

Staten Island Signal Modernization

Prime Contractor and Construction Services

Client: MTA New York City Transit

TRANSIT RESOURCES



Project Information

- **COMPLETION DATE:**
2007
- **CONSTRUCTION PRICE:**
\$72 Million
- **14-Miles of Signal & Communication Systems Modernization.**
- **New Control Center, and Backup Control Center**
- **Largest Signal Cutover on East Coast.**
- **Training, Testing and Commissioning.**
- **Subway Car and Locomotive On-board Equipment**

The modernization program for the Staten Island Rapid Transit system replaced the 14-mile signal system, from St. George to Tottenville, with an FRA-compliant 100Hz, track circuit based, Automatic Train Control (ATC) signal system. 40 - R44 subway cars and 4 locomotives were modified with on board cab signaling equipment for ATC bi-directional movement. A new rail control center and back-up control center was constructed as part of this contract. 14 miles of fiber and copper cable, 17 signal/communication instrument houses, new switches, snow melters and hundreds of foundations for various wayside equipment were installed along the 2 track heavy rail system.

Extensive engineering for largest cutover on east coast was performed, as well as significant training, system integration, testing and commissioning.

The project included the installation of:

- FRA compliant 100HZ steady energy track circuit based signal system
- Wayside signals @ interlockings
- Carborne & Locomotive cab signal system
- SCADA system at CB houses and DC substations
- 2 single mode 36 strand fiber optic cables between St. George & Tottenville
- OC-3 SONET based fiber optic transmission system with nodes at passenger stations and substations
- Control Center building, Backup Control Center & systems
- Systems Integration and Commissioning
- 2 motor-alternator substations

