

## Longitudinal Joint Repair – Mill & Fill vs. Microsurfacing

PennDOT District 11 – Lawrence County

### Problem/Challenge Addressed

Centerline and edgeline failures are common issues with Pennsylvania's asphalt pavements. Determining the most durable, cost-effective treatment method is critical to PennDOT's future maintenance strategy.

### Method/Process/Product to Resolve Challenge

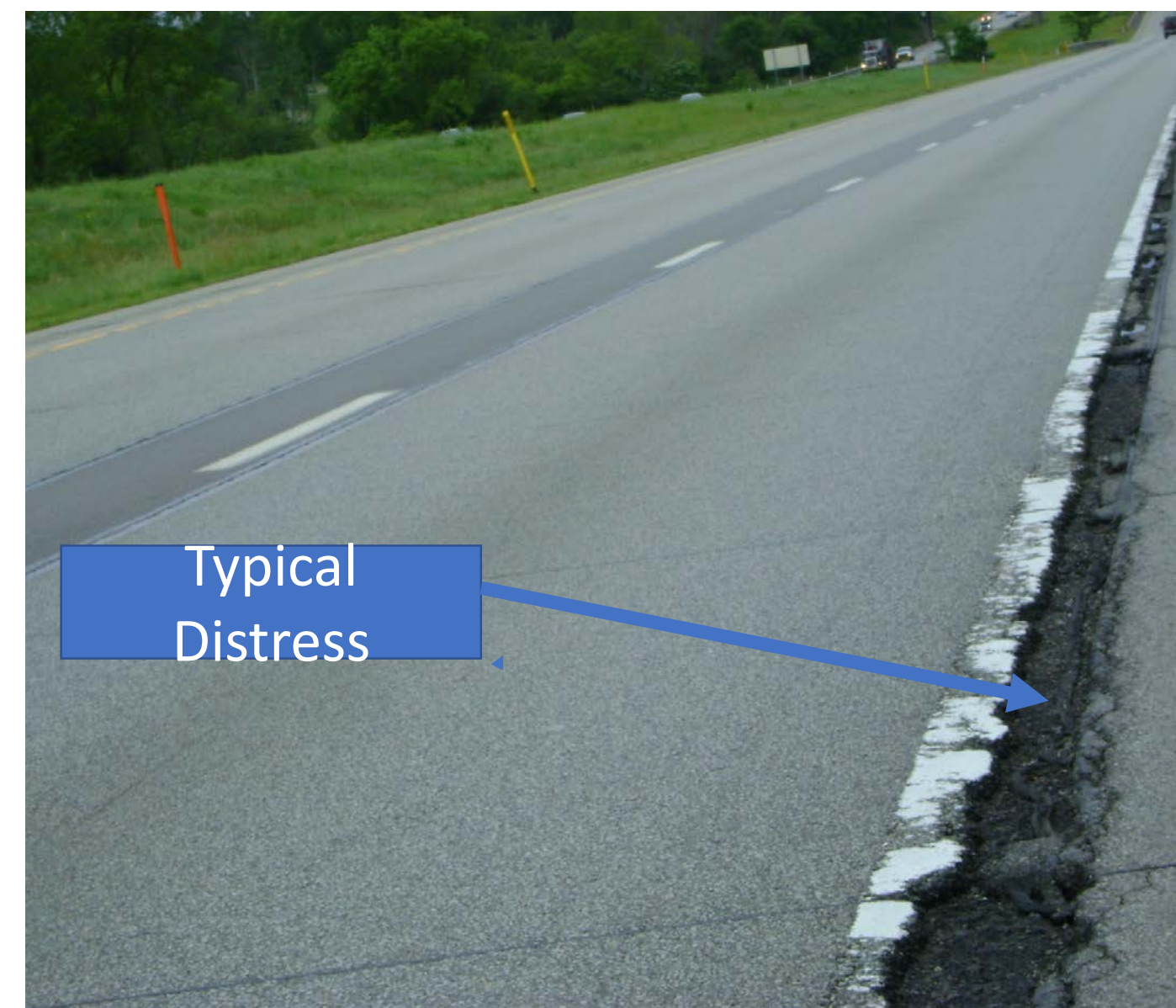
This exhibit compares two longitudinal joint repair methods on the same project section of Interstate 79 in Lawrence County. The first repair was a 2018 Mill & Fill (M&F) to the centerline joint. The second method was a 2019 Microsurfacing repair done to the shoulder joint. In both cases, the distresses were similar in severity and length.

### Contact Information

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### Results/Key Takeaways

At \$2.39/LF, the Microsurfacing only cost about 25 percent of the traditional Mill & Fill method and only took 60 percent of the number of working days. Another advantage to Microsurfacing is that there are no joints to seal and maintain while the M&F results in two joints and both are close to the wheel path. Since both treatments are relatively new, their durability will need to be compared as time goes on.



# MICROSURFACING VS. MILL & RESURFACE JOINT REPAIRS



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## Microsurfacing Joint Repair

- Work Ordered into Crack Sealing Contract, 2019
- Length of Repair is 9.10 miles
- Width of Repair is 24 inches
- Depth of Repair is 1" to 4"
- Width of distresses ranged from ½" to 8"
- Material: Micro-Surfacing
- 3 Working Days
- Cost: \$2.39/LF
- No Joints to Seal & Maintain

## Mill and Resurface Repair

- Stand Alone Bid Project, 2018
- Length of Repair is 10.78 miles
- Width of Repair is 36"
- Depth of repair is 2"
- Width of distresses ranged from ½" to 8"
- Material: 9.5mm Superpave
- 5 Working Days
- Cost: \$10.13/LF
- Results in two longitudinal joints to seal and maintain