Permanent Traffic Recorders

Pennsylvania maintains permanent traffic recorders at 144 strategically selected locations throughout the state. These permanent sites collect traffic volume data on a continuous basis throughout the year. This data is used to develop daily and seasonal factors, as well as to identify changes in traffic patterns. Based on a research study performed by Pennsylvania State University and West Virginia University, it was determined that PennDOT locations in the traffic pattern groups were acceptable according to the FHWA Traffic Monitoring Guide.

The permanent sites use magnetic loops embedded in the pavement for vehicle detection. Additionally, CAVC sites utilize piezo sensors to classify and WIM sites utilize Lineas™ quartz or strip sensors to weigh. The data is stored on-site in traffic counters, prior to being automatically polled every night through the use of modems located at each permanent site.