

# Research in Progress

## LIMMS Development Planning

### Research Need

The Laboratory Information Materials Management System (LIMMS) is a secure materials data collection system that is in use by MassDOT personnel. LIMMS includes a range of software tools that can be used to track the acquisition and testing of materials for transportation systems statewide. Research is needed to better understand the spectrum of alternative commercial and open-source material management systems, their functionality, and their ability to be customized and extended to meet the current and future needs of MassDOT.

### Goals/Objectives

The purpose of this project is to conduct a gap analysis that will examine the needs of LIMMS users from system design and functionality to security. The analysis will take into consideration the multiple platforms used by MassDOT currently for material and contract management. During the project, feedback will be obtained from MassDOT users via private meetings and workshops to understand the scope of LIMMS usage. Given the increasing threat of software attacks, security will be a particular focus of information gathering. The research results will be used to help MassDOT to select a next generation material management product.

### 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.

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**Performing Organization:**  
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**Project Champion:**  
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**Project Start Date:**  
March 1, 2023

**Expected Project Completion Date:**  
July 31, 2024

### Methodology

A gap analysis report will be created based on feedback from MassDOT users, a literature review, information gathered from other DOTs, and an evaluation of alternative material management products. Outreach to contacts at other DOTs will be performed to document common use cases for alternative products. When possible, these products will be evaluated via vendor interviews and software demonstrations. The gap analysis report findings will be used to develop a Request for Information (RFI) with a detailed and accurate scope of work for a sustainable and efficient LIMMS system. The purpose of the RFI is to identify vendors with a LIMMS product that meets the current and future needs of MassDOT. Findings will be used to inform the selection of future LIMMS software vendors.

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