

TECH NEWS

TECHNOLOGY NEWS

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"Narrower" road lanes may improve traffic safety

Does making the pavement driving lane narrower through shoulder markings improve safety and reduce maintenance costs?

Jim Bane, Iowa DOT District 4 maintenance manager, hopes so.

Background

In the mid-1990s Cass County reconstructed secondary road G-30 from Anita to the Adair County line with a 24-foot wide pavement. The combined lane width was marked at only 22 feet, however, leaving an extra foot on each lane between the edge of the pavement and the pavement markings.

Bane drove that road on a regular basis and, over time, noticed that edge rutting was minimal and that the durable markings were lasting longer than on similar roads. He noticed that the road also "felt" wider.

Pilot project

Bane proposed a pilot project for Iowa DOT district 4. Two roads were selected and re-marked: US 59 from the Missouri line to Harlan, and IA 92 from US 59 east to Greenfield.

The pavement on these low-volume roads varied in width from 22 to 26 feet. The old markings were still visible, but they were in poor condition.

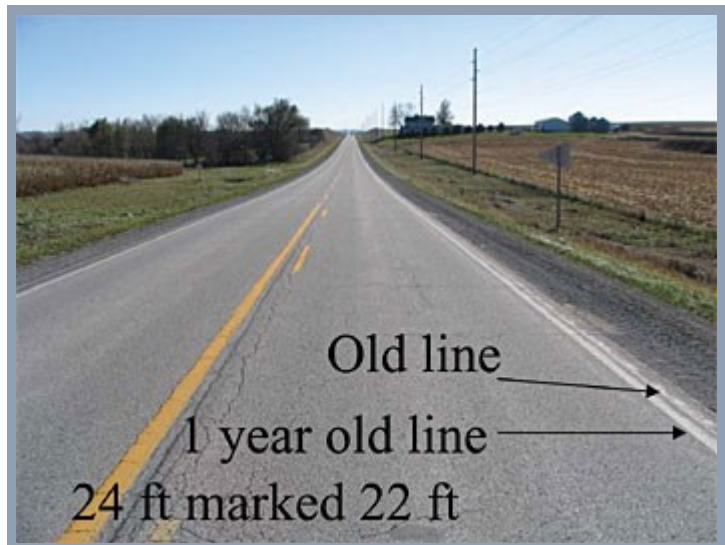
The photo at right shows one 24-foot pavement after it was re-marked at 22 feet.

Preliminary results

It's still early, but so far the results of re-marking the pavement lanes seem promising.

Maintenance supervisors have commented that edge rutting appears to be reduced, and that the pavement markings are more visible (due to a greater separation between the paint line and the shoulder rock) and appear to be lasting longer.

Bane speculates that crash data may ultimately indicate that drivers may be less likely to run off the road when markings are farther from the pavement edge.



A 24-foot pavement after it was re-marked at 22 feet
Photo courtesy of Iowa DOT District 4