
Research Project Title

Evaluation of traffic speed deflectometer for collecting network-level pavement structural data in Tennessee

Purpose of the Project

The purpose of the project is to: 1) develop traffic speed deflectometer (TSD) data collection and analysis guideline for pavement structural evaluation in Tennessee; 2) obtain network-level pavement structural data in Tennessee using TSD; and 3) develop a methodology for incorporating TSD structural data into TDOT PMS.

Scope and Significance

The scope of the research project includes: 1) to complete a synthesis of literature review on TSD application; 2) to develop a practical guide for pavement structure evaluation using TSD data; 3) to obtain TSD information for network-level pavement in Tennessee; 4) to develop a methodology for incorporating TSD data into PMS.

Expected Outcomes

By improving the methodology for maintaining pavement assets, this research will benefit TDOT in the following aspects:

- A guideline of utilizing TSD data for network-level pavement structural evaluation;
- An inventory (database) of current pavement structural value in Tennessee;
- A recommended methodology for incorporating TSD data into PMS;
- Updated pavement structure database in PMS;
- An overall condition evaluation of pavement assets.

Time Period

The time period for the project is from October 14, 2019 to November 30, 2020.

Contact Information

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