

Maryland DOT



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Project 1: Informed Emissions Reduction Strategies for Asphalt and Concrete Paving Projects

Project 2: Geoenvironmental and Life Cycle Analysis of Highway Infiltration Berms Constructed with Dredged Sediments

Project Goals:

Project 1: To use LCA and EPD to develop sustainable pavement practices, including pavement material and design selection, contract specifications and requirements, that optimize performance and asset life, while also contributing to reduced emissions and impacts in pavement practices at MDOT.

Project 2: Provide recommendations on DM and DM blends that can be used for VEBs throughout Maryland.

Project Tasks:

- **Project 1:** (1) Develop a list of stakeholders, survey questions, beta-tested survey, and finalized survey for distribution, (2) create a final readiness assessment report, and (3) training curriculum on EPDs and LCAs.
- **Project 2:** (1) Characterization and Selection of the Testing Materials, (2) Characterizing Geotechnical Engineering Parameters of VEB DM materials with varying Physical Properties, (3) Evaluation of Environmental Characteristics, (4) Grass Establishment and Growth on VEB DM materials in Greenhouse Mesocosm Experiments, (5) Data Analysis and Recommendation for Final Blend, (6) Final Blend Evaluation, (7) Life Cycle Analysis (LCA), (8) Reporting

