

## W. Drexel Avenue Rehabilitation Treatment

Project Update: The W. Drexel Avenue rehabilitation project is nearing completion and the goals of the project scope are being met. The scope of the project included repairing the concrete pavement, improving pedestrian facilities and improving the riding surface. Dowel bars have also been added at every joint to tie the pavement together and extend the quality of the improved ride. Understandably the preference for most of the traveling public would have been to reconstruct Drexel Avenue (all pavement, curb & cutter completely removed and replaced), but unfortunately that was not feasible for several reasons.

The city applied for a very competitive federal grant and was fortunate to receive funding to improve this stretch of Drexel Avenue, saving our local taxpayers approximately \$1,900,000. There are essentially 2 types of projects local governments may apply for state/federal funding, and specific criteria must be met.

- Reconstruction (remove and replace all pavement) To be eligible for the opportunity to receive funding to reconstruct a section of road, the existing condition of the road must be rated a 1-3, based on a scale from 1 to 10. Drexel Avenue was rated a 5. To apply for funding to reconstruct Drexel Avenue the condition of the road would need to drop substantially, which isn't realistic for a road that was reconstructed less than 40 years ago. During the lifespan of a concrete road, there are typically 2 to 3 times it should be rehabilitated before being reconstructed. Drexel Avenue was reconstructed in 1987, therefore per the chart below, provided by the Wisconsin Department of Transportation, Drexel Avenue should be rehabilitated at least 2 times before the entire road section is removed and replaced.
  \*\*Cost to reconstruct Drexel Ave, over \$7,000,000 (City would be responsible for 100% of the cost)
- Rehabilitation (repair concrete and grind pavement or repair concrete and overlay with asphalt) To be eligible for the opportunity to receive funding to rehabilitate a section of road, the existing condition of the road must be rated a 4-6, based on a scale from 1 to 10. Drexel Avenue was rated a 5. Therefore, the city had 2 treatment options to qualify for rehabilitation. Repairing the concrete by base patching and diamond grinding or base patching and overlaying with asphalt. Although overlaying with asphalt would provide a very nice look aesthetically for the first year, within a few years many of the cracks & joints would come through the asphalt, requiring ongoing maintenance.

**\*\***Cost to rehabilitate Drexel Ave, less than \$2,000,000 (City responsible for less than \$500,000)

Scenario	Treatments Available
Initial Construction (Drexel Ave - 1987)	New Construction or Reconstruction
First Rehabilitation	Concrete Repair and Grind or Concrete Repair and HMA Overlay
Second Rehabilitation	Concrete Repair and Grind or Concrete Repair and HMA Overlay
Third Rehabilitation	Concrete Repair and Grind or Concrete Repair and HMA Overlay
Reconstruction	Reconstruction or Pavement Replacement

## Concrete Pavement Life Cycle (Over Approximately 60 years)

In order to maximize the life of pavement, and be fiscally responsible, the treatment used along W. Drexel Avenue was the appropriate choice.