

Montana Department of Transportation
Research Section
Experimental Program
Helena, Montana 59620-1001

Two Medicine Bridge – East
Cold In-place Recycling Experimental Project
NH 1-3(34)210F(1814)

Glacier County

Annual Report
November 2002

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This experimental project involved the comparison of performance of two cold in-place recycled (CIPR) treatments of two different depths (60 mm vs. 75mm). Each received a 60 mm (0.20') grade D HMA overlay. This project is located on US 2 (NINHS P-1) from approximate milepost 210.9-218.8. The breakout of treatments and data collection zones as follows: 60 mm section-milepost 211-213, 75 mm section-milepost 214-217.5 involving eleven data collection sites. Figures 1 and 2 shows representative images of each experimental section.

This project is classified as formal through the year 2003. This was the fourth annual evaluation since construction in June of 1998.

Surface texture for both treatments is tight. Some pop-outs from snow plowing is evident but not detrimental for the mat. Longitudinal cracking was at a minimum and no alligator cracking was noticed. 2002 IRI data rates both CIPR section in the high range of fair condition (99).



Table 1 breaks out the rut data for the treatments:

TABLE 1

TREATMENTS	RUTTING DATA (IN MILLIMETERS)			
	EASTBOUND		WESTBOUND	
	OWP	IWP	IWP	OWP
60 MM CIPR	6.8	5.6	3.2	6.5
75 MM CIPR	5	4.2	3.2	6.3

Figures 3 and 4 illustrate the accumulated four-year rut depth per treatment.

