



Baltimore Harbor Tunnel and Ft. McHenry Tunnel ITS

Client: Maryland Transportation Authority

Location: Baltimore, MD



System Features

- DYNAC ATMS® Software •
- Facility Monitoring •
- Decision Support Management •
- Response Plans •
- Incident Detection & Management •
- Simulation/Training System •
- Data Warehousing •
- Video Display Wall •
- Highway Advisory Radio •
- CCTV •
- NTCIP •
- DMS •
- Traffic Controllers •
- Vehicle Detectors/Loops •
- Ventilation Control •
- Fire/Security System Integration •
- HVAC •
- Utility Monitoring •
- Regional Data Reporting •



Since 1971, the Maryland Transportation Authority has been responsible for constructing, managing, operating and improving the State's toll facilities, as well as for financing new revenue-producing transportation projects. The Authority's seven toll facilities - a turnpike, two tunnels and four bridges - provide for the advancement of a safe, secure and convenient movement of people and goods for the benefit of the citizens of Maryland.

Transdyn was selected to design and build a state-of-the-art system capable of managing traffic and facilities for the Baltimore Harbor and Ft. McHenry Tunnels, two of the busiest tunnels in the United States. At the Authority Operations Center, the system will combine the various and differing legacy subsystems at these facilities into a common central platform that provides an integrated operator interface for managing each tunnel. Each facility will be networked to allow inter-site communications, redundant operational capability, and the sharing of data both within the Authority and with other agencies in the area.

The system is managed by Transdyn's DYNAC ATMS® (Advanced Traffic Management System) software running on redundant servers and distributed workstations. The ATMS enables the Authority to increase tunnel security and reduce accidents by automatically detecting incidents, mitigating congestion and disseminating motorist advisory messages to travelers.

The servers manage various field controllers over redundant Ethernet rings and existing fiber optic links. The architecture is designed for high-availability with no single point of failure and is compliant with the National ITS Architecture and NTCIP standards.