

IRA Section 60506: Low Carbon Transportation Materials Grant Program

Informational Webinar



LOW CARBON
TRANSPORTATION
MATERIALS



U.S. Department
of Transportation
**Federal Highway
Administration**

Disclaimer

Non-Binding Contents

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Images

Unless otherwise noted, FHWA is the source for all images in this presentation.



Acronyms

EPA	Environmental Protection Agency
EPD	Environmental Product Declaration
FHWA	Federal Highway Administration
GWP	global warming potential
IPR	Implementation Process Report
IRA	Inflation Reduction Act
LCTM	low carbon transportation material
NOFO	Notice of Funding Opportunity
RFA	Request for Applications
U.S.C.	United States Code



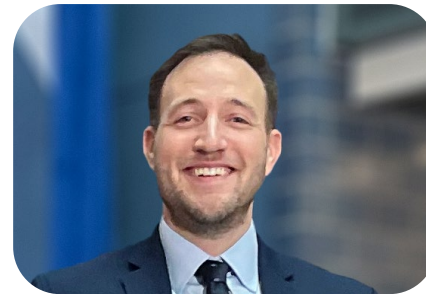
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Agenda

- Low Carbon Transportation Materials (LCTM) Grant Program Overview and Goals
- Funding Information and Eligibility
- Defining LCTM: EPA Interim Determination
- Examples of Eligible Activities
- Application Submission, Selection, and Evaluation Factors
- Reporting Requirements
- Resources



What is the Low Carbon Transportation Materials (LCTM) grant program?

- Established by Section 60506 of the Inflation Reduction Act (IRA) and codified in Section 179 of 23 U.S.C.
- \$2B grant program for eligible projects that include materials and products determined to have “substantially lower levels of embodied greenhouse gas emissions,” as described by the Environmental Protection Agency (EPA)
- Provides either a reimbursement (equal to the incrementally higher cost) or incentive (2% of the cost of the eligible material or product)



Goals of the LCTM Grant Program

- Broad objective to increase and institutionalize the use of LCTMs on Federal-aid projects. Program goals include:
 - Increase the use of lower carbon materials and products that are used in projects funded under Title 23.
 - Facilitate the use of low carbon transportation materials while ensuring appropriateness for use in projects eligible under Title 23.
 - Promote technology transfer and enhance workforce development to increase the adoption of environmental quantification techniques used in decision-making by transportation agencies.
 - Encourage State DOTs to begin LCTM activities and build successful LCTM identification frameworks that may be leveraged by non-State DOT recipients eligible to apply for LCTM funding.



Funding Information

Available
NOW!

State DOTs via Request for Applications (RFA)

- RFA available on LCTM Webpage www.fhwa.dot.gov/lowcarbon/
- Up to \$1.2B for State DOTs
 - Anticipated award: At least \$22M per State DOT submitting responsive application

Coming
Soon

Non-State DOTs via Notice of Funding Opportunity (NOFO)

- NOFO will be available on Grants.gov (anticipated in the coming months)
- Anticipated \$800M for non-State DOTs

NOTE: All funds must be obligated by September 30, 2026, and are available for expenditure through September 30, 2031.



Eligible Recipients

Available
NOW!

Request for Applications (RFA)

- State DOTs (including the District of Columbia and Puerto Rico)

Notice of Funding Opportunity (NOFO)

Coming
Soon

- Local government
- Political subdivision of a State
- Territory of the United States
- Entity described in 23 U.S.C. 207(m)(1)(E)
- Recipient of funds under 23 U.S.C. 203
- Metropolitan Planning Organization as defined in 23 U.S.C. 134(b)(2)
- Special purpose district or public authority with a transportation function



Eligible Projects

- Funds available for use on Title 23 construction projects:
 - Federal-aid highways
 - Tribal transportation facilities
 - Federal lands transportation facilities
 - Federal lands access transportation facilities
- Funds may be used for activities required to develop a process to demonstrate that materials:
 - meet the standard of 'substantially lower embodied carbon'
 - are appropriate for use on eligible construction projects
- **NOTE**: Funds shall not be used for projects that result in additional travel through lanes for single occupant passenger vehicles. See 23 U.S.C. 179(b)(4)(C).



Defining LCTMs (Material Categories)

- [EPA Interim Determination](#) issued 12/12/2022
- For the purposes of the RFA, eligible materials are:
 - Concrete (and cement);
 - Glass;
 - Asphalt mix;
 - Steel; and
 - Assemblies comprised of at least 80 percent of materials that qualify under EPA's interim determination, by total cost or total weight.



