Traffic Monitoring Services



ARA enhances transportation planning and highway design through traffic monitoring services and advanced data quality improvement techniques.

Program Development

ARA helps clients to assess Federal and State traffic monitoring directives, as well as develop and implement standards and practices to improve efficiency and accuracy in traffic data collection. We provide fully independent, unbiased assessments and recommendations for policies, procedures, guidelines, equipment, and resources for the systematic collection, analysis, summary, and retention of traffic data to support vital functions of highway agencies.

Research & Technology Deployment

ARA has maintained long, successful relationships with several Federal Highway Administration (FHWA) programs and offices. We have conducted numerous traffic-related studies for the Long Term Pavement Performance (LTPP) program, including our work calibrating weigh-in-motion (WIM) sites, validating WIM data, and developing traffic loading statistics for researchers and pavement designers. We have also conducted traffic data related research and best practices review studies for several State departments of transportation. ARA is also participating in the development of a WIM guide for the FHWA Office of Highway Policy and Information, and we have worked with several States to establish, enhance, or modify their WIM programs.





Field Services

We have supported several State highway agencies and FHWA Federal Lands Highway Division with traffic monitoring site assessments, installation, maintenance, inspection, and inventory of traffic monitoring devices nationwide.

SITE ASSESSMENT – ARA analyzes proposed or existing traffic monitoring sites to determine if they are suitable for the installation of traffic monitoring equipment and collection of high-quality traffic data. This service includes pavement smoothness testing, traffic flow and composition analysis, and assessment of physical site conditions.

INSTALLATION – ARA provides turnkey design and installation of traffic monitoring sites capable of collecting vehicle speed, traffic volume, classification, and weight data. In addition, we install road weather information systems (RWIS) that utilize pavement, chemical, and weather sensors.

INSPECTION, MAINTENANCE, AND CALIBRATION – ARA's trained and certified technicians provide equipment inspection, maintenance, and calibration for several types of automatic traffic recorder and WIM equipment.

Data Services

ARA provides traffic volume, vehicle classification, and weight data collection, analysis, and quality assurance services, as well as custom data reporting and data utilization support. We specialize in the development of field data collection protocols, field data collection and interpretation, and presentation of data that support the customer's needs. We have unique expertise in conducting WIM data analysis to assure data quality and to develop traffic loading statistics for different users. Additionally, we help agencies to address the traffic data requirements related to the AASHTOWare Pavement ME Design software.



