



Grant Agreement - DTPH56-10-G-PHPT16

Southeast Alabama Gas District, a natural gas utility that serves 32 communities in the southeast portion of Alabama, through 621 miles of transmission main and 1391 miles of distribution main, has completed improving the collection of cathodic protection information through the use of GPS data collection, advanced GIS geodatabase design and implementation of mobile GIS. To begin the project all CP test points and anode beds were collected using Trimble GeoXH 2008 handheld units and post-processed to sub-foot accuracy. The increased accuracy of the collection process will increase the ability of Southeast Alabama Gas District CP crews to relocate all the current CP test points. During the collection process, detailed information was collected on each facility. Upon completion of the GPS collection, the newly acquired CP test points were integrated into the existing GIS database.

The GIS department's existing geodatabase structure was modified to enable Southeast Alabama Gas District to take advantage of advanced GIS data entry techniques. Through these geodatabase modifications and the use Mobile GIS, Southeast Alabama Gas District now has the ability to upload CP test reading to their GIS database from the field, on a daily basis. By implementing this system of off-site editing and uploading of CP readings to a central database, Southeast Alabama Gas District has the ability to query and create up-to-date reports on CP readings across their system. This has given Southeast Alabama Gas District an increased awareness of their existing infrastructure and created a new technique for analyzing their system's necessities.

The implementation of mobile GIS to Southeast Alabama Gas District's existing GIS department's operations has proven a great benefit in maintaining current records as required by DIMP. This project has opened the door to more advanced GIS functionality and the ability to track CP test data in a digital world that was previously only tracked on paper.

This project was completed July 30 of 2011. This project has also laid the foundation for mobile GIS to be used in many aspects of Southeast Alabama Gas District's operation. There are plans to implement this system in valve inspections, line location and new construction.