

Oklahoma DOT



OKLAHOMA
Transportation

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Evaluating the Broader Impacts of BMD and WMA Specifications and Incentives in Oklahoma through a Life Cycle Assessment Framework

Project Goals:

- (1) Evaluate the Broader Impacts of BMD and WMA Specifications and Incentives in Oklahoma through a Life Cycle Assessment Framework.
- (2) Initiate a culture of sustainability and LCA considerations among ODOT as well as contracting community in the state of Oklahoma.
- (3) The end goal is to implement a system where sustainability and LCA play an integral role in the project selection process.

Project Tasks:

- **Task 1:** Development of Training/Workshop material.
- **Task 2:** Build a library of different pavement construction and maintenance/rehabilitation activities relevant to the state of Oklahoma for direct incorporation into LCA Pave.
- **Task 3:** Quantify the impact of lower production temperature and chemical WMA on the environmental impact of typical asphalt mixtures in Oklahoma.
- **Task 4:** Work with contractors to generate EPDs for BMD, non-BMD, and BMD with WMA mixtures.
- **Task 5:** Develop case study reports based on the LCA for conventional, BMD, and BMD with WMA mixtures and projects.

