

NCAT Update

In 2015 CAPA was invited to be a member of NCAT's Applications Steering Committee. Mike Skinner, CAPA's Director of Pavement Engineering attends the biyearly meetings at the NCAT facility in Auburn, Alabama. CAPA's participation on the ASC not only gives us the opportunity to provide local feedback to nationwide industry trends, but it also provides us real time update to the most current research and coming out of NCAT. Here's a quick update from the recent summer meeting.

Test Track Update – Plans for the 2018 Research Cycle

- The first 3-yr testing cycle began in 2000.
- 2018 begins the 7th 3-year cycle with new test sections being constructed this summer. Construction will end in August, baseline inspection of the sections in Sept. and traffic/ESAL loading begins in Oct.
- The test track first started with 8 DOT sponsors and has now grown to 20 DOT sponsors. A significant expansion came when NCAT partnered with the MnRoads test track in Minnesota to study cold weather performance.
- Takeaways from the previous testing cycle did not see significant differences in performance with increased RAP mixes (increased from 20% to 35%). A focus of the previous cycle was the development of the cracking and preservations groups study (select test sections).
- The primary focus of the test track is to research safe, sustainable and cost-effective pavements. A significant focus of this new test cycle is performance of balanced mix designs (with and without rejuvenators).



Other ongoing research includes the development of a framework for Balanced Mix Designs (BMD). *"There is a need for a new generation of asphalt mix designs"* according to Dr. Randy West, P.E. Director of NCAT. *"The state of practice today is that most highway work is mill/overlay and rehabilitation, not new construction, therefore reflective cracking is KEY."* In short, BMD incorporates two or more mechanical tests, such as rutting and cracking, to assess how well an asphalt mix resists common forms of distress (e.g., balancing rutting resistance and cracking resistance). Only a few state DOTs are currently using a BMD approach (not including Colorado), but there are MANY very interested in it. CAPA will share new developments as they become available.