Elmore County Takes the Next Step

In 2005, Elmore County began recycling roads with a new type of roadway reclaimer, the AZ 300 Asphalt Zipper. After taking delivery of the unit, the county experimented with different types of stabilization materials. “After many months of experimenting and monitoring performance, we decided that the addition of cement into the reclamation process provided the most effective results while remaining cost efficient” stated Richie Beyer, Elmore County Engineer.

The Road Recycled

Full Depth Reclamation with Cement
Initially bags of cement were manually distributed from the back of a dump truck. This process proved tiresome and dusty. Through trial and error, the county retrofitted a dump truck with a modified chip spreader to distribute an even amount of cement over the roadway. The process presented only minimal dusting and required no heavy lifting.

The county now loads the dump truck with cement at a local ready mix plant and distributes the cement as needed. The process allows the county to maximize production while minimizing the following three resources:

- **Materials**: recycling the material in place including the asphalt.
- **Labor**: shortening the time spent on each failure.
- **Equipment**: limiting the amount of equipment used.

The process has allowed the county to maximize the use of its limited resources while addressing a major need in the county in a minimal amount of time. The Highway Department has established a process which utilizes a three (3) man crew, a backhoe, the reclamation/milling attachment, a single axle dump truck, and a vibratory smooth drum roller.

In addition to minimizing labor, material and equipment costs, the process provides the public another benefit that most people find even more important. The process minimizes the time the public experiences a lane closure. A good example of this time savings is comparing a 100’ long, 10’ wide lane which would have taken a few days to repair now takes a matter of hours.

For additional FDR w/ Cement information, visit [http://www.cement.org/pavements/](http://www.cement.org/pavements/)