



# State of Utah Experience

## *Performance-Related Tests and Specifications*

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March 15, 2017



U.S. Department of Transportation  
Federal Highway Administration

AMERICAN ASSOCIATION  
OF STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

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# Performance Tests: 3 Legged Stool

- Pavement **Stripping**
- Pavement **Rutting**
- Pavement **Cracking**





# UDOT Performance Test History – Asphalt Pavement - Stripping

- Immersion Compression Test
- Lottman Test, AASHTO T 283
- Justified use of hydrated lime in all our HMA
- QMP to audit hot mix plants – lime and moisture
- Performance test?

# UDOT Performance Test History – Asphalt Pavement - Rutting

- Georgia Loaded Wheel Test
- Asphalt Pavement Analyzer
- Hamburg Rut Test

# Hamburg Equipment - 20 lbs extra load applied



# UDOT Performance, Research – Asphalt Pavement - Cracking



- BBR Beams for cracking performance
- SCB to balance our mix designs

# Dry brittle pavements



- No longer pay asphalt binder separately
- Superpave and the Hamburg Test along with the use of RAP have left us with dry brittle pavements.

# BBR Beams



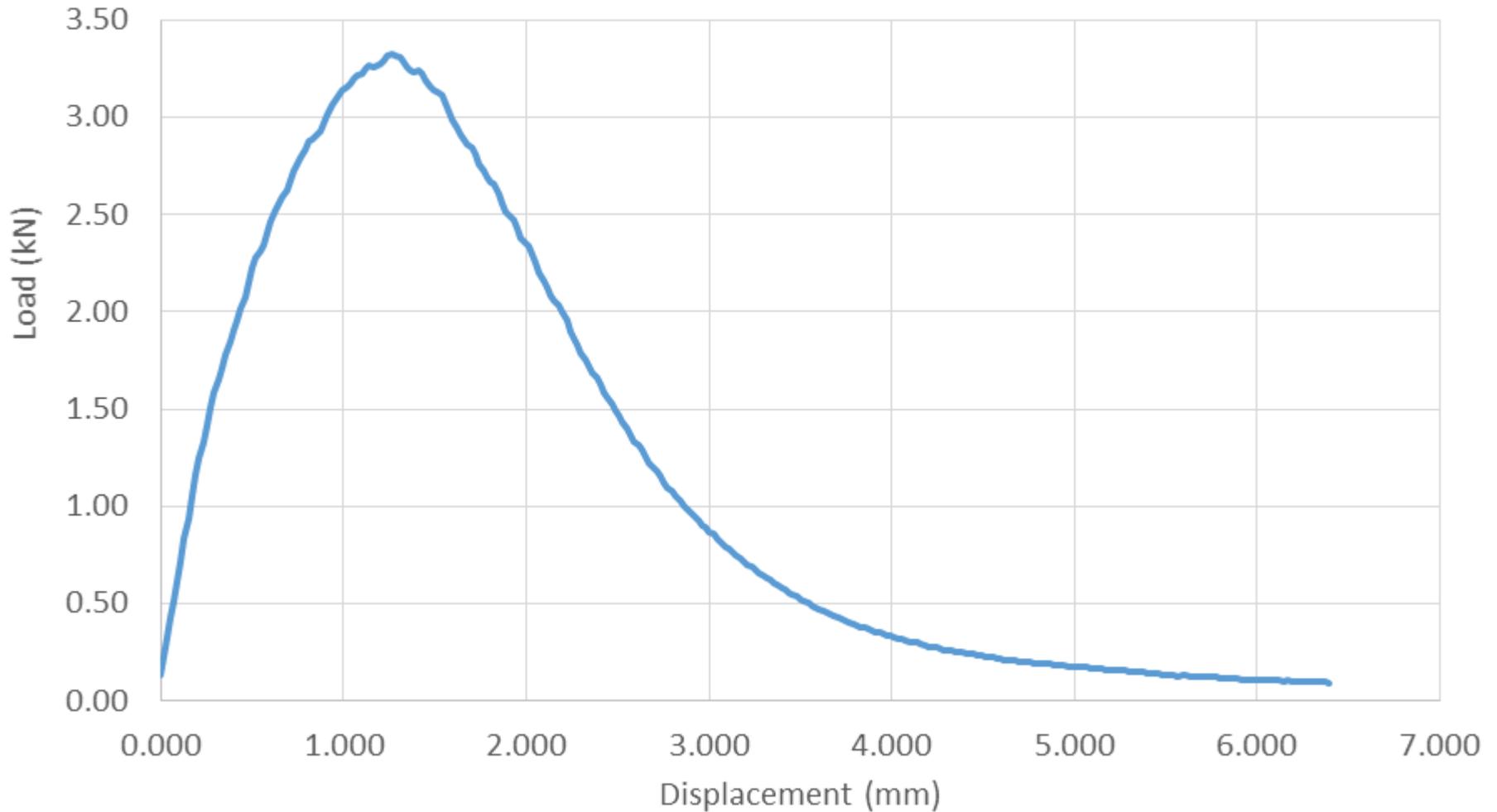
- Dr. Pedro Romero, Utah work with BBR Beams
  - Please notice how this test has demonstrated to relate predicted performance to field performance

# SCB Test, I-FIT, Illinois procedure



# I-FIT Test

Load vs Load Line Displacement (LLD)



# SCB Sample After Testing



# Questions?

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