

Asphalt Tonnage - 2023

Tons HMA placed by DOT: (last 12 months)

- AR: 2.5 M (2023) 3.1 M (2022)
- **LA:** 2.1 M
- MS: 1.1 M (2023) 2.6 M (2022)
- **OK:** 3.7 M
- TX: 14.2 M



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Supply Chain Issues

- AR: Aggregate Trouble getting specific products (Class 4 Chips for asphalt surface treatments)
- <u>LA</u>: Chip seal aggregate issues; none known for HMA
- MS: Some aggregates and mineral filler for SMA
- OK: No issues
- TX: SAC-A aggregate demand exceeds availability



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Funding

What is the state of the DOT Funding for 2023?

- AR: Funding comparable to previous years
 - \$651M in projected revenue
- \$1.3B in projected additional funding
- - Funding is in great shape. Lottery funds and infrastructure bills are helping maintain recent levels of funding.

 \$745M (FY2023)

 - \$930M (FY2024)
- <u>OK</u>: \$1.4B
- TX: \$9.8B



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Funding

Is the level of asphalt work set to increase / decrease / hold steady in

- AR: Slight increase compared to 2023
- LA: Increase expected
- MS: Slight increase
- OK: Primarily hold steady with perhaps slight increase
- TX: Increase expected



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Asphalt Program Updates

Do you have any upcoming major specification changes?

- AR: No major changes
- LA:
 - 4.75 mm NMAS mixtures
 - Non-destructive density for Pay in Pilot
 - Received grant for FHWA Climate Challenge
 - Evaluating new generation of Rejuvenators
 - Requiring only Polymer Modified AC
 - Looking into BMD parameter prediction for production testing
- MS: None



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Asphalt Program Updates

Do you have any upcoming major specification changes?

- <u>OK</u>:
 - Developing Engineered Crumb Rubber (ECR) specification
- · BMD Special provisions in progress
- Developing MRI/IRI specification
- TX:
 - 2024 Specifications Book
 - Updating & revising all TxDOT Test Methods
 - HiMA/HPG (SP3096-001)
- · Proposed revisions to BMD specification (SS3074)



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Balanced Mix Design

Have you or do you plan to implement BMD in your state?

- AR: Yes, working on implementation
- LA: Implemented for all travel lane mixtures in 2016
- MS: Yes, still in planning stage
- OK: Working on BMD implementation since 2018
- TX: Yes, implementation since 2019



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Balanced Mix Design

What approach has been chosen for your state, and what tests have you adopted for BMD?

- AR: IDEAL-CT for crack resistance
- <u>LA</u>:
- Hamburg Loaded Wheel Tester (LWT)
- Intermediate temperature Semi-Circular Bend Test (SCB) ASTM 8044
- MS: Still evaluating different BMD tests
- Volumetric Design with Performance Optimization
 HWTT & IDEAL-CT
- <u>TX</u>: Volumetric Design with Performance Verification • HWTT and Overlay for design; correlation to IDEAL-RT & IDEAL-CT



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Balanced Mix Design

Any pilot projects underway or planned? If so, has there been any real world validation of this BMD criteria?

- AR: 1 pilot project completed. 4 projects scheduled. No data yet
- LA: Fully implemented. Pilot projects in 2014-2015
- <u>MS</u>: No
- OK: 3 projects are underway in 2023. 8 implementation projects expected in 2024 with field testing and validation
- TX: 9 field projects with 33 test sections (2019-2023); 5 field pilot projects planned to date (2023-2025); 2 additional potential projects



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Balanced Mix Design

Is your state's contractors association on board with BMD?

- AR: Yes, they view BMD as the path to higher/broader RAP use
- LA: Industry buy-in was essential in implementation
- <u>MS</u>: Most are open to the idea of BMD, and a few are eager to get started using it because they are open to innovation
- <u>OK</u>: OAPA is very supportive of BMD implementation and is heavily involved in the process
- <u>TX</u>: Yes, BMD Working Group comprised of universities, contractors, and TxDOT dedicated to the improvement and implementation of BMD



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Smoothness

Has your state had issues with smoothness specifications?

- AR: Minor issues that have been addressed with industry
- LA: Unknown
- <u>MS:</u> Recently only minor issues; major hurdles during initial implementation (2013-2015)
- OK: In process and working with industry to switch to IRI from PI
- TX: Not in recent years; same specification for over 15 years



Smoothness

Any issues with reliability of testing equipment?

- AR: None
- LA: Unknown
- MS: Certify contractor equipment annually and perform QA spot checks on projects for comparison to DOT values
- OK: No issues reported
- TX: No, equipment is verified on a monthly basis and certified annually



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Smoothness

Does your state have a time limit to test final smoothness once job has been completed?

- AR: Must be tested within 5 days of completion of a day's paving
- LA: End of the project for pay; end of lift for QC
- MS: Contractors are required to collect surface smoothness values within 72 hours. Engineer has discretion to waive this clause
- OK: Within 7 days of completion of paving activities
- TX: Within 7 days of approval



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Environmental Product Declarations (EPD's)

Has there been any recent buzz around EPD's in your state?

- LA: Yes, received FHWA Climate Challenge grant to develop EPD and LCA model for Louisiana Pavements
- . MS: There has been some discussion of EPD's, but they are in the early stages. Will be participating in FHWA's Climate Challenge which will include work with EPD's
- OK: Several companies have completed their EPD's and have published them
- TX: Yes, received FHWA Climate Challenge grant to develop EPD and LCA



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Life Cycle Assessment (LCA)

What about Life Cycle Assessment (LCA)?

- AR: Currently meeting the requirements of the Transportation Asset Management Plan (TAMP); looking into developing and expanding LCA on the systems and treatments not covered in the TAMP
- <u>LA</u>: Yes, received FHWA Climate Challenge grant to develop EPD and LCA model for Louisiana Pavements
- MS: We will be working with LCA during participation in FHWA's Climate Challenge
- <u>OK</u>: Yes
- TX: Current tool is very basic and based on historical data. Not much has been done to update the tool yet. Expect improvements via FHWA Climate Challenge



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2023 Initiatives

Do you have any new initiatives or specifications coming out

- AR:
 - RAP QC specification
 - State Plant Inspector Lab size change
- LA: Continuing initiatives started in 2022
- MS: None



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2023 Initiatives

Do you have any new initiatives or specifications coming out in 2023?

- <u>OK</u>:
 - Continue to develop BMD and the benchmarking that has occurred. Looking at implementation of BMD projects to further gather data. In 2025, roll out tool for the ODOT Field Districts with going full BMD in 2026.
- - Statewide Asphalt Technician Certification Program
 Developing Statewide Overlay (OT) MPL and Proficiency Program
 - Transition from LIMS and SiteManager to APCM (AASHTOWare) · RAP as SAC-A aggregate source

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