

## Sharpen your grader operations

Most grader operators learn on the job from those with more experience. It's a good way to learn, says Bruce Higgins, but people often don't get exposed to the newer techniques. Higgins teaches operator training and has nearly 20 years' experience operating a grader on roads and construction sites.



"One of the older methods we used in Michigan was to cut each side to the center of the road," says Higgins. "Then we straddled the center and went down it with the blade. Of course, that would flat-top the road and eliminate the crown." Learning good scraping techniques and how to get a 2%-4% crown slope laid out properly is a challenge for operators.

In his workshops Higgins spends one day in the classroom and a second in the field: three or four operators practice with a grader on a local gravel road or parking lot. Operators switch off driving the machine while those on the ground can ask questions and hear each others' ideas.

"Bruce's training worked out very well for us," says Gary Kennedy, Manitowoc County Highway Commissioner. "The classroom training allowed more operators to attend. We plan on having him back next year so other operators can benefit from the field work."



Higgins' training covers grader operation and maintenance, safety, morale, and attitude. "I do what I call full circle training," says Higgins. "It's not just about equipment, it's also about attitude. I ask them to think: If I lived on that road would I be satisfied with the job?"

Newer equipment such as slope meters, and new types of blades and tires are also important topics both for the classroom and in informal talks with supervisors. Many counties don't have slope meters that show the 2%-4% crown grade, says Higgins. "A meter only costs \$90-\$140 to put on a \$140,000-\$180,000 machine," he says. "That's less than one cent on the dollar for the operator to see what he's doing to the road and to get it properly

laid out." New tire tread styles nearly eliminate the need for chains in snow, he says. Serrated, carbide-bit blades cut, mix and lay the road out better with just one pass each side and last for years.

"I try to cover a little bit of everything and give more detail on topics that the agency wants work on," says Higgins. "If they are primarily interested in road maintenance and shoulder work, that's what we emphasize."

Higgins retired in 1997 from the Genesee County, Michigan, Highway Department and since that time has offered training in 76 of Michigan's 83 counties, and in Minnesota, Florida, and Wisconsin.

For information from Higgins about grader operator training contact him at: 810/730-7698; e-mail: BruceHig@hotmail.com

## On-site training: your shop, your schedule

Regular training is important as a refresher for long-term employees and to bring new staff up to speed. Employees also see training as a reward. Sending them to workshops away from your facility is expensive and can disrupt on-going work. As an alternative, you can train more crew members, more economically, with on-site programs. The T.I.C. offers four topics that can be presented at a time and location most convenient for you. Often the content can be tailored to your specific needs.

### T.I.C. on-site training workshops

**Basic Surveying for Local Highway Departments** Highway workers and foremen with little or no surveying experience can learn to use a tape and hand level for fast, reliable measurements to: lay out a building, set culvert and ditch grades, determine crown and slopes, and set construction stakes. Classroom instruction and outdoor field exercises. One day, 20 participants, \$500.

**Basic Work Zone Traffic Control** Crew leaders, designers and field personnel learn Wisconsin standard practice for work zone traffic control. They will do group exercises using the T.I.C. pocket-sized *Work Zone Safety Handbook* to set up the work zone traffic control for a variety of situations including short term operations, moving operations, and full scale construction projects. One day, 30 participants, \$500.

**Flagger Training** This three-hour workshop provides solid flagger training for all your field personnel. It covers procedures approved for WisDOT construction, maintenance and utility flagging operations. All participants receive a flagger pocket guide and actually practice flagging. \$500 per instructor per day.

**Flagger Instructor Training** For key staff who will be training new employees and temporary help, add this extra half-day workshop to the flagger training. Participants practice teaching the flagger training, and receive an instructor's manual, video, and a supply of flagger handbooks. Class limited to 20. Fee depends on the number of flagger sessions.

For more information or to schedule T.I.C. on-site training sessions call Jane Sauer at 800/442-4615, e-mail: tic@epd.engr.wisc.edu, or use the form on page 7.

### Independent instructor on-site workshops

As a service to local agency officials, the T.I.C. offers information about training programs offered by other organizations and individuals.

**Grader Operator Training** Learn how to get the best performance from your motor grader. Workshop covers techniques for grading gravel roads, shoulders, and new roads. Includes one day of classroom

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