

2. TRAFFIC MONITORING

States conduct traffic monitoring for many reasons, including (1) highway planning and design; and (2) motor vehicle enforcement. Weigh-in-Motion (WIM) is a major tool used to collect traffic data.

WIM equipment provides highway planners and designers with traffic volume and classification data by time of day and day of week. In addition, WIM equipment also provides planners and designers with equivalent single axle loadings (ESAL) that heavy vehicles place on pavements. Motor vehicle enforcement officers use heavy truck axle load data to plan enforcement activities. In summary, the uses of traffic and truck weight data include enforcement, pavement, bridge, and legislative and regulatory issues.

The intended use of WIM data should determine the approach the state chooses in developing the WIM data collection site and the resources required to maintain the site over the expected site design life. The following sections present specific successful practices, principles, and “Tricks of the Trade” that states have used to successfully meet an end user’s data, accuracy, quality, and site design life objectives.