



Boston Central Artery/Tunnel IPCS

Client: Massachusetts Turnpike Authority

Location: Boston, MA



System Features

- DYNAC® Software •
- Decision Support Management •
- Access Control •
- Intrusion Detection •
- Automatic Incident Detection •
- Intelligent Video Surveillance •
- Video Analytics •
- HVAC •
- Utility Monitoring •
- 64-bit RISC Servers •
- Display Wall •
- Local Field Controllers •
- Dynamic Message Signs •
- CCTV •
- Vehicle Detection •
- Overheight Vehicle Detection •
- Highway Advisory Radio •
- AM/FM Rebroadcast •
- Environmental Monitors •
- Fire Detection •
- Fiber Optic Video Network •
- Wireless Video •
- SONET Network •
- Spread Spectrum Radio •
- Data Warehousing •

DYNAC®

Boston's Central Artery/Tunnel is the largest and most complex highway project ever undertaken in an American city. The project transformed downtown Boston as the aging and overly congested elevated expressway was replaced with a new underground interstate system and a third harbor tunnel. Opened in 1995, the Ted Williams tunnel extends the Massachusetts Turnpike under Boston Harbor to provide improved access to Logan International Airport.

Transdyn provided the Integrated Project Control System (IPCS) that manages all aspects of almost 200 lane-miles of highway including over 1700 vehicle detectors, intelligent video surveillance via 400 cameras, almost 400 dynamic message signs and motorist advisory systems. From a single workstation, operators monitor and control twenty major operation, ventilation, and electrical distribution facilities along with emergency response, communication, fire detection, security, lighting, and environmental systems. The system is managed by Transdyn's DYNAC® Advanced Traffic and Facilities Management software running on redundant servers and distributed operator workstations.

In order to maintain life safety and optimal traffic flow, the IPCS continuously monitors the tunnel system, roadways, and facilities and provides automatic response plans for traffic incidents and other adverse conditions. The system enables the Department to provide 24/7 surveillance of the tunnel, roadways and facilities resulting in increased security, faster emergency response, improved incident detection and less traffic congestion.