Wireless Access in Vehicular Environments (WAVE): IEEE 1609 Standards Series on CD-ROM

The IEEE 1609 Family of Standards for Wireless Access in Vehicular Environments (WAVE) defines the architecture, communications model, management structure, security mechanisms, and physical access for wireless communications in the vehicular environment. The primary architectural components defined by these standards are the On Board Unit (OBU), Road Side\ Unit (RSU) and WAVE interface.

These standards also define how applications that utilize WAVE will function in the WAVE environment, based on the management activities defined in IEEE Std 1609.1, the security protocols defined in IEEE Std 1609.2, and the network-layer protocol defined in IEEE Std 1609.3. Lastly, they provide extensions to the physical channel access defined in IEEE Std 802.11 to support IEEE Std 1609.4. This family of standards should be used by transportation, automotive, and traffic engineers involved with the design, specification, implementation, and testing of WAVE devices. Network engineers, hardware engineers, and application designers supporting the U.S. Vehicle Infrastructure Integration (VII) Initiative will use these standards as they define the system architecture and as the basis for the interface design of the OBU and RSU devices. Vehicle Infrastructure Integration application designers will use the standards to provide the basis for interface definitions between system components, and as a framework for application architecture.

Table of Contents