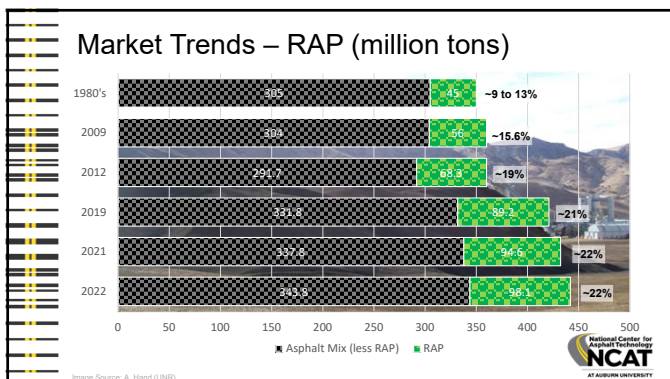
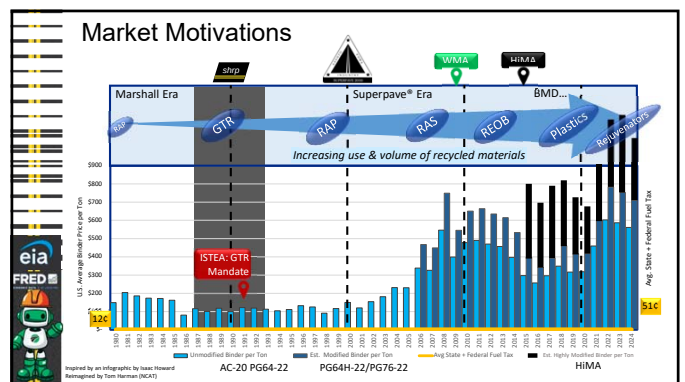
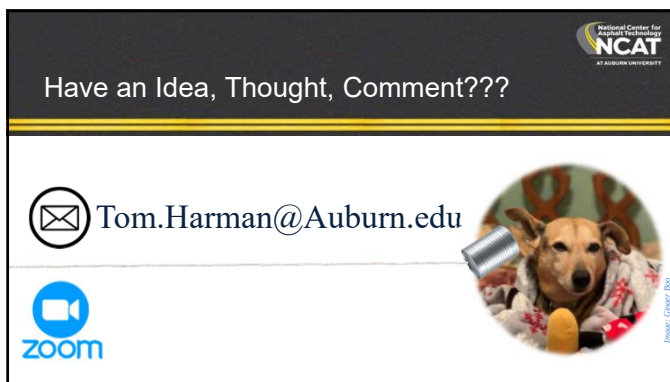
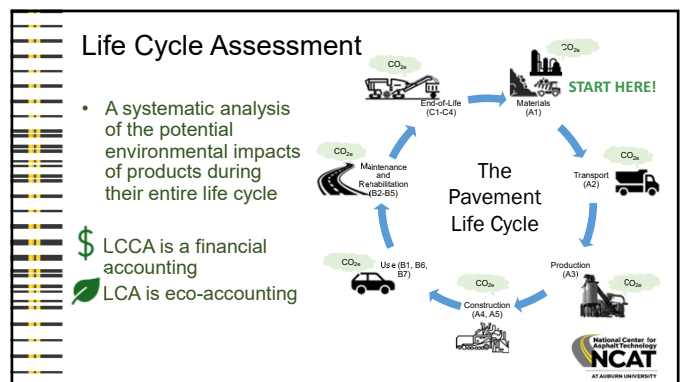
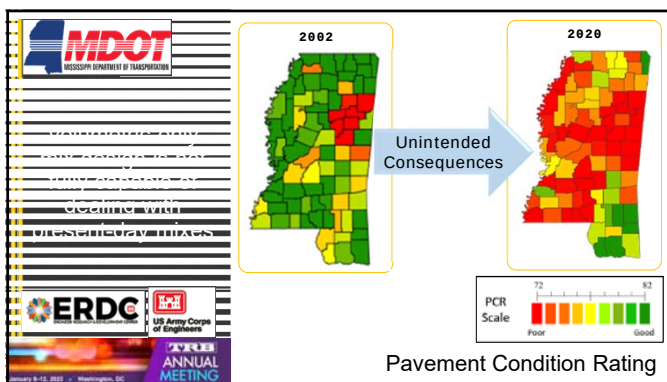


