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TxDOT experiments with road surface

Material laid on I-40 bridge designed to prevent ice formation

By Michael Smith
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MCLEAN - Drivers heading westbound over the Interstate 40 bridge at mile marker 144 may not know it, but they're guinea pigs in a state experiment this winter.

Texas Department of Transportation crews laid a new type of surface last month called SafeLane, designed to make winter driving safer by preventing ice formation, said John Feld, spokesman for Minnesota-based Cargill Inc.

Texas is one of six states testing the product, and TxDOT officials will be eyeing its effectiveness, Feld said.

"If it performs the way they expect it will, then they will plan for more widespread application," Feld said.

SafeLane™ is an epoxy filled with ground-up rock created after 10 years of research at Michigan Tech University.

The material acts as a hardened sponge that can store deicing chemicals for long periods of time and release them automatically as road conditions worsen, company general manager Bob Persichetti said.

If the material should chip, which Persichetti said is unlikely, its pieces pose no danger to vehicle paint.

SafeLane is more expensive than asphalt but won't need maintenance for 15 to 25 years, Persichetti said.

"The good news about our product is that it's put down a little heavier, so we feel comfortable that that's what it should do," he said.

So far, the material has established a good track record.

In 2002, SafeLane was applied to a bridge in Crandon, Wis., that averaged four ice-related accidents per season, company records show.

None have been reported there since, Feld said.

"The value will pay off in the form of reduced call-outs to accidents and less overtime during winter weather than for trucks to come out and throw out another layer of deicing solution," Feld said.

The new coating could also come with fringe benefits.

Standard procedure during icy conditions is to treat roads with chemicals like magnesium chloride during each storm, TxDOT Amarillo District Operations Manager Mike Taylor said.

Repeated chemical treatment wouldn't be necessary with SafeLane, which would extend the bridge's life span, he said.

"Even if the rock doesn't hold the magnesium chloride as well as they project, we've still got a good seal on that bridge," Taylor said.

TxDOT Amarillo District's maintenance supervisor in Groom will monitor the material's performance and evaluate its effectiveness at the end of the season, Taylor said.

SafeLane's abilities also extend past winter weather conditions, Feld said.

The coating also has been proven to help tire traction during summer thunderstorms, he said.

"You just combine all those safety features along with the road preservation aspects of SafeLane, and you have a real win-win proposition," Feld said.

New Road Surface

Product: SafeLane™ Ice Prevention Overlay

What is it: An epoxy filled with ground-up rocks that can store and automatically release deicing chemicals for a long time.

Where: Interstate 40 West at mile marker 144, near McLean

Company: Cargill Inc., Wayzata, Minn.

States tested: Indiana, New York, Ohio, Virginia, Wisconsin and now Texas

More information: www.cargillsafelane.com