

Efficient utilization pays off

Every highway and streets operation must balance equipment, employees and productivity. An aggressive program of improving equipment utilization has made St. Croix County's balance very favorable. From 1987 to 1996 the amount of work produced went from \$80,000 per employee to over \$140,000 with the same number of employees.

"We started looking at how to better use each piece of equipment so it's not costing the taxpayers to have it here," says County Highway Commissioner Dan Fedderly. Each machine has certain minimum fixed costs (insurance and depreciation) and operating costs (gas, maintenance, etc.) "In round numbers, if it costs you \$10,000 a year for a truck and you only use the truck 100 hours, at a rental rate of \$50 per hour you've just lost \$5000," Fedderly explains.

First they analyzed the total revenues generated from each major "client"—county, state, and township—in terms of who paid what portion of the operating minimum for each piece of equipment. This analysis identified the county's workload and revenue sources. Next, they looked at the number of employees and the work each produced.

Making equipment work

"Then we looked at: how do we do better? We increased the amount of work we did by trying to put the right pieces of equipment in the right places," Fedderly says. Twice a year county office manager Tim Ramburg reports to a committee on each piece of equipment. Some equipment needed for emergencies will never cover the minimums, but others, left behind by workload shifts, are disposed of.

The county's grader fleet is a good example. Historically they had an average of 15 graders. After looking at the hours on each unit and the needs, they decided to try to put more hours on fewer units. The fleet is now 6 main units.

Determining need was the first step. "Do we really have to have four graders in different places at the same time, or could the work be done by one unit within the same time period?" Fedderly asks. "The urgency is with snow plowing, so we put wings on the truck plows. That buys additional time for the grader fleet to get around." It was necessary to invest in better graders that could cover more ground faster.

More revenue, lower costs

Increasing revenue also helps. As Fedderly notes: "You can only increase equipment utilization if you have the work." The county promoted services to townships: simple maintenance and plowing to complete design, engineering and reconstruction of roads. Revenues from townships doubled from \$1.5 million in 1987 to over \$3.5 million in 1996.

Containing costs is a must. Some equipment just doesn't perform. For example, a group of tri-axle trucks was continually in the red because of breakdowns, bad set-up, and changes in usage. Even though some of them may have been newer than other trucks in the fleet, the county began disposing of them. "We couldn't afford to keep them," Fedderly says. Similarly, once they set their effective fleet size (35 maintenance and 18 tri-axes), they began to turn over about five trucks a year. This ensures that, ideally, no truck in the fleet is older than 10 years old. Operating and repair costs are held down and units are on the road generating revenue.

"You have to manage each part of the equation: workload, employees, effectiveness, and equipment," says Fedderly. "Put them all together and that gives you the best utilization and productivity. Management is the key, and that comes down to individuals. Patrol Superintendent James Harer manages the day-to-day operation ensuring effective utilization, and Maintenance Superintendent Steve Schofield manages equipment purchase and monitors daily utilization. Every employee, working together with the Transportation Committee, ensures our operation's success."

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