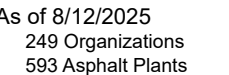




NAPA

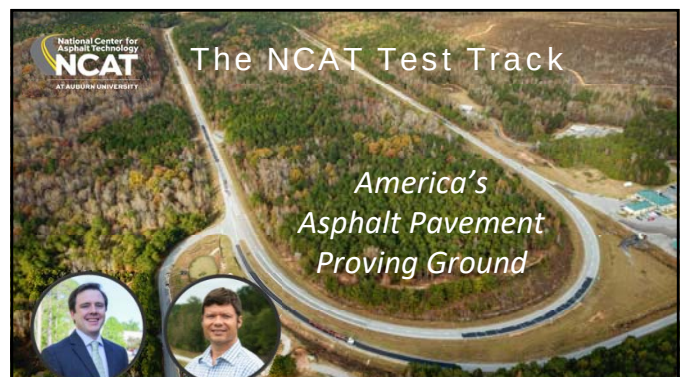


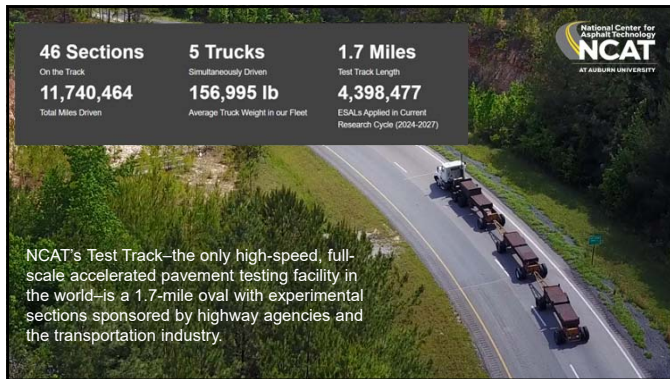
- As of 8/12/2025
 - 249 Organizations
 - 593 Asphalt Plants
 - 8,247 Individual Mixes





<https://asphaltepd.org/published/>





NCAT Test Track

1. BALANCED MIX DESIGN
2. AGGREGATE PROPERTIES
3. BINDER CHARACTERISTICS
4. STRUCTURAL PAVEMENT DESIGN
5. TIRE-PAVEMENT INTERACTION
6. ADDITIONAL GOODIES

TEST SECTION NUMBER S-II

Scan here for all Test Track Reports

Our 8th Research Cycle Sponsors!