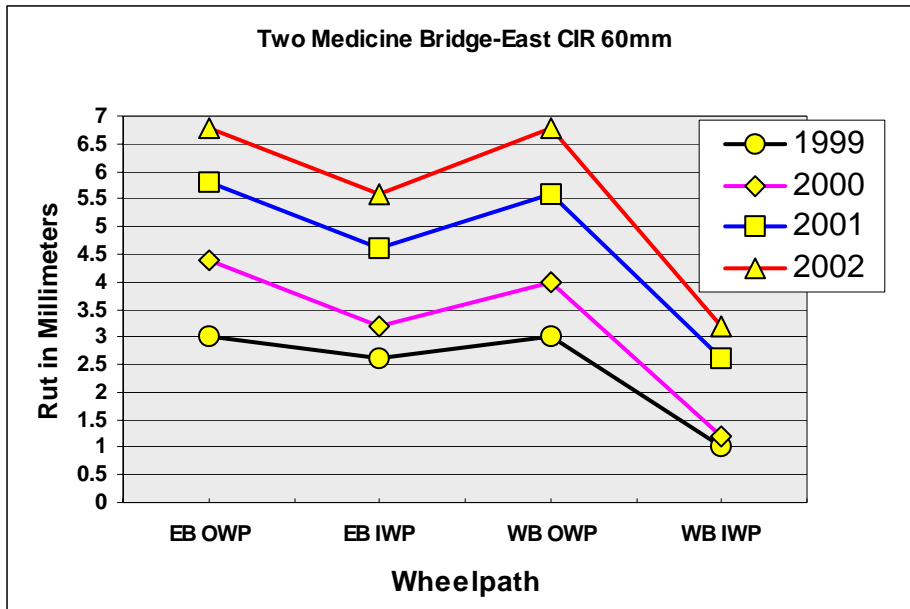


FIGURE 3

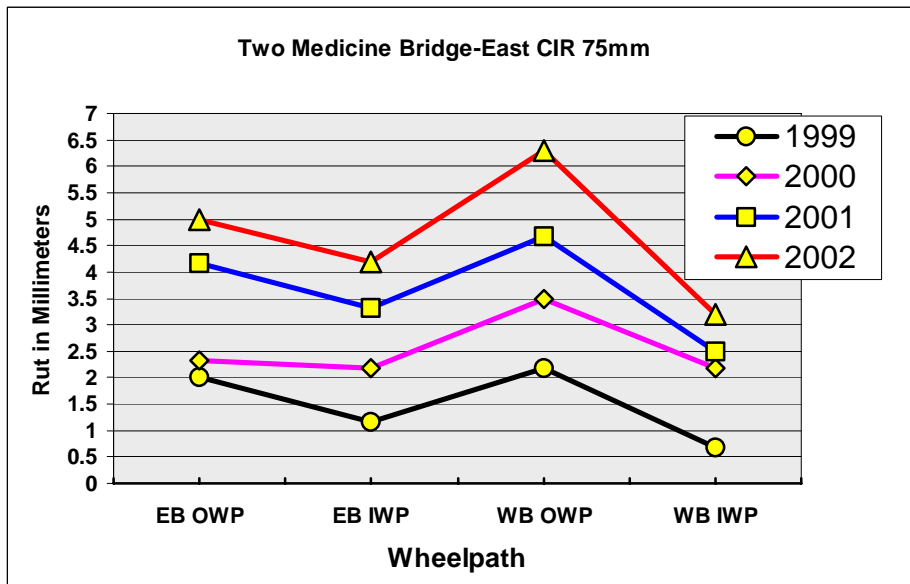


FIGURE 4

Transverse cracking for the 60 mm section averaged at 84 cracks-per-mile (CPM), which puts it in the rating of fair performance. Cracking for the 75 mm section averaged at 4 CPM, which is excellent. Figure 5 shows a distinct disparity between the amounts of transverse cracking between the two treatments. Physically, the only variation with the applications is a difference of 15 millimeters of cold recycle. Rutting variation is relatively minor in comparison to performance; however, the range of transverse cracking with the two sections is substantial. Research may elect to extend the evaluation timeframe to further monitor the transverse cracking with these two experimental sections. Both treatments are rated as performing well.

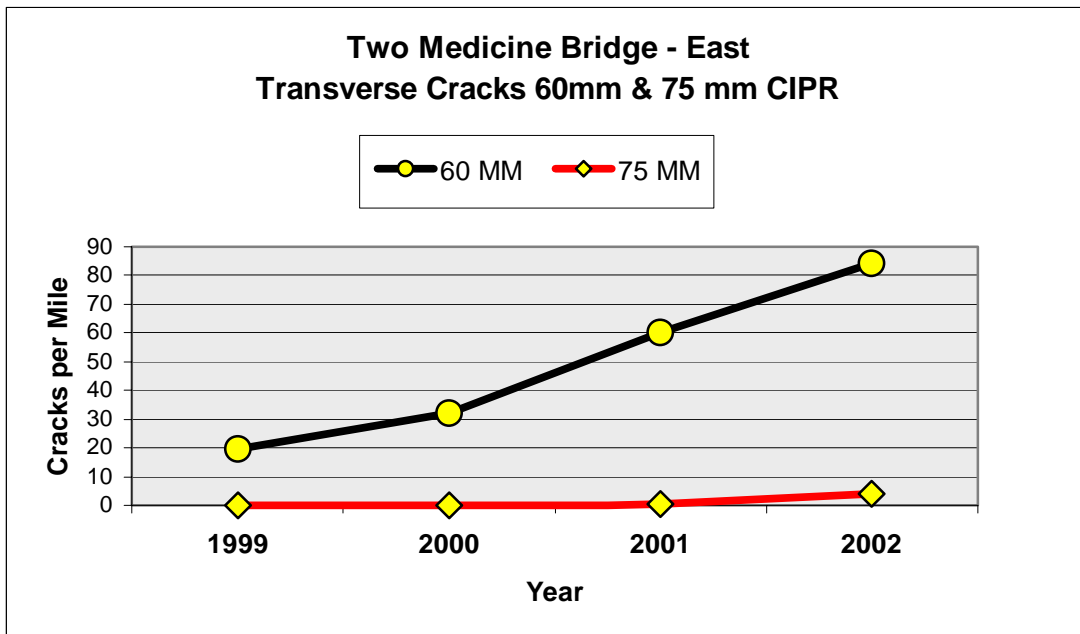


FIGURE 5