



Columbus Metro Freeway ATMS

Client: Ohio Department of Transportation

Location: Columbus, OH



System Features

- DYNAC® Software •
- NTCIP •
- Decision Support Manager •
- Automatic Incident Detection •
- Response Plans •
- Operational Plans •
- 64-bit RISC Servers •
- Video Display Wall •
- CCTV •
- Dynamic Message Signs •
- Traffic Detectors •
- Roadway Weather Information •
- Automatic Vehicle Location •
- Ethernet LAN •
- SONET Network •
- Public Access via Internet •

On an average day, approximately 52,000 vehicles travel I-71 between Cleveland and Columbus. Traffic volumes in the corridor have grown at a rate greater than twenty percent over the past five years with a projected growth of more than fifty percent within the next twenty years. These volumes range from 96,000 vehicles per day in the Columbus area to 30,000 vehicles per day in rural areas.

As an initial step to help mitigate the effects of growing congestion and reduced air quality, the Ohio Department of Transportation (ODOT) selected Transdyn to furnish and install an integrated Advanced Traffic Management System (ATMS) managed by Transdyn's DYNAC® software. This system manages traffic on seventeen miles of I-71 through downtown Columbus and the City of Columbus' signalized intersections, and once complete, will manage 115 centerline miles of freeway, in its entirety, in the Metropolitan Columbus area.

The ATMS monitors traffic flow to detect freeway incidents and congestion, manages incident responses and meter ramp access allowing ODOT and the City of Columbus to optimize traffic flow, reduce accident clearance time, and improve public safety. Motorists are advised of traffic conditions or potential alternate routes by Dynamic Message Signs (DMS) located along the freeway. Real-time traffic information is provided to the public by an Advanced Traveler Information System (ATIS) for route planning and guidance and is available to the public via Internet and information kiosks.

Transdyn furnished and integrated all software elements, including algorithms for traffic flow monitoring, incident detection and system-wide ramp metering. The field equipment provided and installed included a fiber optic backbone, SONET Network, CCTV, NTCIP-compliant dynamic message signs, and ramp meters. Transdyn conducted the training for operations and maintenance personnel on all systems and subsystems.