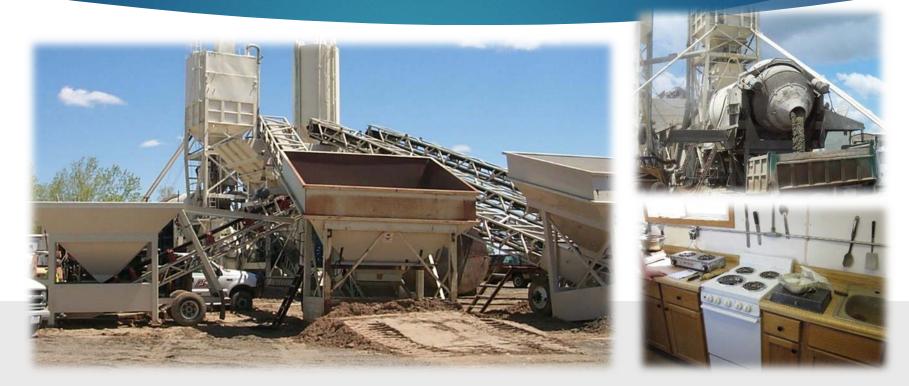
MnDOT Experience with FHWA Incentive Implementation Program



Maria Masten, P.E MnDOT Concrete Engineer



FHWA Incentive Implementation Program

\$100,000 FHWA (80/20 split)

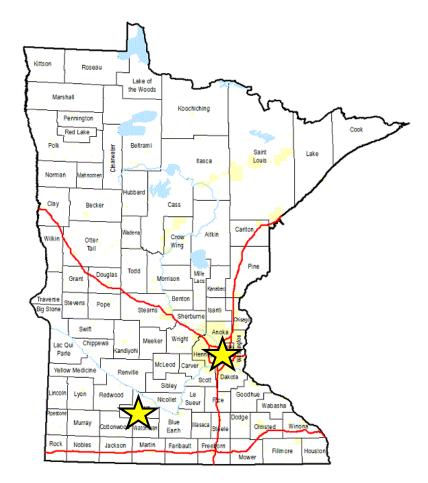
- Trial Batching
 - Maturity Testing
- Super Air Meter and Phoenix Testing
- Quality Control Plan
- Contractor Charting

- \$25,000 MnDOT
 - Contractor SAM Training
 - Final Report Hire consultant to collect data and write report
- Understanding how this matching funds works has been a challenge

Minnesota PEM Shadow Projects

- \$100,000 will be split (50/50) between 2 projects
- I-35W Lake Street
- ✓ TH 60 St. James

