

## What is mill and overlay?



There are 1,360 lane miles of roadway maintained by the City of Columbia. Street maintenance follows the 2016 Pavement Management Plan, which was presented to the City Council on May 2, 2016. The plan is based on the principle that preventative and rehabilitative street maintenance is more cost effective than reconstruction.

One form of street maintenance is sometimes referred to as "mill and overlay". This process consists of two major steps: 1) milling the street and 2) laying the new asphalt (overlay). To mill the street, workers use heavy equipment to remove the surface of the street and place it into dump trucks. Workers then use a machine to spray "tack," a liquid asphalt coating that will assist in adhering the new asphalt to the road. The final process is overlay, which is shorthand for laying asphalt on the street. Once asphalt has been laid, it can be driven on almost immediately. However, drivers are asked to watch for and respect the detour requests of flaggers as street workers put the final touches on the road, such as smoothing it out with heavy road rollers.

"The benefits of asphalt are durability, cost effectiveness, smoothness and the ability to install it relatively quickly," said Dave Nichols, public works director for the City of Columbia. "It is also a recyclable asset."

Milling and overlaying a street is about five times more expensive than other options such as chip sealing, but about five to 10 times less costly than reconstruction.

"The purpose of the program is to focus on a workable and affordable plan for improving the integrity and service life of City streets over the long term, while reducing the costs associated with deferred maintenance," said Nichols.

According to City staff, the estimated funding needed for sustained Columbia street maintenance should be at least \$4.8 million per year. In general terms, this would allow for maintenance work on about 10 percent of our streets each year, essentially letting us prolong the life of our streets. The current budget for street maintenance is \$3.2 million.

"Due to the funding gap, decisions regarding how to spend the allocated funds must be made utilizing good data and technical resources," Nichols said.

"The goal is to stretch the money as far as we can in order to keep as many roads as possible in good shape for as long as possible," said Richard Stone, engineering manager.

The Columbia Public Works Department is accredited by the American Public Works Association.