

RESEARCH SUMMARY

IDENTIFICATION OF METRICS USED FOR VARYING LEVELS OF TRAFFIC ANALYSIS

WHAT WAS THE NEED?

To support decision making during the course of a transportation project, Maryland Department of Transportation State Highway Administration (MDOT SHA) needs to select the most appropriate metrics during different stages of the project.

WHAT WAS THE GOAL?

This research was aimed at identifying the current state-of-the-practice performance metrics employed by agencies for different types of transportation projects.

WHAT DID THE RESEARCH TEAM DO?

The research team identified and reached out to a group of most relevant stakeholders—including federal, state, and local agency staff and private-sector professionals—who have experience with various transportation projects and associated performance evaluations. A best-practice survey was then conducted among stakeholders. The team then summarized the current practices on performance metrics based on the survey results.

WHAT WAS THE OUTCOME?

The team derived a flowchart that documents the current performance metrics used in three stages of a transportation project: (1) Feasibility and planning stage; (2) Design and

MAY 2021

REPORT NUMBER:
MD-20-SHA/UM/4-18

START DATE:
October 28, 2019

COMPLETION DATE:
October 30, 2020

PRINCIPAL INVESTIGATOR:
Lei Zhang
University of Maryland
lei@umd.edu

construction stage; (3) Maintenance and operations stage. The resulting flowchart is expected to support the selection of best-practice metrics for varying levels of traffic analysis at MDOT SHA.

HOW WILL MDOT SHA USE THE RESULTS?

The results of this effort will help support transportation planning projects. One key finding, for example, was the lack of social justice/equity-based metrics to support communities – the metrics were heavily focused on vehicle capabilities.

LEARN MORE

To view the complete report, click [here](#).