

### Chicago Heights sees some budget stretching with Hot-In-Place Recycling.

by John L. Danello Jr., Gallagher Asphalt Corporation

Most people are aware of the fact they can recycle cans, bottles, paper and some types of plastic but most don't know that the roads they drive on can be recycled, too. Hot-in-Place recycling through Heater Scarification is a process that has been actively used by public works departments throughout Chicagoland for decades. This past fall, the City of Chicago Heights decided to use Heater Scarification instead of the conventional approach of milling and overlaying.

Citizens love it because it is a sustainable and eco-friendly process that saves municipalities anywhere from 15% to 20%. John Danello of performing contractor, Gallagher Asphalt Corporation, puts it in very simple terms, "We can resurface 13 blocks worth of roadway for the price of ten, while adding structure with the sub-



sequent overlay." In this budget-crunched economy, that becomes a very attractive alternative to folks who are charged with maintaining roads with shrinking budgets.

Essentially, Heater Scarification



involves two sets of equipment – a pre-heater and a heater/scarifier. Combined, the two units are less than 120 feet in length. The first unit pre-heats the existing asphalt pavement to about 200 degrees. Immediately following, the heater/scarifier continues to heat the pavement to about 320 degrees while scarifying to a depth of typically 1.5 inches. After scarified, the pavement

fied slope and grade.

This "green" process virtually eliminates milling machines and reduces the amount of truck traffic and new hotmix required. Municipal consulting engineer, Chandra Trivedi P.E. of Globetrotters Engineering, says "It's not only environmentally friendly, the savings are there. It's less expensive than conventional resurfacing which involves surface removal, transporting the RAP back to the asphalt plant and then bringing back more new mix." Many cities and towns like Chicago Heights have also recognized it to be an environmentally responsible approach that reduces the overall carbon footprint by 28% versus standard paving methods.

After heater scarification, a thin structural overlay must be placed. In this case, the City chose a hotmix overlay. Other public works professionals have sometimes used chip seals.

then is sprayed with a rejuvenating oil to bring back the plasticity of the mix. Once the oil has been augured and re-mixed in-place, it then passes through a conventional paving screed at the back end of the equipment to maintain speci-

Questions about the project and the process can be submitted to John Danello via email at [jdanello@gallagherasphalt.com](mailto:jdanello@gallagherasphalt.com). 