

Low-Carbon Transportation Materials Program Grants

A Resource for DOTs and Other Qualifying Entities on the Grant Process and Federal Funding



The Inflation Reduction Act (IRA), signed into law on Aug. 16, 2022, provides over \$5 billion in discretionary funding to be used for three new FHWA programs, including the Low-Carbon Transportation Materials (LCTM) grant program, which accounts for \$2 billion of the funding.

WHAT ARE LCTM GRANTS?

The IRA created the LCTM grants program to reimburse and provide incentives to eligible recipients for using construction materials and products on projects that have substantially lower levels of greenhouse gas (GHG) emissions associated with production, use and disposal compared to estimated GHG emissions of similar materials or products, as defined by the EPA.

The LCTM Grants Program is an opportunity for DOTs and other qualifying entities to not only reduce carbon but contribute to the improvement of concrete quality overall. A program supported through the LCTM grant can consist of multiple steps that will lead to substantial reduction of embodied carbon over time.

WHAT MATERIALS ARE ELIGIBLE?

Eligible materials are concrete, asphalt, flat glass and steel with “substantially lower” global warming potential (GWP). “Substantially lower” values have been set by the EPA, based on national/regional industry data, and must be demonstrated through an Environmental Product Declaration (EPD).

WHAT PROJECTS ARE ELIGIBLE?

Under this program, funds are available to use on construction projects funded under 23 U.S.C., including projects on:

- Federal-aid highway
- Tribal transportation facility
- Federal lands transportation facility
- Federal lands access transportation facility

WHO CAN RECEIVE A GRANT?

- States
- Units of local government
- Political subdivision of a state
- Territory of the United States
- Federally recognized Indian Tribe
- Federal Land Management Agencies
- Metropolitan Planning Organization
- Special purpose district or public authority with a transportation function

GETTING STARTED WITH LCTM APPLICATIONS

LCTM grants will involve a two-part application process. State DOTs will be able to apply first, with 90 days to respond. Other eligible entities will be able to apply next, with 90 days to respond. There will be one application allowed per entity.

WHAT CAN DOTs EXPECT DURING THE APPLICATION PROCESS?

DOTs will prepare a plan, or program, to establish processes to pursue low-embodied GWP. Each agency will submit a single application for their entire program, selecting which eligible materials they want to include—RC3 encourages applicants to include concrete.

Programs should be broad and include all information needed to adopt LCTM in construction. This may include, but not limited to:

- **Specification review/modification**
- **Adopting performance-based testing to ensure innovative new materials perform**
- **Benchmarking current GHG emissions to assess improvement**
- **Workforce development**
- **Demonstration projects**
- **Project implementation**
- **Monitoring**

WHAT COSTS WILL THE GRANT COVER?

LCTM program grants will cover all extra costs associated with using an eligible material including higher material costs, but also costs associated with additional design, specifications, training and/or monitoring as covered in their approved Implementation Process Reports (IPRs), including the cost in developing the IPRs.

ABOUT RC3

In anticipation of the LCTM program, the American Concrete Pavement Association, National Concrete Pavement Technology Center, and other qualified engineering professionals have formed the Reduced Carbon Concrete Consortium (RC3). The purpose of the Consortium is to help disseminate information on reducing carbon in the construction process and assist DOTs and other qualifying entities with the LCTM application. The Consortium is also available to provide technical assistance to DOTs and facilitate contractor preparedness with critical next steps such as Environmental Product Declarations (EPDs).

RESOURCES

The National Concrete Pavement Technology Center recently published the *Guide for Reducing the Cradle-to-Gate Embodied Carbon Emissions of Paving Concrete*, which provides agencies with strategies to reduce the environmental impacts of concrete production, as part of its FHWA Cooperative Agreement: Advancing Concrete Pavement Technology Solutions.

Learn more about the publication and access the guide at: <https://cptechcenter.org/news/cp-tech-center-publishes-reduced-carbon-guide>.

The request for applications can be found at <https://www.fhwa.dot.gov/lowcarbon>.

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RC3 is supported 100% by non-profit investment devoted solely to educating and assisting on carbon reduction. There is no fee to join and receive information.

rc3.acpa.org