Defining LCTMs (Qualification of Materials for Construction)

- [EPA Interim Determination](#) issued 12/12/2022
- Material is from an eligible material category
- Cradle-to-gate Type III Environmental Product Declarations (EPDs)
 - Based on the relevant Product Category Rule;
 - Valid at material placement on construction projects.
- Is below the thresholds determined from a published industry benchmark.
 - 20th percentile, 40th percentile, and better than industry average depending on a project's location
- Material supplier provide (if available) the upstream manufacturing's ENERGY STAR Energy Performance Score where an Energy Performance Indicator is available



Defining LCTMs: Additional Resources

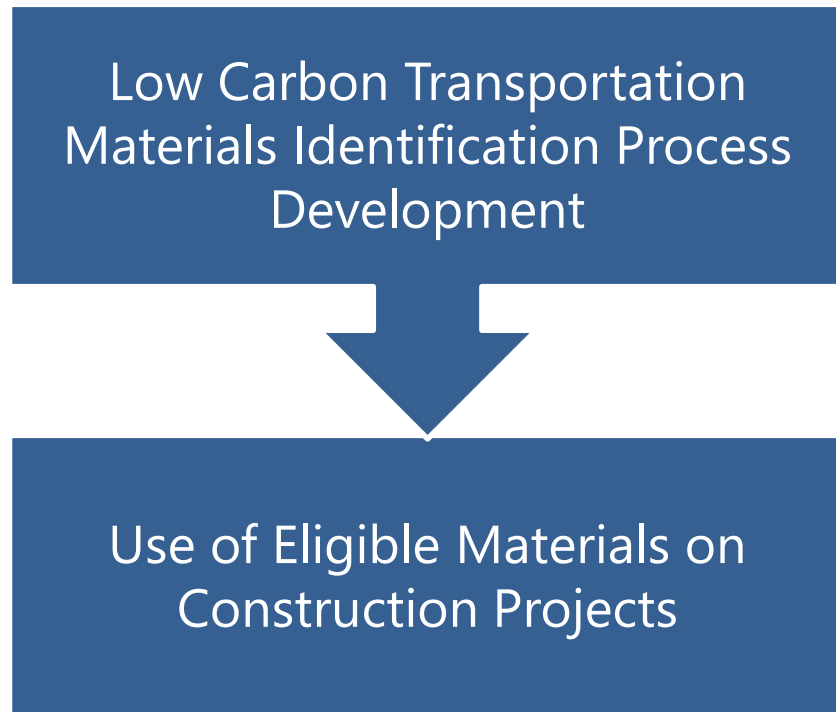
Additional information on these topics will be provided:

- EPA Interim Determination as it relates to FHWA's determination of eligible materials
- ENERGY STAR Performance Score
- FHWA referencing industry efforts on developing industry average thresholds
- Establishing and using industry average thresholds



Examples of Eligible Activities

Categories of Activities



Examples of Eligible Activities



Process for Substantially Lower Carbon



LCTM Quality Assurance and LCTM Specifications



Construction Project Identification



Use of LCTM on Construction Projects



Application Submission – State RFA

- Submit application materials to the program inbox at: FHWALowCarbonMaterials@dot.gov
- Limit of 1 application per eligible recipient
- Application deadline: 11:59 PM EST on June 10, 2024
- Application materials must include:

Part	Comments	Page Limit
SF-424, Application for Federal Assistance	Applicants may leave fields 5a, 5b, 6, 7, and 13 blank	None
SF-424C, Budget Information for Construction Programs		None
SF-424D, Assurances for Construction Programs		None
Volume 1: Technical Application	<i>Attach to SF-424, Item 15</i>	15 pages
Volume 2: Budget Application	<i>Attach to SF-424, Item 15</i>	None
Additional Supporting Documentation	<i>Attach to SF-424, Item 15, As needed</i>	10 pages



Selection Process – State RFA

- Applications will be assigned a rating of “Responsive” or “Not Responsive” to the evaluation factors



A “Responsive” application addresses each factor and subfactor in the RFA and provides sufficient information to determine that the project meets statutory eligible application criteria.



