

# Paving the way for warranties

No one would buy a \$100,000 patrol truck without a warranty. Why buy asphalt paving projects costing many times more without a warranty? WisDOT, the Wisconsin Asphalt Paving Association, and FHWA set out to answer that question. In 1995 they built the first warranted project on a state highway; five years later 24 were in service.

The result? Warranted pavements are performing better than typical pavements, as measured by ride values and all distress factors. "The warranty has expired on the oldest ones, done in 1995 and 1996, and they needed no remedial work," says Steven Krebs, WisDOT chief pavement engineer.

Some cities, like Mequon, also use warranties. "We've been requiring a three-year warranty on our roads since 1995 and it's worked out very well," says Bill Hoppe, Mequon city engineer. "For the past six years, we've done a total of approximately 25 miles of road. During that time we're talking about the contractor coming back and fixing maybe 150-200 yards of road."

The City of Milwaukee has always required a three-year guarantee in the form of a bond from the contractor. Construction supervisors visually inspect

the jobs after the third year and require the contractor to make necessary repairs. "We don't have a published list of criteria," says Michael Chaplock, Milwaukee construction supervisor. "Generally the pavements hold-up rather well. We do expect some reflective cracking in asphalt. If it's excessive, then we'll have them do some crack sealing."

The state found that total costs are significantly lower. According to the report, *Asphaltic Pavement Warranties*, standard projects done in 1995 to 1999 averaged \$28.04/ton including estimated delivery costs, versus \$24.34/ton for warranted projects.

"The cost benefits are due to reduced delivery and maintenance costs," Krebs cautions. "Up front what the District pays out of pocket is still more." Delivery costs are staff time for testing, supervising, and related project involvement.

To make the warranty process work, WisDOT and paving contractors developed written quality criteria and thresholds for when repairs would be required. Also, since the warranty would be on just the pavement, the state initially chose warranty project sites not needing significant base course repairs.



Fears of scaring away smaller bidders and concerns about "putting the fox in charge of the henhouse" seem baseless, Krebs notes. "The contractor really has the control. It makes more sense for them to take responsibility for the outcome and just tell them: What we want is a smooth, drivable, durable piece of pavement," he says.

*For more information see the WisDOT report Asphaltic Pavement Warranties (see Resources on page 6). Contact Bill Hoppe at 262/242-3100, bhoppe@ci.mequon.wi.us, Michael Chaplock at mchapl@mpw.net, and Steve Krebs at 608/246-5399, steven.krebs@dot.state.wi.us*

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