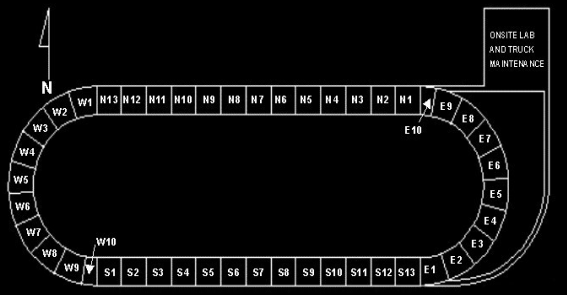
Track Research Objectives

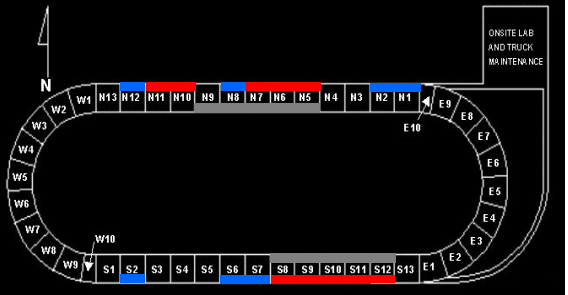
- Optimize thickness design (structural)
  - High RAP, PFC, WMA, alternative materials
  - Transitional calibration of layer coefficients
  - Validation of mechanistic methodologies
- Identify ideal surface materials (mix)
  - High RAP (100 percent gravel dense vs PFC)
  - 28% flat & elongated SMA vs dual layer PFC
  - SBS versus GTR modified PG76

Accelerated Performance Testing

Test Track Layout



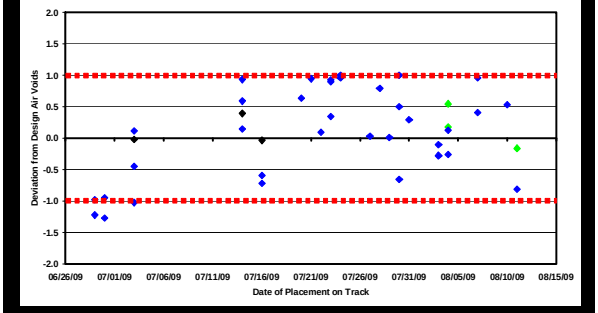
2009 Research Cycle (T4)



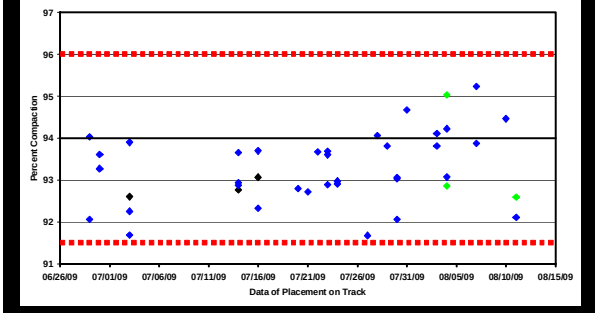
Construction Tolerances

- Plus or minus 1 percent air voids
- Min. VMA from AASHTO M323 (13%)
- Less than 80% VFA (except rich mixes)
- Less than 1.4 dust to binder (P_{200}/V_{be})
- Mat densities between 91.5 and 96%

