



George Washington Bridge ITS

Client: Port Authority of New York & New Jersey

Location: Ft. Lee, NJ



System Features

- DYNAC™ Software •
- Decision Support Management •
- Operational Plans •
- Response Plans •
- Automatic Incident Detection •
- Data Warehousing •
- Display Wall •
- 64-bit RISC Servers •
- Emergency Call Box •
- Microwave Vehicle Detectors •
- Dynamic Message Signs •
- NTCIP •
- CCTV •
- ETC Based Travel Times •
- Automatic Vehicle Location •
- Roadway Weather Information •
- Highway Advisory Telephone •
- Communication Network •
- Ethernet LAN •
- CDPD Communications •
- TRANSCOM Interface •
- Web Page Updates •



The two-level structure George Washington Bridge (GWB) crosses the Hudson River between upper Manhattan and Fort Lee, New Jersey, forming a part of Interstate 95. Opened to traffic in 1931, the George Washington Bridge is the world's only 14-lane suspension bridge and is the busiest bridge in the world. Under management by the Port Authority of New York and New Jersey, the bridge handles over 90 million vehicles per year.

The Port Authority of New York & New Jersey selected Transdyn to design, build, and maintain an Intelligent Transportation System (ITS) for the George Washington Bridge. This ITS monitors and controls traffic on the bridge and approach-roads allowing the Port Authority to reduce congestion, improve accident detection and clearance times, provide facility security, and maximize the throughput of the bridge.

Transdyn's DYNAC ATMS™ (Advanced Traffic Management System) software, running on redundant servers and multiple operator workstations, automatically detects incidents and provides recommended response plans to clear incidents and mitigate congestion. Motorists are advised of estimated travel times and are provided alternate route guidance via dynamic message signs, a highway advisory telephone system (1-877-PARROADS), advisories to the TRANSCOM regional network, and updates to the Port Authority web page.

An Automatic Vehicle Location (AVL) system tracks Port Authority vehicles on roadways and the ITS automatically provides the operator with 'best responding vehicle' information to aid in the management of incident responses.

The central computer system is integrated with vehicle detectors, dynamic message signs, emergency call boxes, closed circuit video cameras, a roadway weather information system, a highway advisory telephone, an automatic vehicle location system, and a toll tag reader system to provide a highly integrated system which can manage the entire roadway from a single operator workstation.