with a partial load and

do not need to return during the day, consider using smaller, more fuel-efficient vehicles.

Another right-sizing opportunity is to replace three trucks that operate in the same general area with two larger trucks. You may be able to equip the larger trucks with material-handling devices to speed up cycle times, making it possible to accomplish the same tasks in the same amount of time with one less vehicle.

If you are experiencing excessive down time and on-the-road breakdowns, your trucks may be overloaded or improperly designed for the application. This not only destroys your fleet's productivity, it is also dangerous and expensive. Take the time to learn how to properly match your trucks to your application before buying another vehicle.

## Route Optimization

If your fleet makes route deliveries and/or pickups, closely review the routes your drivers are following. In many cases, routes just happen over a period of time and may not be efficient. If you suspect that this may be the case, take advantage of computer-based map programs to review various route options. If you are technology-savvy, you may even consider using computer-based modeling programs to model your vehicle's routes. Remember to consider combining existing routes by using larger or more efficient trucks.

## Truck Body and Equipment Designs

Specialized truck bodies, mounted equipment, and other accessories designed to make work trucks more productive are constantly being developed and improved. If you haven't updated your components in awhile, you may not be using the best ones available for your application. Before you buy another truck, make a detailed review of your current and projected work truck requirements, and then determine if there are newer products available that could improve your trucks' productivity.

If you are not currently using specialized bodies or equipment, see what's available. A combination of increasing labor costs and the availability of new components may make it worthwhile to upgrade to more specialized truck bodies and equipment. Take the time to research what's available. This may mean talking to your local truck equipment provider, doing research on Web sites such as NTEA.com, and/or attending a truck equipment trade show such as The Work Truck Show, where you



Trade shows like The Work Truck Show provide the opportunity to research new bodies, equipment, and components from a number of manufacturers, all conveniently located in a single location.

can compare what's new from a number of manufacturers all in one place.

## Reducing Stationary Fuel Consumption

One measure of productivity is the quantity of assets utilized to perform a specific task. This may be measured in hours of labor per unit, total cost per unit, or in the case of a work truck, gallons of fuel burned per task. The Department of Energy has estimated that the typical Class 6/7 work truck has an equivalent fuel economy of around six miles per gallon. In many cases, a significant portion of that fuel is burned in non-productive operation (idling) or while operating engine-driven auxiliary equipment (PTO operation). Anything you can do to reduce this type of engine operation will have a direct impact on your fleet's productivity. In addition, many cities, counties, and even states have implemented idling restrictions for commercial vehicles. Expect even more areas to adopt these restrictions in the future.

**Idle Reduction Technology**—Many newer trucks can be programmed to automatically shut down the engine after a specified period of idling. Aftermarket systems are also available that will automatically start an engine during PTO operations when there is a demand for power, and then shut it down after a specified period of no demand. In some operating cycles, these systems can produce significant reduc-

tions in non-productive engine operation.

**Alternative Auxiliary Power Sources**—The need for auxiliary power at a job site does not necessarily mean that you have to operate your truck's engine for extended periods of time. Many soft hybrid technologies provide auxiliary power on demand. These include electric PTOs (E-PTOs), battery-powered static inverters to provide commercial-quality AC electric power (120- and 240-volt), and auxiliary engine-driven systems. Auxiliary engine power systems are available to provide commercial-quality electricity, welding capabilities, hydraulic power, compressed air, and even to support truck hotel loads (heating and cooling).

**Cab Hotel Loads**—In addition to the auxiliary engine-driven systems mentioned above, electric-powered (battery) systems are also available to support cab heating and cooling for shorter periods of time. Fuel-fired systems maintain not only cab heat, but also keep the engine water jacket warm and even pre-warm hydraulic fluids. These systems are effective in cold climates and can maintain acceptable temperatures for extended periods of time while consuming a small fraction of the fuel that would be burned by operating the truck's engine.

## Beyond the Truck

Looking beyond the truck itself, anything you can do to make your drivers more productive will help them accomplish more work in the same period of time. In certain operating and drive cycles, the use of telematics (including GPS systems) can significantly increase productivity. At the same time, some systems will allow you to monitor vehicle operation and

identify potential problems before they result in on-the-road failures.

Electronic data collection and management systems allow for almost instantaneous collection and tracking of data in areas such as inventory control, job-specific component selection, and pickup and delivery. These technologies include radio frequency identification (RFID), optical bar code scanning, GPS location interface, and computer-generated parts picking lists. All these systems are designed to improve inventory control and reduce the amount of time crews spend performing administrative functions. This, in turn, means less time chasing forgotten materials and more actual productive time.

All of these systems have been mainstream technologies for companies such as FedEx and UPS for a number of years. These technologies have proven effective and their cost has lowered, making them affordable to almost any fleet that could benefit from their use.

## Productivity Can Help Green Your Fleet

There is no denying the fact that "green" is in. Many fleets have incorporated some type of mandate or purchasing philosophy to increase the green elements within their operations. Many of the same steps that improve fleet productivity also can contribute to greening your fleet. Using smaller vehicles, improving fuel utilization, reducing idle time, and using lighter weight equipment for upfits all contribute to reducing fuel consumption and greenhouse gas emissions.

Over time, more productive vehicles will increase your overall fleet efficiency and save you money. As an added benefit, you may also be able to add a green story to your operation. GE



Many exhibitors staff their booths with technical personnel so attendees can take advantage of their expertise to select the best trucks, equipment, and components to maximize fleet productivity.

*Mr. Johnson is director of fleet relations for the National Truck Equipment Association (NTEA). Johnson will lead two different technical sessions on specifying work trucks, including fuel economy and productivity considerations, at The Work Truck Show® 2010 and 46th Annual NTEA Convention. The Work Truck Show 2010 runs March 10-12, 2010, at America's Center in St. Louis, MO. Convention and educational sessions start March 9. For more information, visit [www.ntea.com](http://www.ntea.com) or call 800-441-6832.*