Baltimore Subway Inspection

Baltimore, MD

Client

Maryland Transit Authority

Problem

The Maryland Transit Authority (MTA) needed to perform a detailed physical inspection of their subway system. They needed a reliable method for collecting, storing and retrieving their inspection data, archiving related photos and generating inspection reports.

For previous inspections, they had used a database system that had become outdated and relied upon paper inspection forms that had to be entered into a computer. This legacy system contained data from previous inspections that had to be made available for future reference, no matter what upgrades were made.

Scope

Warshaw Group customized its Mobile Validity® data collection technology to allow the MTA to electronically collect data on handheld computers with data collection menus specifically tailored to their project. The data collection screens promoted completeness and accuracy of entered data, by performing validation and completeness checks. The user interface contained built-in logic to speed physical inspections.

Warshaw Group hosted MTA's Mobile Validity® application during data collection and assisted in data upload to the hosted system via modem from Baltimore to New York.

Warshaw Group provided:

- Upgrade of MTA legacy system
- Business analysis for inspection process and required attributes
- Configuration of Mobile Validity® data collection software
- Configuration of Mobile Validity® mobile data entry modules
- Administration of communications for data upload
- System hosting
- System reporting configuration
- Data conversion to legacy system
- Enhancements to legacy system including inspection photo archiving feature

- System training
- Maintenance and support

Solution/Benefits

The Warshaw Group system allowed the MTA to rapidly deploy a handheld computerized data collection system that improved efficiency and data accuracy. The system allowed the MTA to reduce total inspection time while increasing the quality of their data.

By integrating the new system with MTA's legacy system, MTA was able to reconcile all future and past data, and have all of their data available for data reporting for inspection assessment. Through creating an automatic photo storage process for the new system and an archiving system for the existing photos, MTA was finally able to have access to visual inspection evidence related to extensive inspection data for usage and reporting. MTA's handheld physical inspection solution resulted in inspection efficiency gains, while producing highly relevant and accessible data. This system was both cost effective and time saving for the MTA.