AUTOMATING TURNING MOVEMENT STUDIES

UTILIZING NEW SEGMENTED SENSOR TECHNOLOGY

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Abstract

The Oklahoma Department of Transportation (ODOT) performs approximately 200 16hour manual turning movement count (TMC) studies each year. These studies provide vital information for intersection improvement projects, such as stop sign and traffic signal warrants and other pedestrian safety projects. Within ODOT, the demand for these studies has outstripped the capacity to respond to request and provide the data in a timely manner. Typical times from request to receipt of data are currently six to eight weeks.

This research investigated the feasibility of automating intersection data collection. Towards this goal, the researchers at the University of Oklahoma completed a number of studies and created a novel algorithm for processing timestamp data for a two-lane intersection. We believe the technology developed can be successfully applied to improve the efficiency of turning movement studies.