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BMD and Sustainability

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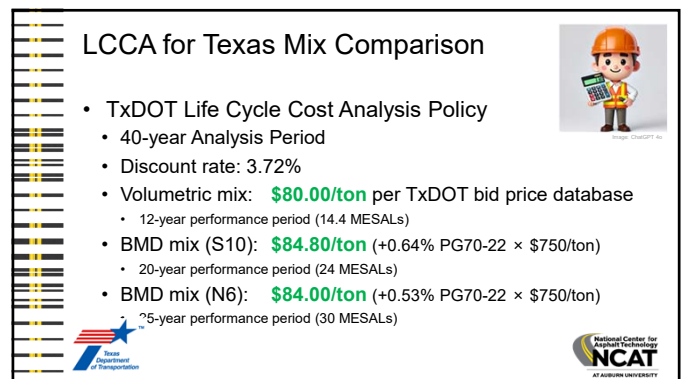
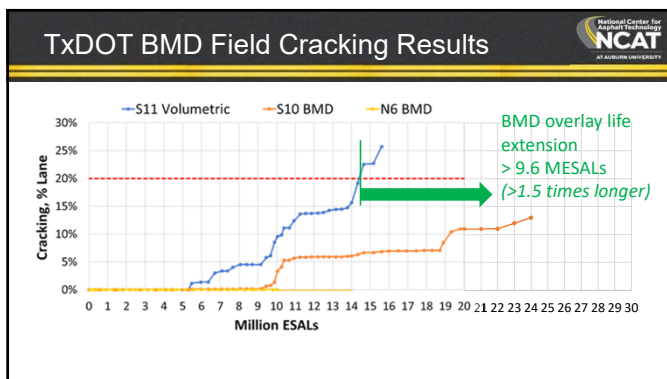
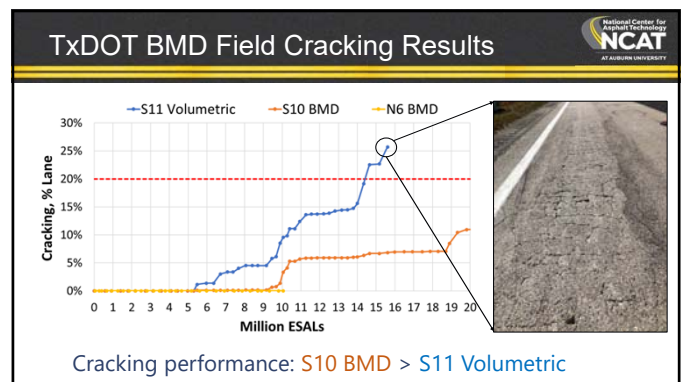
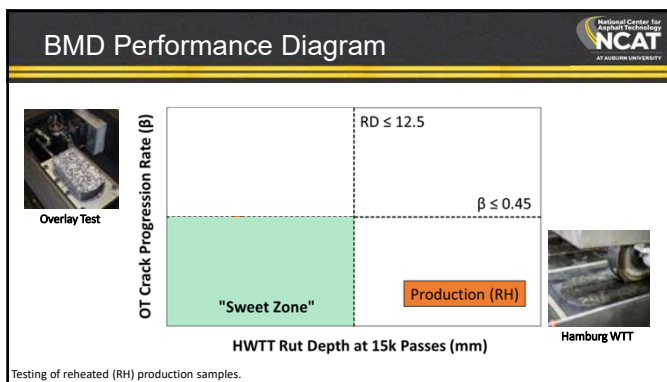
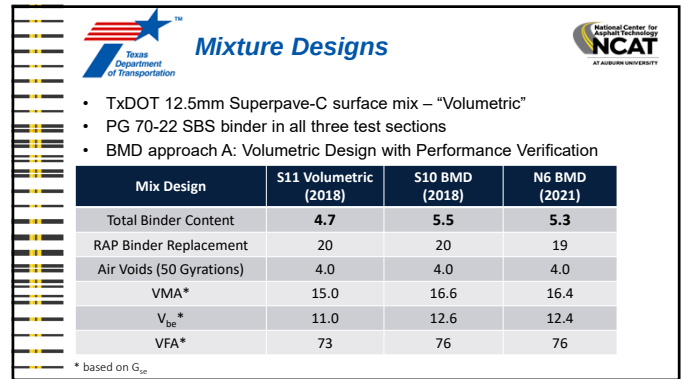
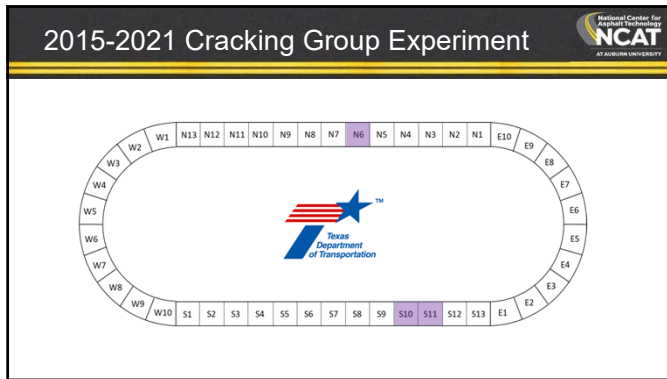
Dr. Randy West Dr. Fan Yin Dr. Ben Bowers Dr. Suri Gatiganti Tom Harman

