

COLD IN-PLACE RECYCLING (CIR)

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CIR is a treatment to correct structural failures such as thermal cracking, wheel rutting, and potholes. CIR also improves the ride and provides a dense construction platform for a HMA overlay.

The CIR process consist of recycling 3"- 4" of the existing roadway through milling, screening, and mixing with an engineered emulsion and cement. The CIR is then placed with a conventional HMA paver and compacted.

Compaction is monitored with nuclear density gauges through daily control sections in a QC/QA process. Typical production rates can range from 1.5-1.7 lane miles a day. Cost of CIR is approximately \$72,000/mile additional to typical HMA PM treatments.

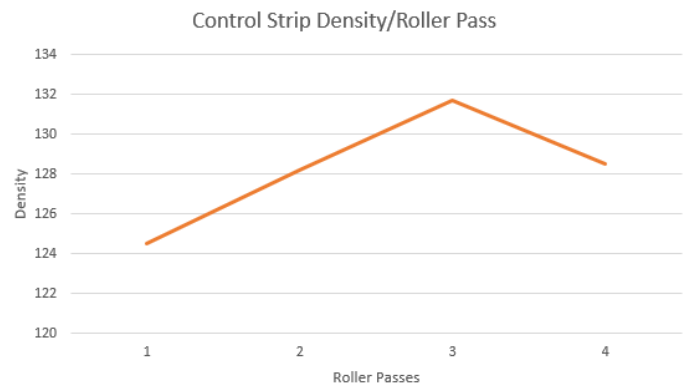


Applications:

- Asphalt pavements that have ride issues and depressed cracks or rutting
- Asphalt pavements that have transverse cracking or rumble strip issues
- A new method is to improve ride and extend pavement life

Lessons Learned

- Preliminary Engineering Necessary
 - Maintenance Review
 - Identify Subgrade Issues
- Requirements
 - 6"+ Existing HMA
 - Stable Base Section



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