

# TREAT Mobile Lab

Teaching and Researching Emulsified Asphalt and Treatments



**Date:** May 13, 2025

**Location:** Fayetteville, AR

**Treatment sections:** 2 slurry seal, 2 chip seal

**Emulsions manufactured:** CRS-2

On May 13, Andrew Braham, Tanner Turben (PhD student), Rasool Fazeli (MS student), Joey Eiland (Scientific Research Technologist), Terry Mullen (Research Project Analyst), and several undergraduate research assistants (Dylan Rives, Aleana Nixon, Cody Harrison, and Brittney Nguyen) hosted a soft-rollout for the TREAT Day of Training (DoT). Twenty-three professionals attended the full DoT, while approximately 45 professionals attended the live demonstrations. The professionals included representatives from Senator Boozman's and Congressman Womack's offices, University of Arkansas employees, state and local agency employees, material suppliers, contractors, and vendors. Figure 1 shows the audience during the demonstrations.



**Figure 1 – Demonstration audience**

The DoT started at 8:30am with an overview and introductions around the room. Next, there were sessions covering an introduction to pavement preservation, an introduction to asphalt emulsions, and an overview on how asphalt emulsion is used in maintenance and rehabilitation. Then, there was the live demonstration of asphalt emulsion manufacturing. After a trailer walk-through, Tanner and Rasool prepared a soap solution for a CRS-2 emulsion, and manufactured the CRS-2 emulsion on the lab mill in the trailer. After manufacture, the emulsion was poured into cups with tongue depressors that were distributed to the audience so they could get hands-on experience with handling an asphalt emulsion and exploring the viscosity, temperature, and consistency. Figure 2 shows the tour of the trailer through the concession door and the audience outside.

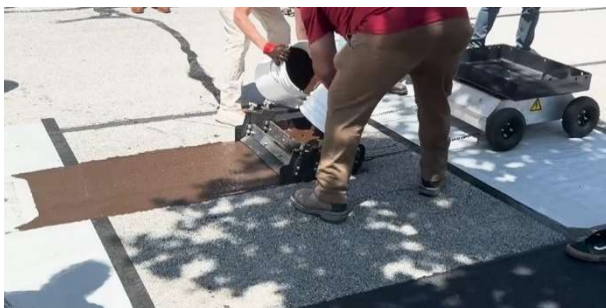
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**Figure 2 – Emulsion manufacturing trailer tour and manufacturing demonstration**

After a session on asphalt emulsion quality control and testing, and lunch, specifications and inspection were covered in the classroom. After a break, the audience moved outside again for the live chip seal and slurry seal demonstrations. The day before, a slurry seal and chip seal section had been placed, so the audience could see the treatments immediately after placement and 24-hours after placement. When placed, the sections were brown, but over time cured to black. The chip seals leveraged a CRS-2 emulsion with a local 3/8" aggregate chip, and the slurry seals were a CQS-1H with a local fine aggregate. The CRS-2 and CQS-1H emulsions used in the four sections were manufactured in the previous week at the University of Arkansas. Figure 3 shows the sections being placed. After the demonstrations, there was a brief wrap up and the DoT ended at 3:30 pm.



**Figure 3 – Chip seal application (top), slurry seal application (bottom). Note that each treatment type has a section placed the day before that was fully cured in the foreground.**