EXECUTIVE SUMMARY

The US 202 Parkway is a new nine-mile long two to four lane roadway connecting Welsh Road and PA Route 611 through Montgomery and Bucks County. The construction of the new parkway provided the opportunity for the Pennsylvania Department of Transportation to pilot a fully-comprehensive Intelligent Transportation and Adaptive Traffic Signal System on an arterial corridor. The additional capacity provided by the new roadway as well as improvements to existing traffic signals and the inclusion of a comprehensive ITS was intended to mitigate the recurring congestion that had become prevalent throughout the project area.

The ITS system provides motorists with real-time travel times and other important roadway condition information and allows PennDOT to continually monitor the corridor for accidents and congestion. The autonomous travel time feature allows the motorists to choose alternate parallel routes based on real time traffic conditions. In addition, this project installed a completely autonomous adaptive traffic signal control system along the Parkway and PA 309 Corridors which reduced signal delay 35%-60% following implementation.

PennDOT District 6-0 is the primary stakeholder in the project and operator of the completed system. All control of the ITS devices occurs within the District 6-0 Regional Traffic Management Center (RTMC) located in King of Prussia, PA. Additional stakeholders included five local municipalities surrounding the Corridor. Each received integrated traffic signal control as well as access to CCTV video through PennDOT’s video sharing platform.