TIDC Transportation Infrastructure Durability Center AT THE UNIVERSITY OF MAINE

UTC Project Information	
Project Title	Carbonating subgrade materials for in situ soil stabilization
University	University of Maine
Principal Investigator	Aaron Gallant
PI Contact Information	aaron.gallant@maine.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	Federal: $161,874; UMaine: $161,874
Total Project Cost	$323,000
Agency ID or Contract Number	69A3551847101
Start and End Dates	09/2018-09/2021
Brief Description of Research Project	Ground improvement is the in situ alteration of the ground's material properties, with the ultimate goal of strengthening, stiffening, and/or altering drainage characteristics to benefit design, construction, and performance of civil infrastructure. Carbonation is a process by which carbon dioxide (CO_2) gas reacts with alkali minerals naturally occurring and/or introduced in the ground to generate a binder (stable carbonate minerals). The objective of this research project is develop a means to carbonate soil supporting new and existing infrastructure and increase the durability and lifespan of New England's transportation assets, including roadways susceptible to creep, frost-action, and other modes of deformation that lead to pavement distress.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	This project is in its initial research phase. Implementation of Research outcomes will be reported upon completion of initial research.
Impacts/Benefits of Implementation (actual, not anticipated)	This project is in its initial research phase. Impacts and benefits of the research will be reported after the implementation phase.
Web Links • Reports • Project website	N/A