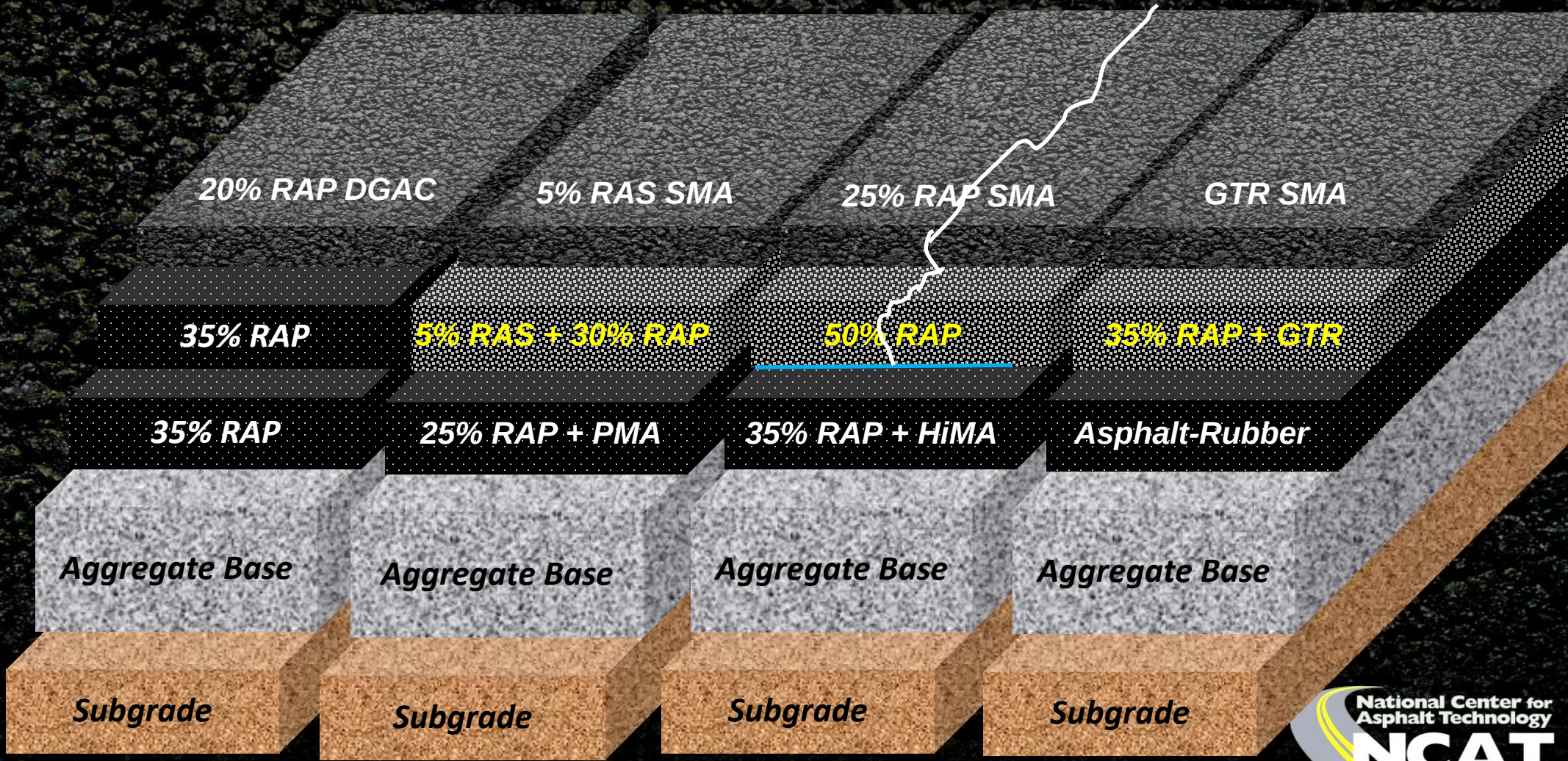
All Asphalt Mixes Produced with a WMA Technology



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Evolution of Cracking in Section S5

1. Weak bond between binder and base layers
2. Debonding between binder and base layers
3. “Middle-up” crack initiated at bottom of binder
4. “Middle-up” crack reaches surface of pavement
5. Full depth crack extends to bottom of base

