



2012 PG Experiment

- Traffic continuation on 2009 GE+ test sections
- GE+ contains high RAP, two WMA, PFC sections
- Stop traffic when trigger distress(es) reached
- Apply consensus PP treatments to GE+ sections
- Duplicate / expand study in off-Track research

2012 Track Research Cycle

- Quiet Pavement Surfaces: OGFC
- Improved durability of OGFC
- Low cost, thin overlay
- Alternative binders and binder modifiers
- Continue traffic on perpetual pavements
- Preservation Group (PG) experiment
- Green Group (GG) thinner perpetual pavements

2009 Group Experiment (+)

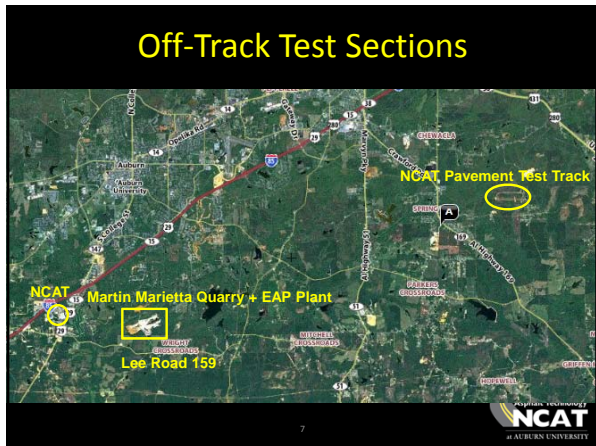
Conventional Dense HMA	Permeable Surface on Genex HMA	High RAP % HMA	High RAP % Warm Mix	Foamed Warm Mix	Added Warm Mix	Thinpave Warm Surface Control	Thinpave Warm Surface Control	Kraton Modified Mix	FLA Modified Mix
7 inches 1.0	7 inches 1.0	7 inches 1.0	7 inches 1.0	7 inches 1.0	7 inches 1.0	7 inches 1.0	9 inches 1.0	5.25 inches 1.0	7 inches 1.0
6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB	6 inches DGAB
Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade	Soft Subgrade

Private Sector Funding

2012 "PG" Experiment

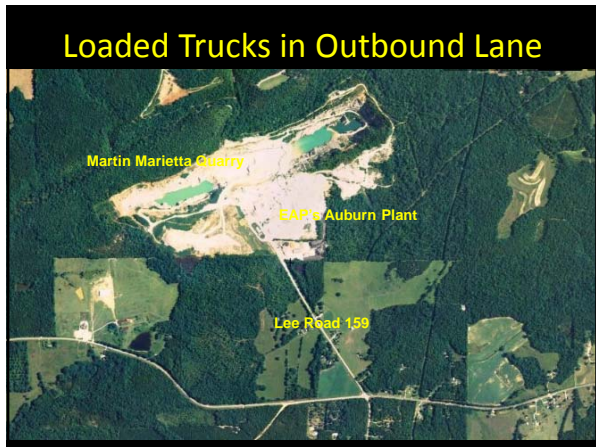
Potential 2012 PG Treatments

- Thin-lift HMA (Inlays vs overlays, conventional vs low cost)
- Chip seals (various agg sizes, design processes)
- Scrub seals
- Micro-surfacing
- Cape seals
- Fog seals
- Micro-milling
- Etc...



Lee Road 159

- 0.4 miles in total length with uniform distresses
- 0.1 miles with typical intersection distresses
- Low non-truck traffic (only 5 residents)
- 500 to 750 thousands tons / year from quarry
- Between 20 and 30 thousand truckloads / year
- Keen PP interest from Lee County Engineer





FDOT US 98 Preservation Study₂₀₁₂

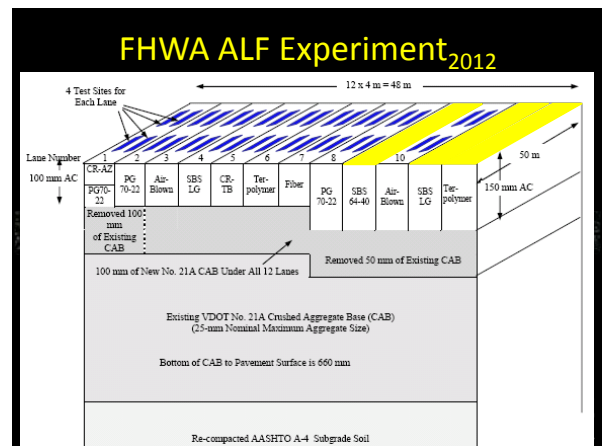
- Micro-surfacing
- 4.75 NMA mix overlays (½ inch vs ¾ inch)
- 9.5 NMA mix 1 inch thick overlay
- 9.5 NMA mix 1 inch thick mill/inlay
- 12.5 NMA mix 1½ inch thick mill/inlay
- Bonded friction course (¾" spray paved FC-5)
- Hot in-place recycling 1½ inch thick

25 YEARS 1986-2011
National Center for Asphalt Technology
NCAT
at AUBURN UNIVERSITY



Oklahoma Friction Study₂₀₀₈₋₂₀₀₉

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2012 Track Time Line

- 9/26 green light from Lee County Commission
- ALDOT 10/3/2011 RAC approval (PF + PG)
- Pooled fund advertisement in fall 2011
- Sponsor commitments by 12/31/2011
- ALDOT Letter of Direction by 3/1/2012
- Summer 2012 reconstruction (trucks by 8/31)
- PF payments due 2/29/12, 10/1/12, & 10/1/13




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Rubblization



Multi-Head Breaker (MHB)



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2012 "GG" Experiment



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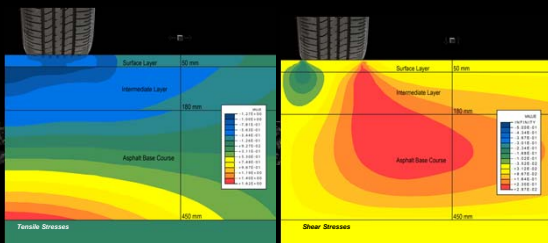
Green Group Experiment

- Strain tolerant thin base layer
 - Arizona-type gap graded asphalt rubber
 - High polymer content mix
- Thickness reducing stiff binder layer(s)
 - High modulus mix with 50% RAP
- Rut resistant, durable surface layer
 - SMA with RAS to eliminate need for fibers




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Green Perpetual Pavement



Feature mixes with recycled components where they do the most good



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Proposed Green Perpetual Pavement




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Arizona Rubber ALF Mix ALF

- Mix design by CA Asphalt Rubber Association
- Rubber content via actual ALF mix materials
- 17 percent rubber (40 mesh)
- Blending unit shipped in for onsite use
- Classical Arizona wet process



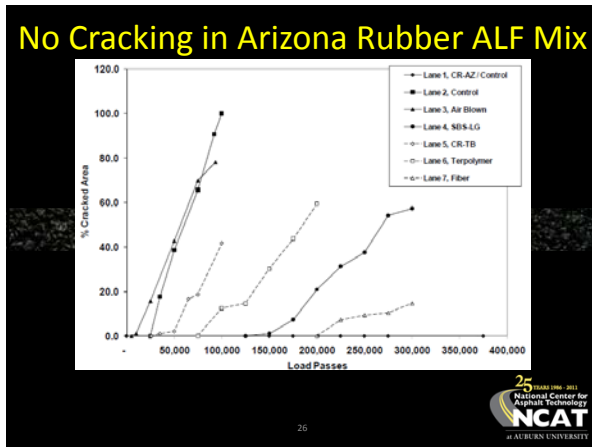
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Questions ?



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