Testing in 2019
Construction Season



FHWA Trailer Visit



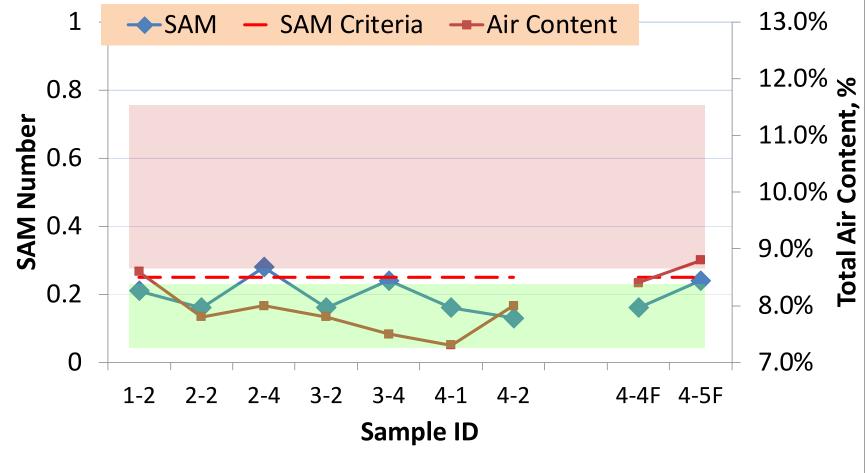
Sampling and Testing MCT at the Plant





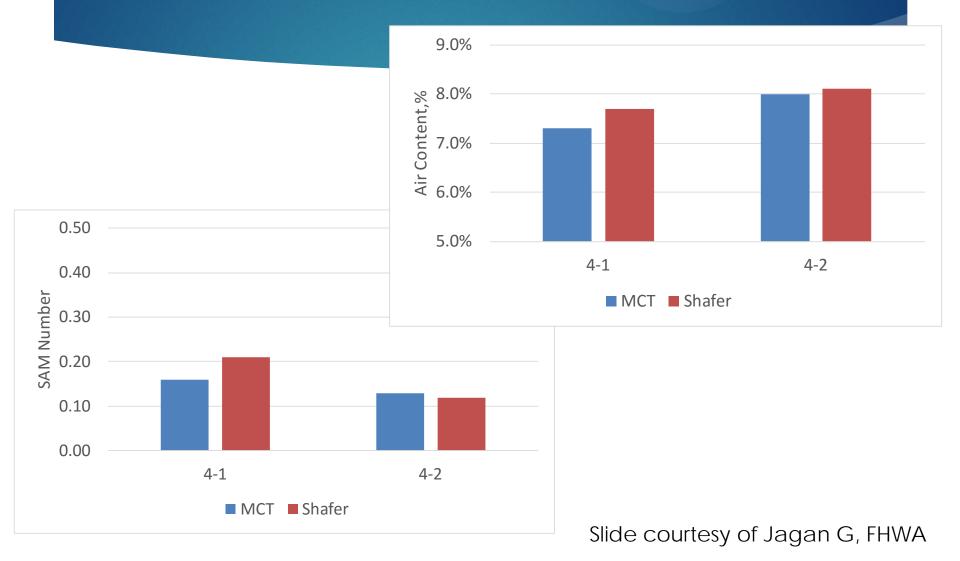
Slide courtesy of Jagan G, FHWA

Air Void System - SAM



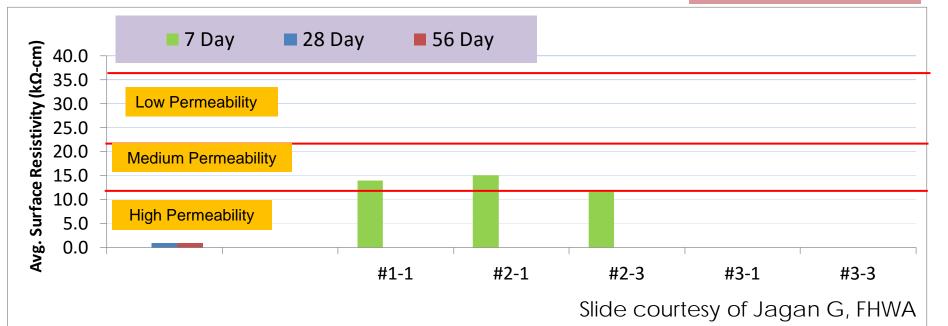
Slide courtesy of Jagan G, FHWA

SAM – MCT versus Shafer



Surface Resistivity





Bucket Test







Bucket Saturated



Sensor Embeded

Slide courtesy of Jagan G, FHWA

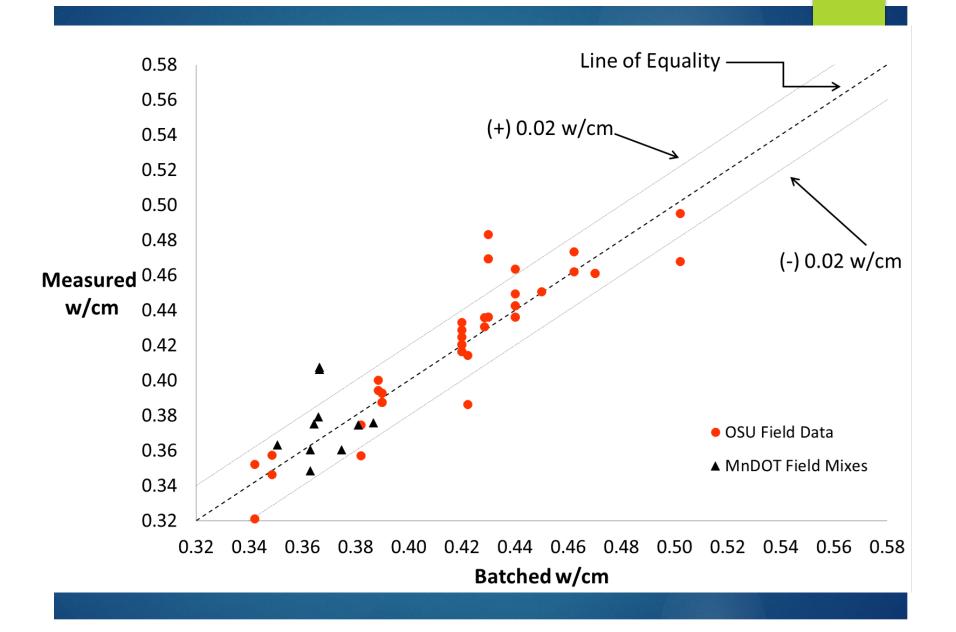
The Phoenix





Phoenix Test Data

- Currently testing side by side with microwave oven on same project FHWA Trailer visited
- Will be incorporated into PEM Shadow testing in 2019



Questions