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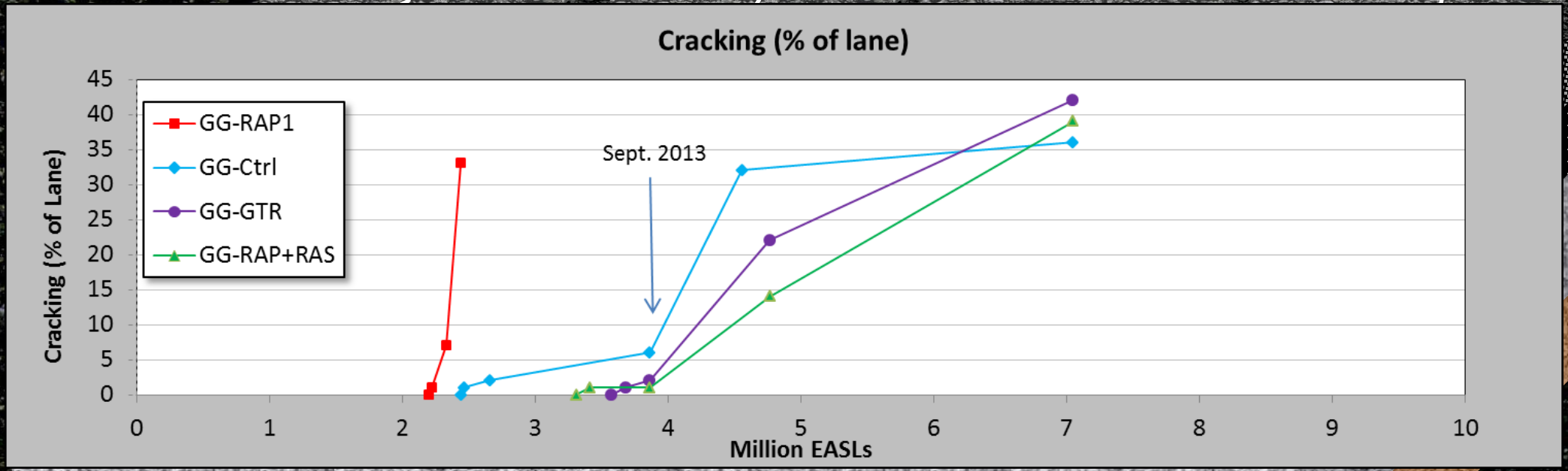
2.5

