Localized **non-uniform** areas and joints fail prematurely. Random testing seldom catches problem.

Increased use of night paving makes inspection more difficult.
SHRP2 R06C Goal

Advance solutions to measure and quantify non-uniformity of asphalt mixture construction

Pavement Mounted Thermal Profiler (PMTP)  
Ground Penetrating Radar (GPR)
R06C - Technologies to Enhance QC on Asphalt Pavements

Proof of Concept Pilot (3)
$100k/ea. (GPR) + In kind

Lead Adopter Incentive (10)
$40.5k/ea. or In kind

User Incentive
R06C GPR Implementation Highlights

• GPR Validation:
  - Testing protocols established by UMN.
  - 3 units fielding to MN, ME & NE and initial validation completed in 2016
  - Final Reports Released Oct 2017:
    - Test Protocol for the Rolling Density Meter
    - Non-destructive Eval. For Bituminous Compaction Uniformity Using Rolling Density
Additional Contract Support

MOD Approved for Additional Contract
IA Support till Dec 31, 2018

- Includes 10 additional PMTP 4-hr workshops
- 5-ea 45-min PMTP presentations
- 2-ea 90-min Webinars (PMTP and GPR RDM)
- 2-ea GPR RDM User-Group Peer Exchanges
FHWA Items of Interest:

• Shortfalls / Limitations
• Equipment Precision & Verification
• Technology Potential: QC? QA?
• Further Evaluation Needs
• Specification Needs
• Post SHRP2 Advancement Strategies
Special Thanks

- MN DOT
- AASHTO & ARA
- GSSI
- Guest DOTs

Thank you