Informing the drivers are very important for ensuring the traffic flow properly and safely in highway transportation. Mobile devices take part in technologies that support the improvement of intelligent systems in traffic management and control systems which vehicle and way knowledge are shared. Due to the GPS, Acceleration, Wi-fi etc. features of smartphones developed by using built-in sensors are preferred to use in traffic. In this study, how diagnostic tool ELM327, which reads data through vehicle network, communicates with mobile devices, what type of software are used for data tracking and which data is transmitted from the vehicle are explained. In smart transportation systems which added the smart phones features, providing bi-directional communication applications like warning drivers against possible accidents, determining road congestion, communication vehicles each other, sharing and displaying highway knowledge on mobile devices. It is expected that it contribute to the development of systems which enable traffic management and control beside server-based data sharing and informing drivers.

Keywords: CAN Bus, ELM327 Diagnostic, OBD II, Smartphone, TMS, ITS.