



**Miller Electric / Metric Engineering**

**Florida Department of Transportation (FDOT) - District IV**

**I-95 / I-595 / I-75 Advanced Intelligent Transportation System (ITS)**

**Deployment**

**(33 Arterial DMS Sites (ADMS), 53 Voice over Internet Protocol (VoIP) mesh radios)**

As part of the Florida Department of Transportation traffic monitoring system, which extends throughout the Florida Interstate system, Miller Electric, under contract with the FDOT District IV, required a cost effective solution for the transmission of data to thirty-three (33) arterial dynamic messaging signs. Fiber was not a cost effective solution for this project due to the large amounts of infrastructure being traversed, so a microwave system was utilized. MCIS also designed and deployed a Voice over Internet Protocol mesh radio system consisting of fifty-three (53) radios and providing contiguous coverage over fifty-five (55) miles of highway. This mesh radio system has enabled FDOT personnel to utilize VoIP telephones as well as stream live traffic surveillance video in their vehicles while mobile at speeds upwards of 70 miles an hour. This system was designed so there is 100% overlapping coverage (e.g. every other access point could fail and the system would still work). These ADMS and VoIP sites were split between I-95 and I-75, with the majority installed along the I-95 corridor. MCIS was chosen to complete the total system design of this extremely complex wireless system. As part of this effort, MCIS provided full RF analysis and design, wireless project management, installation support, and FDOT training for maintenance of equipment.

