A New Way to Keep Score

Life Cycle Costing drives fleet management strategy

ile cabinet contents are neatly labeled, equipment manuals perfectly shelved, and folders precisely stacked on the desk top in Scott Zielinski's office. Machine performance records can be called up instantly on the computer of the manager of fleet and facilities for Lake County, Illinois.

Since he began the job in January of 2010, Zielinski has worked hard to bring that same order and attention to detail to management of the county's 1,400-unit fleet.

Zielinski, who is responsible for maintenance of vehicles and machines in all departments, implemented a fleet strategy that provides a point value of zero to 15 to each unit.

QUICK FACTS

- Lake County is part of the Chicago metropolitan area, and has a **population** in excess of 700,000.
- Lake County crews are responsible for maintaining approximately 800 lane miles of county highway.
- The county's **1,400-unit** fleet includes 515 light-duty vehicles and 120 heavy machines and trucks.

The remaining machines are light-duty equipment. "That includes chain saws and everything," said Scott Zielinski, manager of fleet and facilities.

Know the Score

Each vehicle is assigned a rating of up to five points for age, five points for mileage, and 10 points for LTD maintenance. The more points, the more costly the machine is to own and operate.

"This enables us to identify the vehicles with the highest maintenance costs, life to date, versus acquisition, and take them out of the fleet," Zielinski said. "A 15-point vehicle is at the top of my list to be replaced in the upcoming budget year."

Zielinski is now able to demonstrate that a 10-year-old machine with low points is less expensive to operate than a newer model with high maintenance costs, for example.

"For each vehicle, I track the parts cost, the labor costs, the outside repairs—the total cost of owning and operating that piece of equipment. I chart those numbers, and compare that to depreciation," Zielinski said. "This enables me to compare one machine to another—like to like. Now we can see which units are more costly to own and operate utilizing specific metrics."

Previously, Lake County had a policy of replacing light-duty equipment at seven years or 70,000 miles, and no replacement policy for heavy equipment.

"We want to target the vehicles that cost the most money to own and operate. A 7/70 program takes out either the oldest vehicles or the ones with the highest mileage. But those may not be the ones that cost you the most," Zielinski said.

Life Cycle Costing (LCC)—using a machine's initial purchase price, maintenance and operating costs, and resale value to determine the true cost of owning and operating equipment—drives Zielinski's fleet strategy.

He began using LCC with the fleet's 515 light-duty vehicles. "It's a ramp-up program. We started with the equipment that has the biggest impact on our budget-the light-duty vehicles," Zielinski said.

LCC is new to Lake County with regard to fleet replacement strategy, so Zielinski needed to update the database. "You have to have a good software program for fleet maintenance, and keep your records current," Zielinski said.

continued on page 6



Expanding The Base

A Cat[®] 950H Wheel Loader that the county acquired in February 2011 was the first piece of heavy equipment purchased using LCC. Machine specs were written to include maintenance costs and the guaranteed buyback price, which enabled the county to purchase a wheel loader based on actual owning and operating costs over the projected life of the machine—not simply the purchase price.

Guaranteed buyback is a huge plus. "With the wheel loader, we were able to demonstrate that buyback value has significant cost implications," Zielinski said. "When you have a company that stands behind its product like that, there's a comfort level in investing the upfront purchase price of the machine."

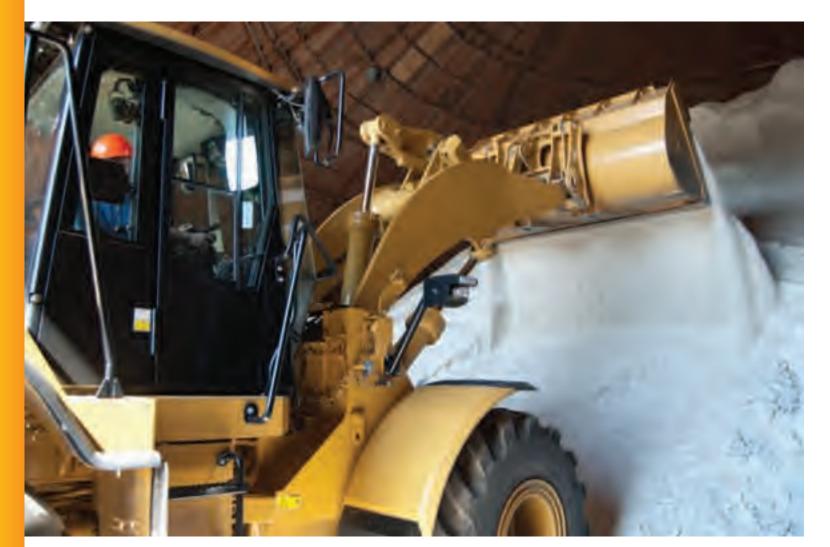
The machine loads salt and other materials into trucks, and clears trees and other debris from roadways.

Operators appreciate the machine's excellent breakout force, and extended reach. The extended reach provides a range of mobility that enables county crews to load all trucks, with sidewalls at a variety of heights. "That separated it from the competition," said Zielinski.

He anticipates keeping the machine for 10 years. "We're getting away from buying something, keeping it for 40 years, and having that piece of equipment become dilapidated and incurring high maintenance costs," Zielinski said.

Instead of keeping equipment until it no longer works and has no resale value other than scrap, the county plans to sell equipment while it still has some value and then apply the resale funds to the purchase of new machines.

"It all goes back to Life Cycle Costing. If we buy machines with extended warranties, and replace them on a regular basis, they will lower our fleet costs." Zielinski said. 🕏



Planning Ahead

Adequate fuel supply key to weathering disaster

isasters, it seems, are all around us. Floods, tornadoes, earthquakes have all made their destructive power felt in 2011. While it's true you can't control or predict emergencies and disasters, your agency can take steps to ensure backup power to keep your critical services operational.

Analyzing your fuel situation is a step you can take right now. Many agencies fail to secure an adequate fuel supply to last through an emergency—a mistake that would make all your other preparations pointless. Here are some items to consider:

Tank size: Is your tank large enough to run your equipment for as long as it will take to get more fresh fuel to the site? If a worstcase scenario occurs, will you have the fuel to run 12, 24, 36 (or more) hours without access to more fuel?

Fuel supply: Do you have a trusted supplier who understands the critical nature of your operation? Do you have a written agreement where all expectations are listed, especially in case of an emergency? What happens if *your* fuel supplier is hit with an emergency and can't deliver? Do you have a back-up source?

Warning systems: Most tanks have a low-fuel alarm, but they are often designed to give a warning when fuel is nearly gone. Instead, the alarm should go off when the tank gets down to about 50 percent capacity, giving you enough time to secure fuel and keep your fleet operating. Warnings can also be delivered by text or email so you can take action even if you're not on site.

Etc.: Planning is good, but over-preparedness can cause problems, too. Too much emergency fuel stored for too long will deteriorate and could become contaminated. Left untouched and untreated, algae, water and other contaminants can degrade your fuel, clog your fuel filters and possibly lead to engine failures. In a worst-case scenario, fuel contaminants could damage engine components. 🕏

We Can Help:

Through experience, established relationships, diverse equipment fleet and ability to plan and position supplies and equipment, our dealership can make a significant difference in emergency preparedness and response. If you have questions about contingency planning or would like help setting up a plan, please contact our team of power systems experts.