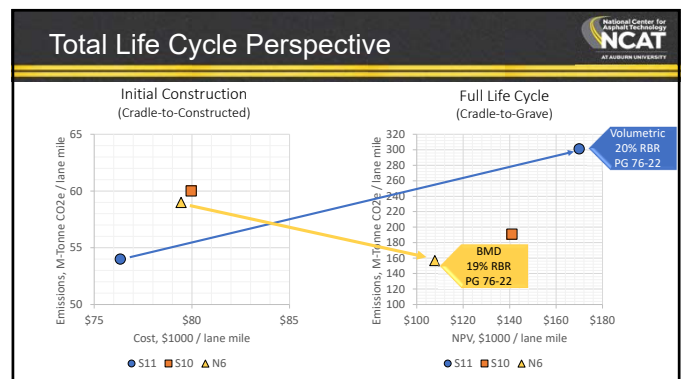
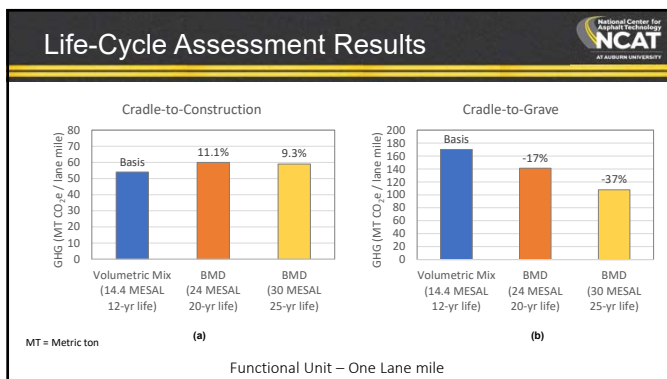
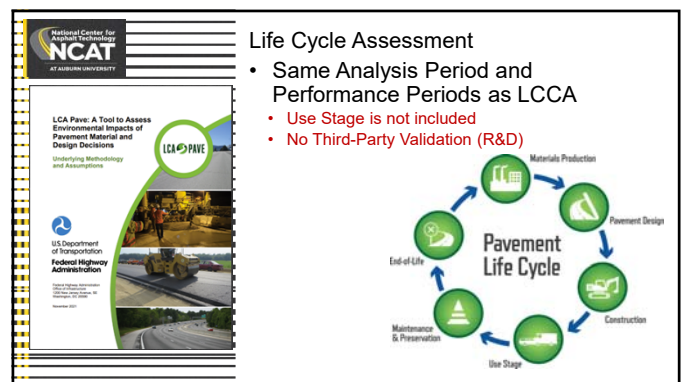
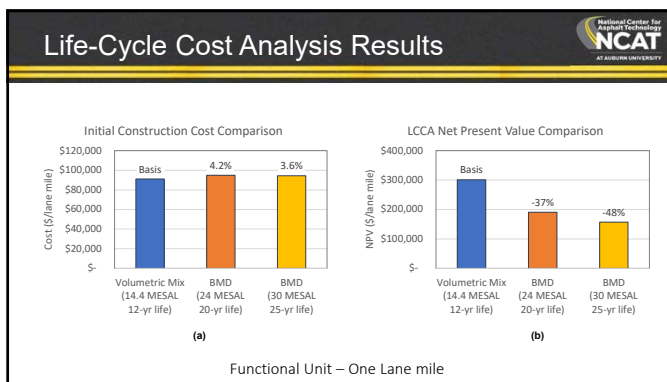
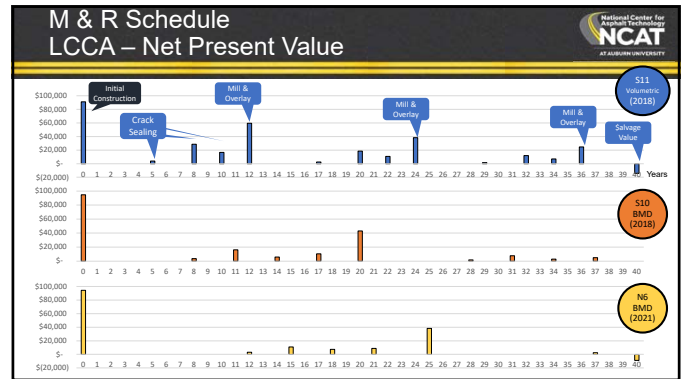
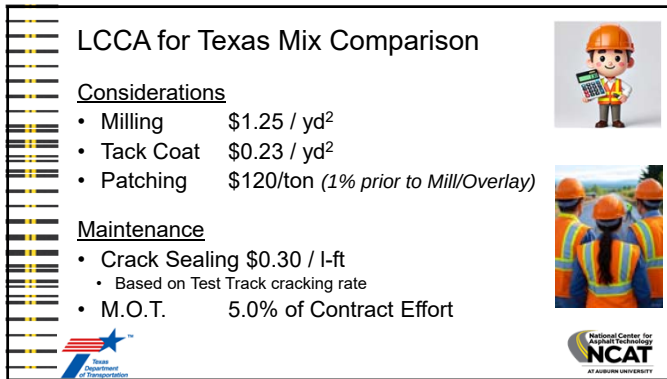
BMD Experiment

