

Systems for tracking preventive maintenance on equipment

Everybody knows that preventive maintenance saves money by catching small problems before they turn into major breakdowns. Making repairs on schedule also saves time — preventing unanticipated equipment down time, saving lost hours for the operator and emergency crew, and allowing speedier repairs because necessary parts are on hand.

Effective preventive maintenance requires keeping good records and using them. Computerized equipment management systems are available from many sources, but they often don't quite do what you need, or only do part of the job, or their reports are too complex. Some systems only track specific aspects of the process: parts control, fueling, or manufacturer-specific systems that report on their maintenance schedules. Any system, computerized or manual, will need to be customized for your operation.

Whether you are using a computer or a paper system, there are two keys to preventive maintenance records: equipment usage and service history.

Track equipment usage

When there are only a couple trucks to manage, the foreman can often track usage in his head. In larger operations, you can track usage effectively through fuel consumption.

"Even if I had a small fleet, I'd get on a computerized fueling system or register the miles or hours every time the piece of equipment fueled up," says Bill Fischer, Outagamie County shop superintendent. His fleet of more than 300 pieces of equipment is on a customized computer-based PM system that starts with fuel tracking.

Hours or mileage are the trigger for scheduling preventive maintenance based on the equipment manufacturer's maintenance schedule. In Outagamie County, they have linked their fuel tracking system to a computer program that keeps the history of each unit and its PM schedule.

Driver time cards can also be used to track the number of days or hours a unit has been in use. This is less precise because it doesn't directly reflect the intensity of use. For example, a snowplow driver covering a couple hundred miles in a weekend after a major snowstorm would be tracked just like a day of light sanding and salting.

A reminder system is a big help. Outagamie's computer system adds fueling miles to the unit's history and delivers a regular report, noting those units that are approaching their next service interval. Another software program offered by FABCO for Caterpillar equipment has a "to-do" list that shows equipment approaching service intervals and also keeps unit service histories which can be reviewed.

Keep service history

By using mechanic time sheets you can track what was done to each unit and record any comments, such as reminders to check hoses or brakes that show wear. More details on the time or work sheet mean more information is available on the equipment, and more data can be tracked.

These records are especially important for tracking the number of miles or hours for recurring problems such as brake jobs, overhauls, etc. Some systems will print out a task checklist and a list of parts for each type of planned service. It may also list tools required for the service. This type of system helps you track labor and parts costs for each unit.

Any PM tracking system, paper or computerized, is only as good as its data. "You need to assign ownership of the system to someone so the data gets properly recorded and entered," advises Bob Bruce, Technical Service Manager at FABCO in Green Bay. In his experience, fleet managers who have worked with a good manual PM tracking system can move fairly smoothly to a computer-based system, but those who have never had any system in place often do better if they use a simpler paper system first.

You can learn more about fleet maintenance at the UW-Madison seminar **Managing Fleet Maintenance Operations**, offered April 29-30. Scholarships are available for Wisconsin local government officials through the T.I.C. See Calendar on the insert page for information.

What system do you use? Would you recommend it? Tell us and we'll share your experience with other Crossroads readers. Fax or mail the form on page 7, call 800/442-4615, or e-mail to Pudloski@engr.wisc.edu. For more information about preventive maintenance, see *Crossroads*, Sp 96. If you need a copy, use the form on page 7 or e-mail to Ranum@engr.wisc.edu. Note that description of commercial products is given for information only and does not imply evaluation or endorsement.

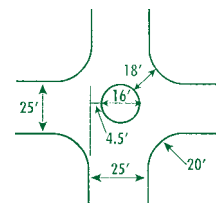
Circles on residential streets

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with us as an organization." He hopes to install the first test circle in late summer.

Dryer had experience with traffic circles in Mobile, Alabama, where he worked until last year. "We had 20 there, and quite a bit of controversy," he says. "Drivers think you're nuts but residents like them."

Madison plans to use a mountable 30-inch curb for its permanent traffic circles to allow a moving van to easily negotiate the intersection, even if it can't quite make the circle. Neighborhoods will be responsible for maintaining low shrubs and flowers inside the circles.



A 16 foot circle in a typical intersection.

"Speeding is a problem on every street, and we're really hand-tied as to what works to get motorists to travel at lower speeds," Dryer says. Traffic circles and other traffic calming devices are widely used in Germany and the Netherlands where they seem to be effective and well-liked.

For more information on traffic circles and other traffic calming techniques, borrow the videotape of T.I.C.'s 1996 satellite workshop: **Livable Neighborhoods: Rethinking Residential Streets**. Print materials are also available. See Resources, p. 5 for details.