Lincoln & Holland Tunnels Intelligent Surveillance and Emergency Management Systems

Client: Port Authority of New York & New Jersey

Location: Metro New York City, NY

TRANSDYN

System Features

DYNAC ATMS® Software •
Intelligent Video •
Video Analytics •
Decision Support Management •
Response Plans •
Stopped Vehicle Detection •
Traffic Monitoring •
Probe Vehicle System •
Travel Time Advisory •
High Availability Architecture •
National ITS Architecture Compliant •
NTCIP Compliant •
Dynamic Message Signs •
CCTV System •
Fiber Optic Communications •

DYNAC®

Operated by The Port Authority of New York and New Jersey, the Holland and Lincoln Tunnels opened in 1927 and provides a vital link between midtown Manhattan and central New Jersey. The Holland Tunnel was the first Hudson River vehicular tunnel, and the Lincoln tunnel is the world's only three-tube underwater vehicular tunnel facility. With traffic volumes exceeding seventy-million vehicles per year, they are among the busiest tunnels in the world.

After the events of 9/11, the Transdyn/PTG JV was selected by the Port Authority of New York & New Jersey to design, build, and maintain Intelligent Video Surveillance and Emergency Management Systems for the Holland and Lincoln Tunnels.

The contract included new cameras, intelligent video processors, computer systems, communication systems, sensors, and dynamic signs. Central systems and software at each facility monitor roadway conditions and use video analytics for incident detection and emergency management. The systems acquire data from field sensors, and Transdyn's DYNAC ATMS® automatically detects incidents such as stopped vehicles, and implement optimal response plans to manage emergency situations, clear incidents, balance traffic flows, and mitigate congestion.

The intelligent video system is vital to the safe and efficient operation of these facilities. Video from CCTV is analyzed to detect traffic anomalies both inside and outside of the tunnels as well as other sensitive areas.

A combination of SONET and point-to-point fiber optic networks at each facility deliver the video to each respective control center. The project included the modernization and renovation of existing communication desk areas into new control centers to accommodate the new systems and functions.