3.4

3.8



Aggregate Base

Aggregate Base

Aggregate Base

Aggregate Base

Subgrade

Subgrade

Subgrade

Subgrade

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Other Mix Additives

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Warm Mix Asphalt

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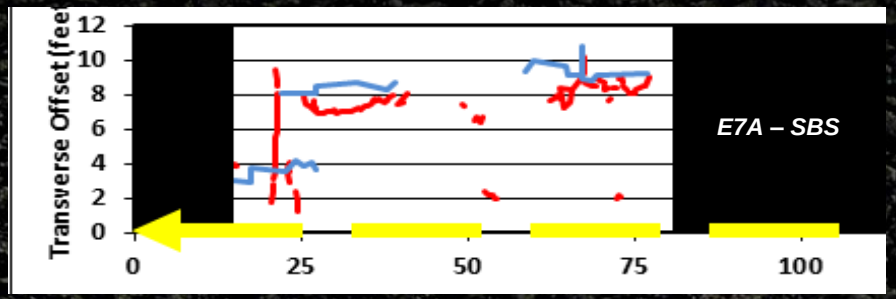
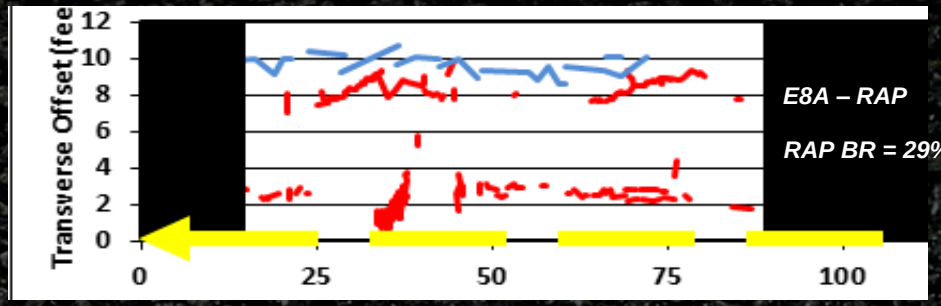
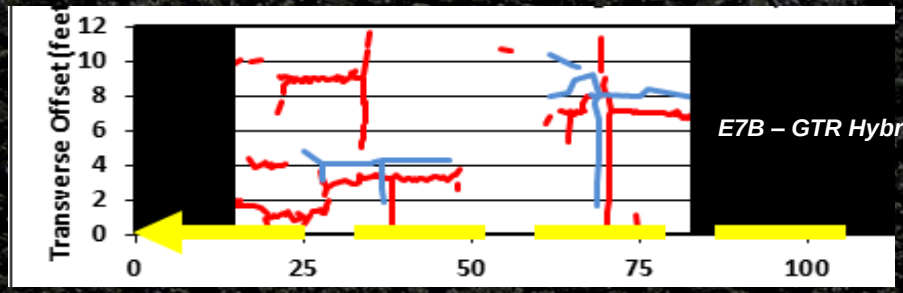
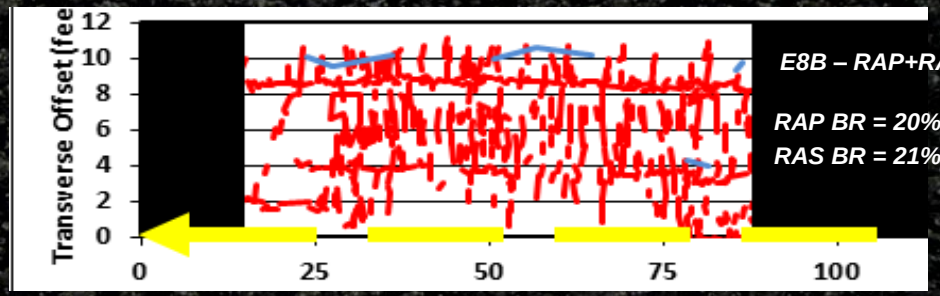
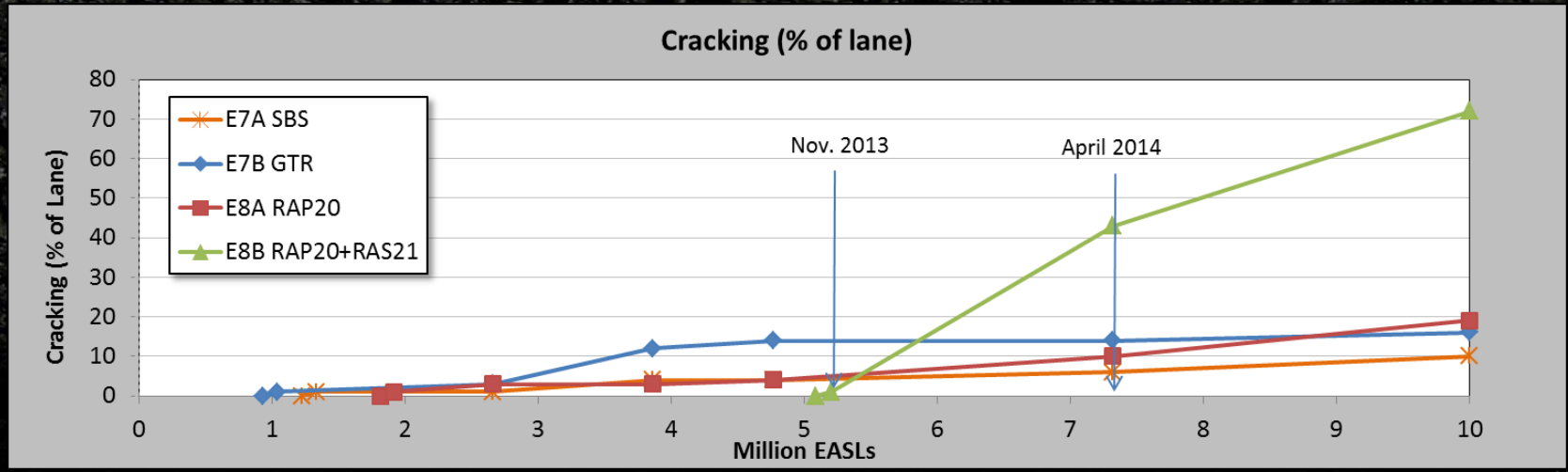
Reflective Cracking