In accordance with the RFA, Responsive Applications must address:

1

Substantially Lower Embodied Carbon Identification

- Identification of eligible construction materials
- Substantially lower embodied carbon threshold
- Energy Star Performance Score
- EPD process

2

Quality Assurance and Materials Acceptance

- Material specification
- Verification process
- Performance monitoring plan

3

Use of Materials and Products on Construction Projects

- General approach
- Stakeholder outreach
- Calculating Incentive or Reimbursement
- Identification of eligible construction projects

4

Schedule and Budget

- Start and end dates and estimated budget for each major milestone, activity, and deliverable



Reporting

SF-425

- Submit annually, at a minimum
- Attachment must include description of progress on outcomes listed in application and IPR(s) and performance indicators that include measurable goals or targets

Implementation Process Report (IPR)

- Documents processes for how the recipient plans to implement LCTM activities
- States must receive approval of the IPR(s) before FHWA will issue the authorization to proceed or obligate LCTM funding for use on a construction project



Implementation Process Report (IPR)

- Must contain, at a minimum:
 - Process to ensure conformance with EPA Interim Determination
 - Process for engineering performance of LCTMs
 - Process for EPD acceptance
 - Identification of eligible construction projects
 - Methodology for calculating the incremental or incentive amounts for construction projects
- Recipient may choose to develop multiple IPRs to meet the requirements above for different materials or processes



LCTM Grant Program Phases



Application Phase: staggered RFA and NOFO opportunities.

FHWA Announces Recipients



Project Phase: LCTM Process Development and Construction



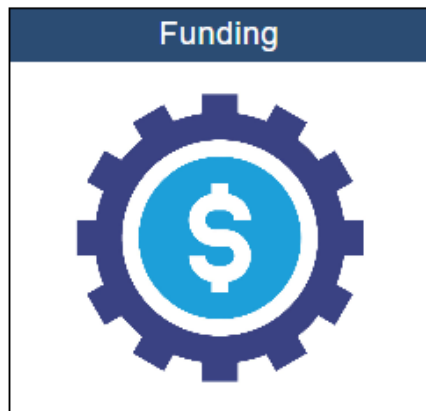
Showcase Phase through 2031

- FHWA may host peer exchanges and webinars and develop case studies
- Share LCTM lessons learned and next steps for further implementation

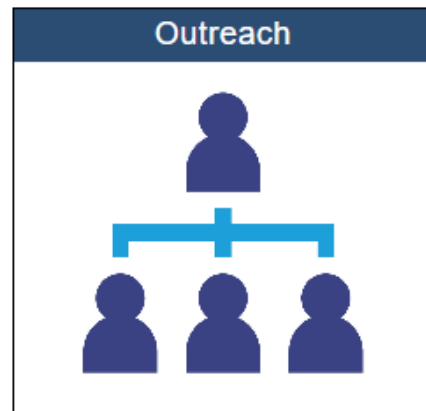


Resources

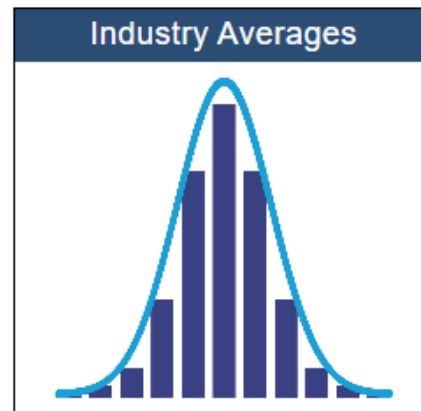
- LCTM website: www.fhwa.dot.gov/lowcarbon/
- Email: FHWALowCarbonMaterials@dot.gov



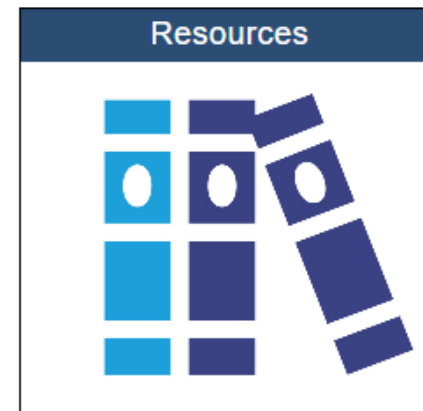
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FHWA



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- ✓ Q&A
- ✓ Fact Sheets
- ✓ Link to EPA Interim Determination
- ✓ Technical Resources

Summary



State DOTs via Request for Applications (RFA)

- RFA available on LCTM Webpage:
www.fhwa.dot.gov/lowcarbon/
- RFA closes at: 11:59 PM EST on June 10, 2024
- Submit applications and questions to:
FHWALowCarbonMaterials@dot.gov
- Anticipated award: September 2024



Non-State DOTs via Notice of Funding Opportunity (NOFO)

- NOFO will be available on Grants.gov
(anticipated in the coming months)



Thank You for Your Attention

www.fhwa.dot.gov/lowcarbon/

FHWALowCarbonMaterials@dot.gov



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