



Michael Maslej rolls a fresh patch of asphalt as senior equipment operator Daniel Brady, left, and crew supervisor Jason Burdette, put tools back on the city's new infrared truck. PHOTOS BY SANFORD MYERS/THE TENNESSEAN

# Franklin saves money one pothole at a time

Infrared asphalt truck repairs roads in minutes with fewer workers

By Kevin Walters  
The Tennessean

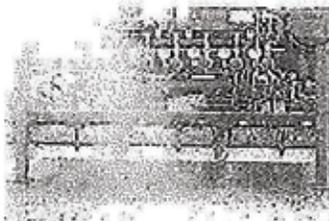
**FRANKLIN** — Fixing a pothole just got faster in Franklin.

Since January, Franklin street crews have been using the city's first infrared pothole patching truck. Franklin's truck, purchased last year, has an enormous infrared heater that's lowered over a pothole, where it heats the broken asphalt until it is soft and pliable.

When the asphalt is soft, crews can fill and repair potholes in roughly 20 minutes instead of the 2-3 hours it used to take.

Though the infrared trucks provide a tried-and-true method of repairing potholes in cold-weather states, they're a rare sight on Middle Tennessee roads. This is the first truck of its kind owned by a Williamson County city and, apparently, the first owned by any city in the Nashville area.

Franklin officials suspect the truck's cost of more than \$154,000 is probably the reason more cities haven't made the jump from traditional pothole patching — which requires as many as half a dozen workers and numerous pieces of heavy equipment and machinery — to one



The heating elements on the infrared truck warm the asphalt, making for easier repairs.

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Know a pothole in Franklin that needs to be filled? Call the Streets Department at 615-791-3254.

truck and half as many crew members.

Yet the city's savings have already begun stacking up. Since the truck's arrival in mid-January, Franklin has saved \$36,000 in manpower, equipment and material costs to patch 178 potholes, said Franklin Streets Director Joe York.

"We intend to have (the truck) paid for in the next year and a half," York said.

## Numbers crunched

Franklin is reaping savings on its potholes only because of the persistence of York and Don Terry, the city's senior road inspector.

Terry discovered the infrared trucks and asked York to buy one, but York was skeptical city aldermen would give the truck a green light.

"I told him, 'Don, at \$150,000? How am I going to convince the city administrator and the finance director and the board that we're going to save money by buying this truck?'" he said.

So Terry spent a year calculating the city's pothole costs. Using the available figures, Franklin spent more than \$154,000 to repair 3,672 square yards of potholes in fiscal year 2008-09. By comparison, if Franklin had an infrared truck, the city would have spent \$35,000 to make the same repairs.

With the numbers in hand, York got approval to buy the truck, which was then shipped to Heat Design Equipment Inc. in Kitchener, Ontario, where it was outfitted with its infrared accoutrements.

Franklin had to turn to a Canadian

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# Truck resolves pothole problems

» POTHOLES FROM 1

company because cold-weather cities regularly employ infrared heaters to repair potholes.

"You go up North, this technology's been in place for years," Terry said.

## One truck does it all

The infrared element reheats the oil in the asphalt, allowing it to be more pliable and able to be re-filled with fresh asphalt, which also is carried in the infrared truck. The single truck eliminates several steps, including having to cut the roadway with a saw, removing the broken section of road and then hauling in fresh asphalt.

"There's no truth that it doubles as a tanning bed," joked City Administrator Eric Stuckey while watching a recent demonstration of the infrared heater in use.

York is optimistic this year's mild winter will mean fewer potholes to re-



Since January, Franklin's new infrared truck has been used to patch 178 potholes. It has already saved the city \$36,000. PHOTOS BY SANFORD MYERS / THE TENNESSEAN

pair because less salt was spread over the roads compared with winters past.

"Salt, even though it melts the ice, is detrimental to your asphalt," York said.

The infrared truck will be a crucial piece of equipment as Franklin's network of 284 miles of road grows in the years ahead. As the truck helps the staff cut down on pothole expenses,

Franklin is preparing to spend more to resurface city streets — at least in the coming fiscal year.

The city will spend \$2.1 million to repave its roads compared with \$1.7 million last year; Stuckey is proposing to transfer more than \$400,000 from the city's general fund to help.

Topping the list of streets to be repaved:

North Carothers Boulevard from Cool Springs Boulevard to the city limits, Galleria Boulevard, and a portion of South Carothers Boulevard will be addressed. York is still prioritizing which smaller residential streets also will be resurfaced this year.

Contact Kevin Walters at 615-771-5472 or [kewalters@tennessean.com](mailto:kewalters@tennessean.com).



City of Franklin Streets Department senior equipment operator Daniel Brady checks to see if the asphalt is hot enough for patch work during a demo last week.

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