NCAT Pavement Test Track

Advances in Testing

Content

• Structural mix performance
• Functional mix performance
Structural Performance

- Cracking
- Durability
- Rutting

Laboratory Rutting Tests

Marshall Press IDT
Comprehensive Tests

Rutting tests predict performance
Rutting tests predict each other
Fracture tests are more problematic (CG)

Structural Performance

Construction Quality Testing

77°F 122°F

10

11

12
Functional Performance

- Friction
- Macrotexture
- Roughness

Wet Surface Friction with Ribbed Tire

NCAT Three Wheel Polishing Device
Takeaways

- Prevent failures AND incentivize innovation...
- Construction testing is the place to start!
- Web access (asphaltresearch and 2018Track)
  - http://pooledfund.org/Details/Study/626
  - http://eng.auburn.edu/research/centers/ncat/testtrack/mnroad.html
  - http://www.pavetrack.com
- Excellent northern thermal cracking performance
- Differentiation in southern fatigue performance
- Work underway on sample height, aging, reheating.

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