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Current Research Focus

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Sustainability

Life Cycle Assessment

Porous Pavement

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Sustainability

Recycled Materials

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Sustainability

Warm Mix Asphalt

Pavement Albedo

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Colored Asphalt

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Reflective Surface

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Safety

Open-Graded Friction Course and High Friction Surface

Pavement Friction

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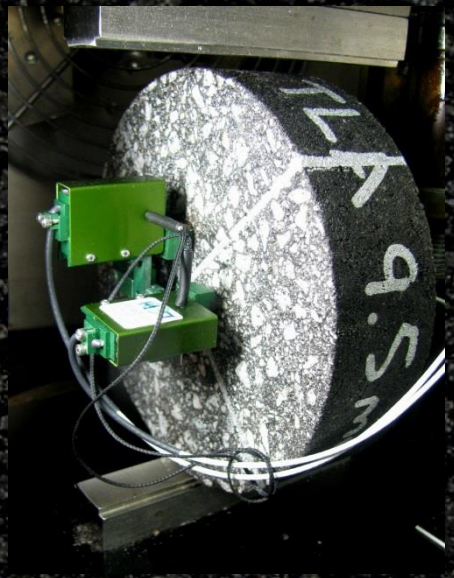
Performance Testing



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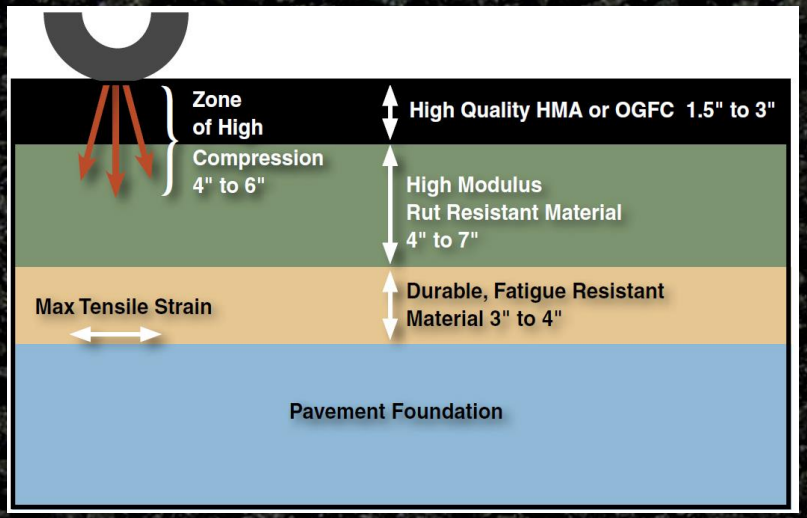
Pavement Design



PvD AASHTOWare Pavement ME Design AASHTO

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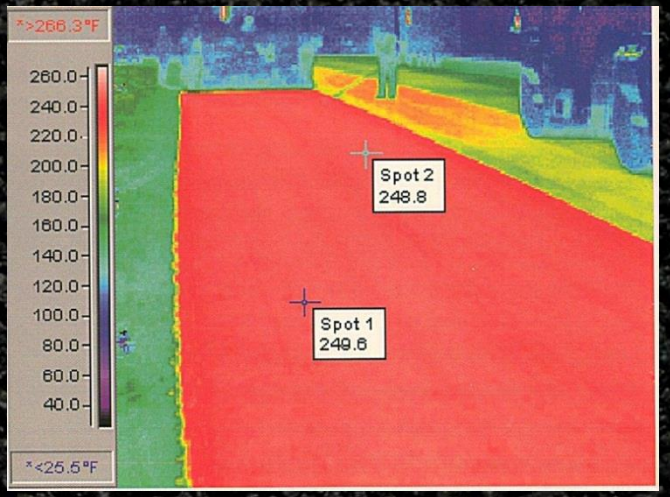
Best Practices and QA/QC



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Pavement Management and Preservation

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Preservation on Lee County Road 159

- *Thin Overlay x 8*
- *Micro Surface x 6*
- *Chip Seal x 7*
- *Fog Seal x 1*
- *Crack Seal x 1*
- *Control Section x 2*
- *25 Total Sections*

- *Evolved county road*
- *Low ADT, high truck*
- *Empty in, loaded out*
- *In yr = 1 Track day*
- *Out yr = 6 Track days*
- *Diverse condition*
- *Varies by WP and dir*

Training

- Advanced Mix Design
- Asphalt Technology Course
- Superpave Mix Design
- Professor Training Course
- Technician Certification Courses: AL, GA, PR

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Thank You

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