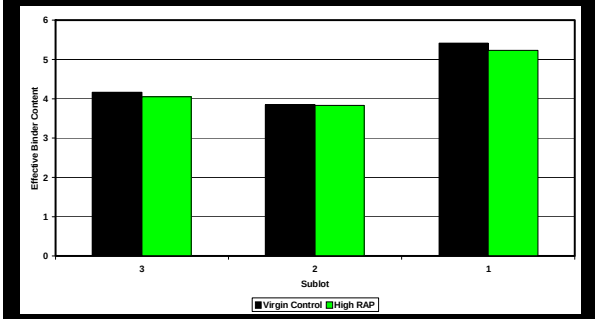
Deviation from Design Va



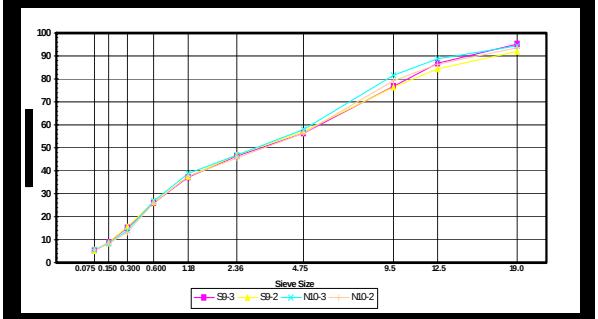
Mat Compaction



Effective Asphalt Contents

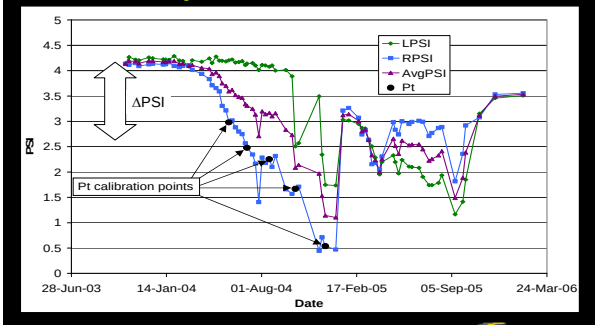


Gradations of Base/Binder Mixes

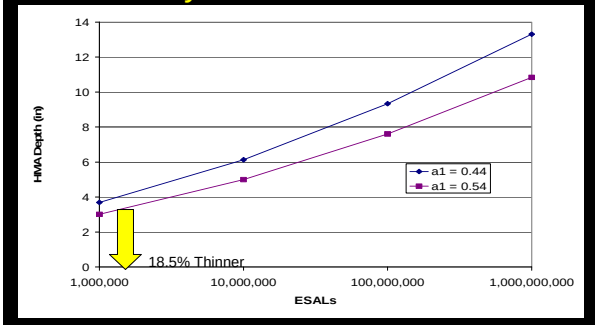


Thinner Structural Test Sections

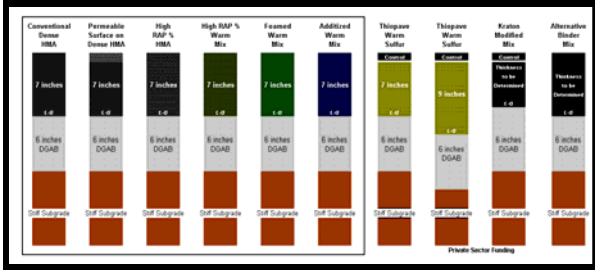
Interim Layer Coefficient Calibration



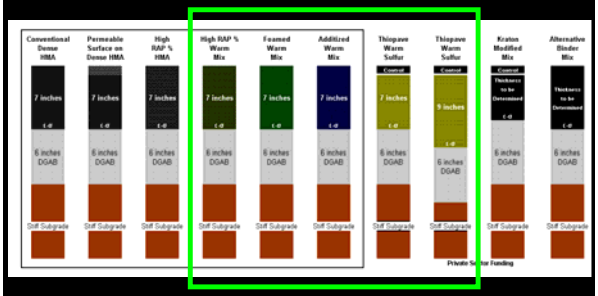
Interim Layer Coefficient Calibration



