What was the challenge you set out to solve?

Jones County wanted to create an easier way to fill holes and cracks on our paved system. Previous methods included use of a dump truck by running the cold mix out the front sander after removing the spreader wheel or shoveling mix out of the back of a pickup truck. The task of shoveling cold mix asphalt from a pickup truck is not very desirable and utilizing a dump truck becomes problematic depending on where the hole is located on the pavement and adds personnel.

How did you develop and implement your solution?

Our fabricators wanted to develop an automated unit that contained the material and augured it out to a more precise location. The unit also needed to be portable so it could be easily loaded and unloaded out of the back of a one-ton chassis flatbed truck. The hopper needed to accommodate the width of a loader bucket and keep the capacity of cold mix around 2,000 pounds.

What did it take to make this solution a reality?

We had two fabricators that produced this unit in 25 hours. The three main components were the hopper, auger, and hydraulic power unit. Our fabricators utilized sketches and layout technics they derived to produce the hopper and assemble the unit with locally purchased materials and components.

What was the cost of implementation?

The total cost of this project was $7,250.

What was the impact and results of your efforts?

The Cold Mix Placer enables maintenance crews to get the material where it needs to be placed resulting in quicker response times less material wasted and making an unfavorable task much easier to perform. The placer can be operated by one crew member, but we usually send a crew of two when filling potholes. The unit can quickly be placed and removed with a skid or wheel loader utilizing forks. The unit weighs approximately 1,000 pounds and can hold 2,000 pounds of cold mix asphalt. The auger grinds up any larger pieces of mix for a better gradation providing a more uniform fill. Little or no clean-up is required when the unit is not in use. Any excess material in the hopper can simply be augured back into the stockpile.