

Research in Progress

Tree Preservation and Planting for Complete Streets Development

Research Need

Trees contribute to the quality of life in our communities, as do capital projects for walking and cycling. But projects can harm trees, reducing their value. Preserving trees during projects enhances their value to communities.

Goals/Objectives

To develop guidance documentation that can be used by MassDOT's engineers, planners, and landscape architects, as well as consulting arborists, for preliminary corridor tree-health evaluation and general impact analysis. Guidance will also include soil area planting requirements for new trees, as well as best management practices for soil protection during construction.

Project Information

This project is being conducted as part of the Massachusetts Department of Transportation (MassDOT) Research Program with funding from Federal Highway Administration (FHWA) State Planning and Research (SPR) funds.

Principal Investigators:

Brian Kane, Delia Mahoney

Performing Organization:

University of Massachusetts - Amherst

Project Champion:

George Batchelor, Andrew Schlenker

Project Start Date:

April 1, 2022

Expected Project Completion Date:

May 31, 2024

Methodology

1. Complete state of practice literature review for preserving trees and improving survival and growth rate of trees planted following construction.
2. Convene panel of local experts for project activities feedback and insights
3. Create and distribute an on-line survey to relevant subject matter experts around the country
4. Synthesize all data collected in Steps 1-3 above to create technical memos to assist MassDOT in developing guidance documentation for preliminary corridor tree-health evaluation and general impact analysis.
6. Present findings to MassDOT and other interested parties

Research and Technology Transfer Section
MassDOT Office of Transportation Planning
Planning.Research@dot.state.ma.us