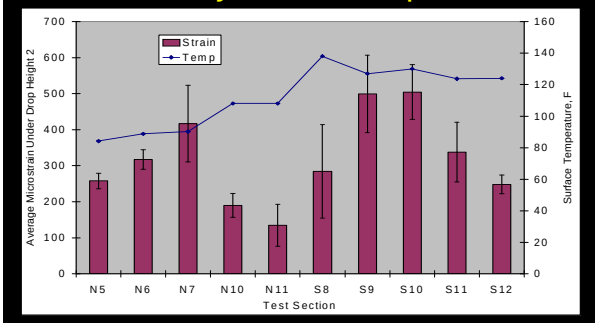
2009 Group Experiment



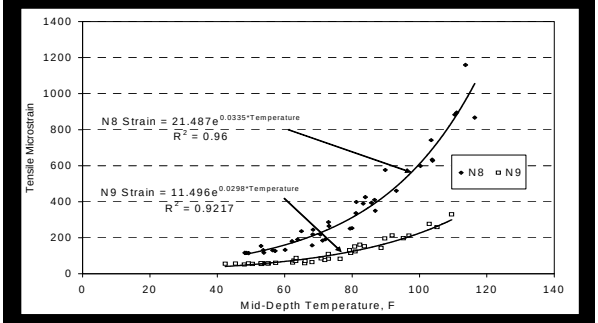
2009 Group Experiment



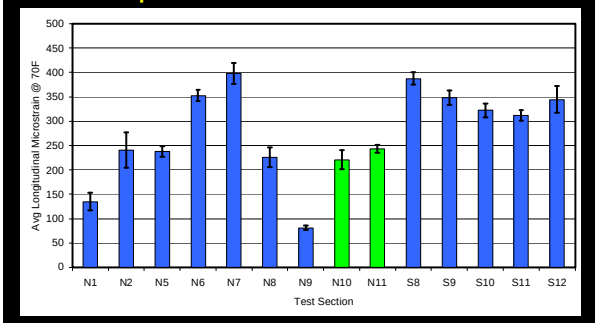
Preliminary Strain Comparisons



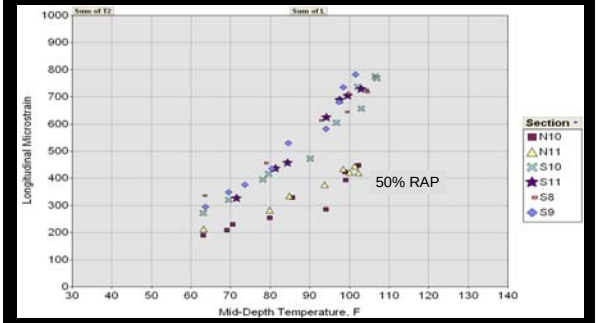
Strain vs Temperature



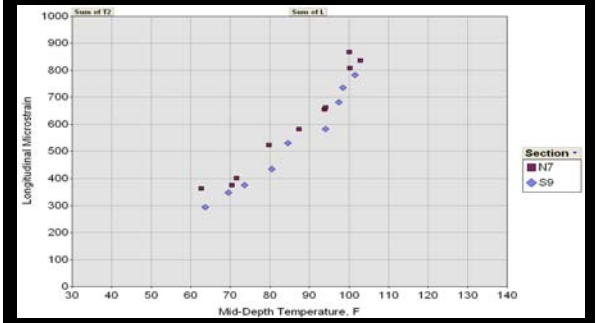
Temperature Corrected Strains



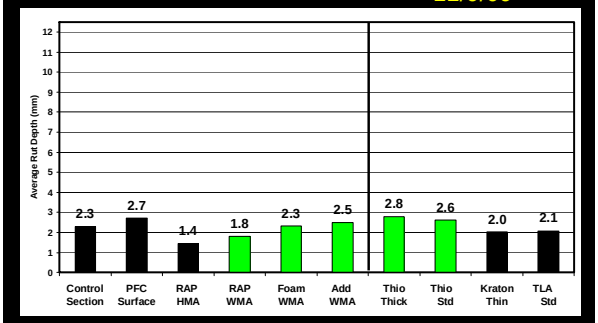
Preliminary Strain Comparisons



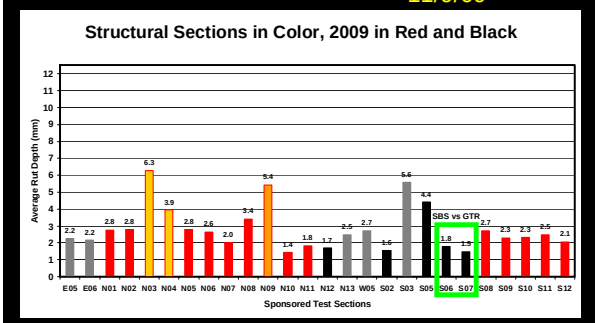
Thinner High Polymer Section