Texas Department of Transportation

- Field performance comparison of asphalt mixes designed with Volumetric vs. BMD approaches
 - 2.5-inch mill-and-inlay
 - Underlying pavement 15-20% lane area cracking

S10 BMD (2018) → S11 Volumetric (2018) → N6 BMD (2021)





Case Study No.2

- 2015-2021 NCAT Cracking Group Experiment
- Correlation of BMD Cracking Tests to Field Performance

2015-2021 Cracking Group Experiment



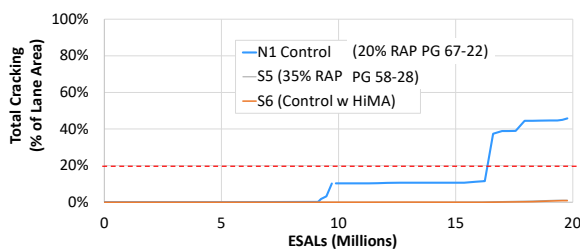
BMD and Sustainability



NCAT Cracking Group Experiment – QC Results

Section	Description	NMAS	Eff. Binder Content (%)	Air Voids (%)	VMA (%)	As-Const. Density (%G _{max})	Recovered Binder Cont. Grade
N1	20% RAP, PG 67-22 (Control)	9.5 mm	4.7	3.8	14.7	93.6	88.6 -16.6
S5	35% RAP, PG 58-28	9.5 mm	5.1	3.2	15.1	92.2	82.8 -23.0
S6	Control w HIMA	9.5 mm	5.0	3.1	14.7	91.8	101.4 -21.5

Cracking Group Field Performance



LCCA for Cracking Group

- NCAT LCCA recommendations for **ALDOT**
 - 40-year Analysis Period
 - Discount rate: 4.0%
 - Performance Periods
 - Control mix: 1 yr. on TT = 3.5 yrs on I-85 = 11.4 years
 - 35% RAP mix = ratio of NCAT-OT $\beta = 1.51 = 17.2$ years
 - HiMA mix = ratio of NCAT-OT $\beta = 1.85 = 21.1$ years
 - Mix Costs
 - Volumetric mix: **\$70/ton** per ALDOT bid price database
 - 35% RAP mix: **\$70/ton** (PMA binder & RAP savings wash)
 - HiMA mix: **\$100/ton** (estimate)



