PROJECT SUMMARY

Project Title: Tennessee Department of Transportation’s Traffic Monitoring Program

Purpose of Project: To determine best practices for highway traffic monitoring programs by reviewing the traffic monitoring programs of selected States and to recommend changes Tennessee Department of Transportation (TDOT) would have to make to its traffic monitoring program to meet best-practice requirements.

Scope of Project: The scope of the project includes a review and a comparison of TDOT's Traffic Monitoring Program with that of selected State DOT(s) whose monitoring programs are to be used to define best practices and to research the cost of improving TDOT’s Traffic Management Program to meet best-practice requirements. The research will also investigate new technologies for traffic data collection methods, and traffic data statistical analysis such as seasonal factors, and present a detailed report with recommendations and guidelines for program improvement.

Significance of Project: TDOT’s traffic monitoring program is responsible for collecting and reporting the traffic data to the Federal Highway Administration’s (FHWA) under its Highway Performance Monitoring System (HPMS). The monitoring program also provides the data required by other TDOT programs and applications such as determining travel trends, projecting future growth in highway travel and needs assessments, and freight planning. The data collected in the program is therefore critical to improving the safety and efficiency of Tennessee’s road transportation system.

Expected Outcomes of Project: A comprehensive understanding of the traffic monitoring programs of a select number of US states and that of TDOT’s. The research will also identify areas in TDOT’s highway traffic monitoring program where improvements are needed and make the necessary recommendations for this to occur. The recommendations will cover staffing, technology for data collection, and statistical requirements.

Time period: The project was started on January 1, 2016 and is expected to be completed on June 30, 2017

Project Contact: Dr. Daniel Badoe, Department of Civil Engineering, Tennessee Technological University, Box 5015, Cookeville, Tennessee 38505