

ISSUE

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Road Map to Sustainable Pavements

AMAP ADVISORY COMMITTEE QUARTERLY TECH BRIEF

Contributions: AECOM, NAPA, NCAT, Asphalt Institute, and PPRA

AMAP ADVISORY COMMITTEE

AMAP has an Advisory Committee comprised of members from several aspects of the industry. The Committee consists of a Roofing, Paving, Agency Subcommittees (SC). The Committee's primary goal is to maintain open communication between AMAP and the rest of the industry, offering education and insights on modified asphalt, from its definition to its usage and performance.

PAVING & AGENCY SC

The Paving SC consists of representatives from AI, NAPA, PPRA, & NCAT. The Agency SC consists of representatives from DOTs in each region, the Asphalt Pavement Alliance (APA), and the American Public Works Association (APWA).

GET INVOLVED

Find out how to get involved! Contact us at info@modifiedasphalt.org.



Association of Modified Asphalt Producers

This issue

The AMAP Advisory Committee provides an overview of the Low Carbon Transportation Materials Grant Program, recent federal and state sustainability initiatives, and collaborative strategies for reducing greenhouse gas emissions in pavement construction.

Low Carbon Transportation Materials (LCTM) Grant Program – Overview and Current Landscape

The Federal Highway Administration's (FHWA) Low Carbon Transportation Materials (LCTM) Grant Program, created under the Inflation Reduction Act (IRA, Pub. L. 117-169) and codified in Title 23, U.S.C., Section 179, aimed to support the development and use of construction materials with significantly reduced greenhouse gas (GHG) emissions.

States were expected to gain short-term operational insights, long-term economic resilience, and enhanced supply chain flexibility. Applications were due by June 10, 2024, and in fall 2024, 39 DOTs were awarded grants totaling \$1.2B. Eight received their full requested amounts, while the remaining 31 received approximately \$31.9 million each.

While many states began working on grant agreements with FHWA in late 2024 and early 2025, Executive Orders (EO 14154) signed on January 20, 2025 paused federal grant funding for unexecuted agreements. As a result, most DOTs were unable to finalize agreements and did not receive funds. However, a number of states—including California, Colorado, Delaware, Illinois, Kentucky, Maryland, New York, Oregon, Pennsylvania, Washington, and Wisconsin—are planning to proceed with LCTM initiatives, driven by Buy Clean legislation or state sustainability mandates.

To evaluate and benchmark material emissions, states are using Environmental Product Declarations (EPDs), as defined by ISO 14025, which quantify the environmental impacts of materials based on Product Category Rules (PCRs) and Life Cycle Assessments (LCAs). EPDs must be independently verified and are increasingly becoming required in state bids for materials like asphalt, concrete, steel, and glass.

Contractors submit EPDs into databases, enabling states to benchmark materials based on Global Warming Potential (GWP). Benchmarks may be regional or local and help compare materials against legislated or policy-based GHG reduction targets.

DON'T MISS OUR NEXT ISSUE

Our next Tech Brief will highlight two forward-thinking projects that built resilient asphalt pavements through economic balance, engineering performance, and environmental stewardship.

Initial efforts focus on the “Cradle to Gate” life cycle stages (A1–A3):

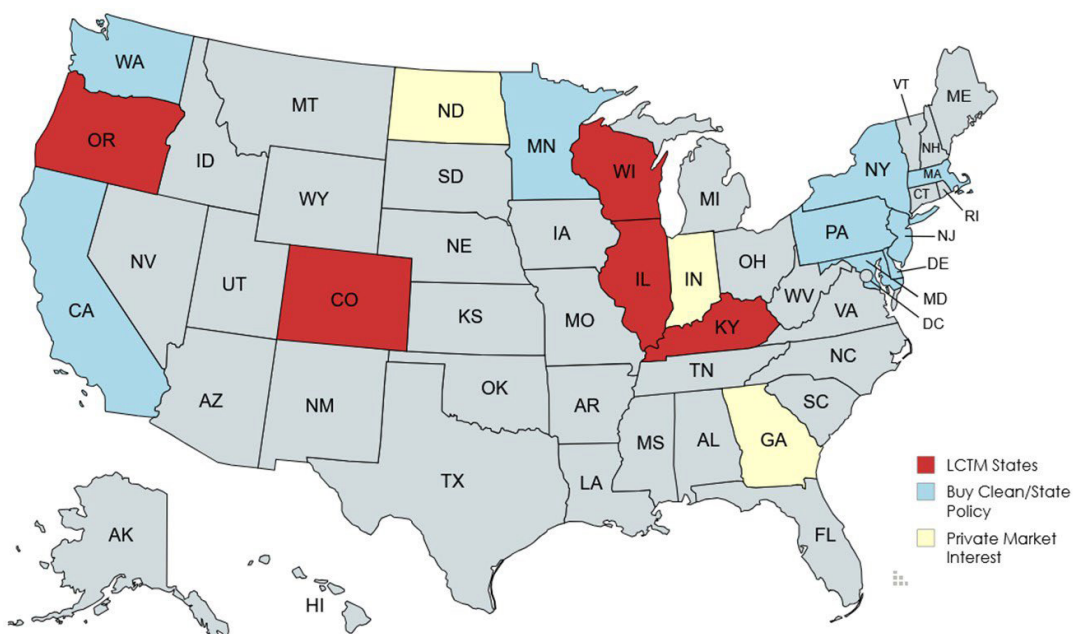
- **A1:** Raw material extraction
- **A2:** Transportation to production
- **A3:** Material production

As familiarity grows, states may expand analysis to include:

- **A4–A5:** Transportation to site and installation
- **B1–C4:** Use phase and end-of-life scenarios

Collaboration is key. Discussions are underway between state agencies, industry partners, and academia to balance the need for GHG reductions with practical implementation strategies. Many producers have already adopted EPD frameworks and their input can help shape balanced programs.

Despite early challenges, states see value in leveraging EPDs and LCTM frameworks to meet environmental goals and legislative mandates. The evolving approach offers a meaningful pathway to reducing infrastructure-related carbon impacts while maintaining industry viability and long-term performance.



Questions?

Feel free to reach out to the author — Jim Pappas, PE – who is happy to connect and continue the conversation.

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