

# Storm Recovery

Katrina knocked Barriere off its game, but a return to performance management has it hitting its benchmarks again

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BEST PRACTICES

**M**ention the name Katrina, and you immediately have Ben Tucker's attention.

As equipment director for Barriere Construction, a highway-and-heavy construction company operating throughout southeast Louisiana, Tucker not only experienced first-hand the horrendous hurricane of August 2004 and its destruction of equipment, buildings and people, but he also learned just how disruptive the storm was to the internal workings of his own company. Management vigilance of Barriere's internal data stream was severely interrupted. The stream kept flowing, but no one had time to pay attention to it.

Maintenance performance benchmarks, the safeguards that helped the company win the 2004 AEMP Private Fleet Masters Award, were knocked off the tracks. But when the business strategies were reestablished, the restoration was so successful that this year-five years after the storm-Barriere was named AEMP's Private Fleet Masters Award winner for a second time.

The return to normal, however, was no easy task. It took half a year of man hours and the application of past lessons learned to complete the job.

Six months after the "Notorious Lady" left town, "We were living in

a reactive mode," Tucker says. "This was the first disaster we had ever gone through. We lost about 25 percent of our work force. Some people who were fleeing the storm never came back. We lost about \$1.2 million worth of equipment that had to be replaced-backhoes, excavators, wheel loaders-and other units were damaged and had to be repaired."

Although Barriere's maintenance shop was being used only for dispatch-99 percent of its repairs are outsourced-Tucker had to hit the streets calling on vendors to return relationships back to business-as-usual status.

Swamped with the necessity to regroup, rehire and "get things rolling again," no one had time to pay attention to the data still being collected and stored in the company's work-order system. For obvious reasons, nobody was following through on the data or tracking it. As a result, maintenance "costs were going through the roof," Tucker says.

At the end of the hectic six-month period, company owners realized that fleet costs were rising and told Tucker, "to get back to what I was doing before the storm."

Tucker knew exactly how to execute the "fix it" order. He called on management know-how he had

learned in 2000 when his company hired a consultant to help reduce maintenance costs that had reached 15 percent of company revenue.

"We spent twice as much then on maintenance than we spend now and were doing half the volume of work," Tucker says. After the consultant's management assessment, a decision was made to adapt one specific business concept that had worked successfully in the oil fields and manufacturing companies.

That concept was to manage equipment, not people, and it led to the outsourcing of the majority of company fleet repairs and maintenance, as mentioned earlier.

"We took that process and molded it to our environment," Tucker says. "In doing so, we had to implement week-long training programs for equipment technicians and operators. We had 33 production crews, and we called everyone of them in for the training."

The concept worked. Maintenance costs as percentage of revenue dropped dramatically, and business operations flowed along smoothly-right into the path of Katrina.

Since that earlier experience had taught Tucker how to batten down the hatches, so to speak, he turned his attention to the key performance benchmarks so necessary to a

profitable fleet operation. They included tracking preventative-maintenance compliance; monitoring the number of PM work orders generated and how long it took to complete a work order; conducting internal audits of equipment condition; determining if superintendents were conducting monthly equipment inspections; if operators were doing weekly maintenance checks on the units and, in Tucker's words, "tracking whether those inspections were just pencil whipped or were quality reportS."



Ben Tucker, equipment director at Barriere Construction, successfully reestablished maintenance performance benchmarks that had been seriously disrupted by Hurricane Katrina. The company was named 2009 Private Fleet Master Award winner.

Other key benchmarks were tracking utilization of owned and rented equipment; monitoring equipment damage; keeping up with the amount of training per operator; cost of fuel, tires, and equipment-replacement value cost as part of company revenue; and looking at maintenance revenue as a maintenance cost by equipment category:

"My whole fleet, for instance, may cost \$8 an hour to operate," Tucker says. "We watch to see if that number goes up or down and by how much, and what revenue was generated. You

can only do so much, but we look at that and make sure we stay within our budgeted equipment rates."

Also tracked are emergency repairs by percentage and the percentage of crews that had emergency repairs.

To put the end results into some type of framework, maintenance COST prior to Katrina were about 1.2 percent of revenue. When Katrina hit, costs increased to about 2 percent. Now that maintenance performance benchmarks have been reestablished, the percentage has dropped below 1 percent.

To reverse the upward trend in maintenance costs, Tucker returned to a system he used before the storm slammed ashore. Called Total Process Reliability (TPR), personnel from different divisions throughout the company, such as production, maintenance and management, were called in for monthly meetings to review Key Performance Indicators (KPI)—the benchmarks just mentioned.

"Our TPR Committee started meeting again regularly to see how much training was being done in each division," Tucker said. "We also identified where we were having problems and, basically, put everything back in place." Tucker visited the company's primary vendors that included the local Caterpillar dealer, a hydraulics company, a tire distributor, and a trucking company that handles all Barriere's on-road fleet.

Because of the influx of new hires caused by the storm, training became an essential ingredient of company recovery.

"We had to train operators, bring people up through the ranks to make sure they knew how to operate the equipment, and how to do the required daily inspections and weekly maintenance. The new peo-

ple didn't always know what to do or what they were accountable for," Tucker says.

The most important factor in such an undertaking, he says, is using the KPI to "track and trend."

"For example, we do a mean time between corrective action and failure. You have categories of equipment, so you make sure your work-order system is set up to track classifications of repairs, breakdowns by priority and repair class. The work order system has to be set up for tracking and trending. We do that by using a Pareto Chart that shows, for instance, 10 components on a machine, such as hydraulics, fuel systems, tires and undercarriage, body and appearance and so on. You set up the work orders, and when you trend everything out you will find that the 80-20 rule is true—80 percent of what goes wrong happens with 20 percent of the parts.

"The graph on the Pareto Chart shows where those parts are on a machine," he says, "so when you are doing PMs, technicians can focus on those specific components that are causing the most problems. With that data, you can get a mean time between corrections and failures. You put in a line of defense before failure, and you can expand that time to failure out further."

Using this approach, Tucker has been able to extend his oil drains from 250 to 350 hours, for example. "We know our oil will last up to then without having any problems. It is simply PM optimization," he says.

"You must have certain schedules and maintain your auditing process," says Tucker. "You have to be held accountable for what you do on a daily, weekly and monthly basis."

"That," he says, "is memorizing." EM