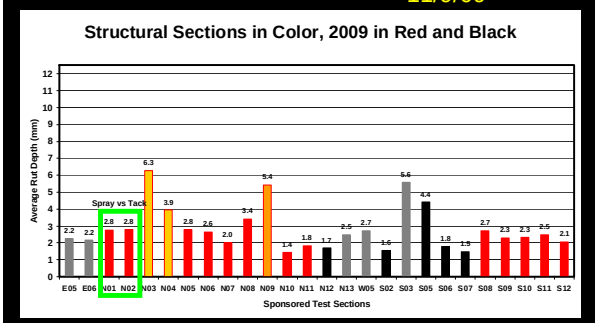
Group Experiment (+)11/9/09



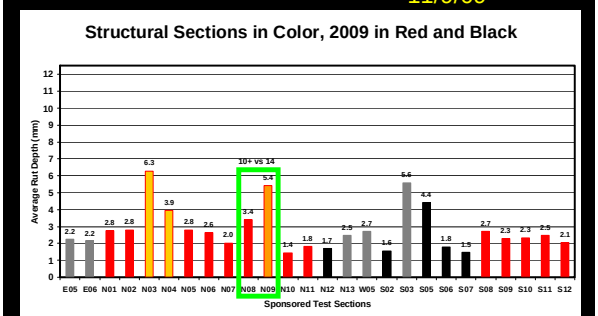
Field Performance11/9/09



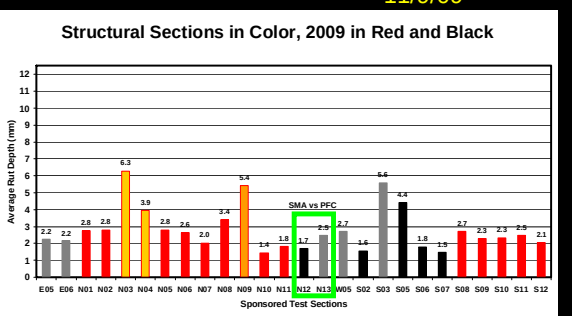
Field Performance11/9/09



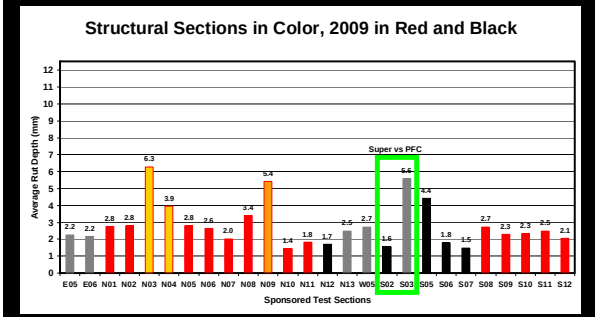
Field Performance 11/9/09



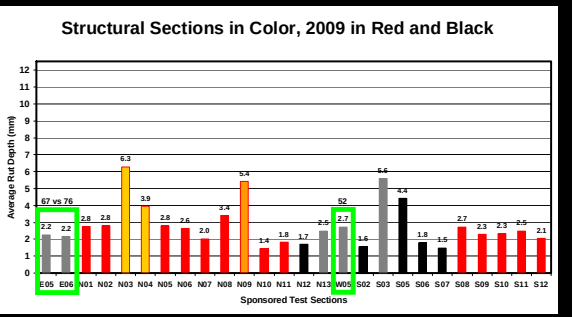
Field Performance 11/9/09



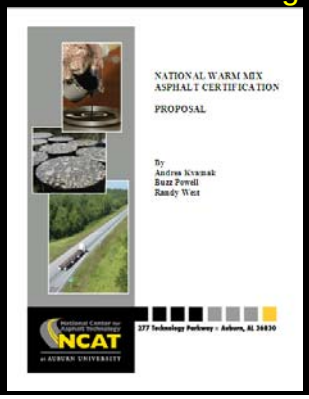
Field Performance 11/9/09



Field Performance 11/9/09



WMA Certification Program



Questions ?