

Asset Management Background

Understanding the Traffic Monitoring Guide

United States Code of Federal Regulations title 23, 420.105(b) defines the congressional and public reporting requirements of the Federal Highway Administration (FHWA). Much of the traffic data collected by the Michigan Department of Transportation (MDOT) support these federal requirements.

FHWA issued an updated Traffic Monitoring Guide (TMG). As noted in its Executive Summary, the focus is “to provide the most up-to-date guidance to State highway agencies in the policies, standards, procedures, and equipment typically used in a traffic monitoring program ... Help improve and advance current programs with a view towards the future of traffic monitoring and with consideration for recent transportation legislation resulting from the Fixing America's Surface Transportation (FAST) Act.” The TMG continues to stress the importance of a traffic monitoring program that supports all business areas. This includes the need to assess current and past performance and predict future performance.

MDOT has been collecting and reporting traffic data since 1953. MDOT’s Data Collection Section of the Data Inventory and Integration Division is responsible for the collection and reporting of traffic data on more than 36,000 miles of federal-aid roads in the state of Michigan, with additional reporting requirements for the 83,000 miles of local roads. Traffic data collection consists of short-term studies, year-round data from the continuous count sites, and special studies (intersection turning movements, Welcome Center usage, bike lane usage, park and ride condition and count, airport takeoffs/landings, gap, delay, and pedestrian studies). The data collected is provided to the FHWA on a monthly and annual basis. Additionally, the data is used to drive decisions being made by other MDOT divisions, Michigan State Police, the Transportation Asset Management Council, and local agencies.

The Data Collection Section continues to modernize and streamline data collection and quality assurance/quality control procedure based upon TMG recommendations and FAST Act performance-monitoring legislation. The section is assessing the impacts of the requirements (i.e., nonmotorized, speed, and per-vehicle data reporting), researching equipment and technologies, and implementing collection and reporting practices to support the legislation, as well as MDOT’s continuing effort to provide transparency and data access to the public.