Public Health Assessment of Transportation Projects

Research Need

Performance-based assessment of transportation projects as related to many determinants of public health is often missing. Health impact assessments require additional resources that are not always available. To address health more systematically, there is a need to identify health metrics, tools, and frameworks that can be used to assess the health-related impacts of individual transportation projects and programs.

Goals/objectives

1. Identify available tools, performance measures, data, and models that would inform transportation decision-making approaches used by MassDOT in order to improve health outcomes over time.

2. Identify and geocode existing datasets and use them to develop measures, e.g., equity metrics, disease risk for air pollution exposure and physical activity, for assessing health-related impacts of transportation projects statewide.

3. Incorporate identified datasets and evaluation criteria into the existing project scoring spreadsheet to be used for decision-making and planning processes for transportation projects statewide.

4. Recommend areas for further investigation, including specific relationships between the transportation system and public health outcomes.

Methodology

1. Review existing models and transportation-related health criteria, considerations, and outcomes through published documentation and interviews with representatives of state Departments of Transportation and public health agencies.

2. Propose evaluation criteria that can be incorporated into the MassDOT project scoring process and collect and geocode data needed for project evaluation.

3. Adjust the existing project scoring spreadsheet to incorporate health considerations.

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: Dr. Eleni Christofofa, Dr. Krystal Pollitt, Karin Valentine Goins, Dr. Stephenie Lemon

Performing Organization: University of Massachusetts Amherst, Yale University, University of Massachusetts Medical School

Project Champion: Elliot Sperling, MassDOT

Project Start Date: August 2018

Expected Project Completion Date: February 2020