

**Client**

Kansas City Scout,  
The Missouri Department  
of Transportation, District  
4 and the Kansas  
Department of  
Transportation

**Location**

Kansas City Bi-state  
Metropolitan Area

**Services**

- ITS Planning
- Requirements  
Development
- System Architecture
- ATMS Software
- Field Integration
- ATIS Website

**Date**

2004

**Key Personnel**

Bill Kemle. P.E.

## Kansas City Scout ITS Planning, Design, System Integration, ATMS Software Development and ATIS Website

**Scope of Services**

Kansas City Scout is a comprehensive traffic and incident management system designed to address the traffic impacts on over 90 miles of contiguous freeways in the bi-state Kansas City metropolitan area. The Missouri Department of Transportation and the Kansas Department of Transportation jointly operate the system. Scout integrates 91 closed circuit television cameras, 36 dynamic message signs, 248 vehicle detector stations, a highway advisory radio system, and a dynamic web site, [www.kcscout.com](http://www.kcscout.com).



This project involved the complete conceptual design, high-level design, detailed design, software development, system integration, testing, training, and documentation for the Kansas City Scout ATMS. ATMS software included event management, field device control, traffic surveillance, automated incident detection, traffic data analysis, and system configuration.

Delcan's responsibilities included work relating to:

- Coordination with the steering committee and training
- Development of incident response strategies
- Integration and development of ITS
- User and systems requirements definitions
- Defining system architecture
- End-to-end integration
- The telecommunications system
- Telecommunication Operations Center (TOC) facility and plan, specification and estimate
- Implementation of system hardware and ATMS software
- Construction support by developing the implementation phasing
- Developing the field component siting criteria
- Developing the system design criteria and detailed design of TOC
- Developing communications Architecture
- Participation in the development of procurement strategies.
- Field investigations and TOC field components
- Advanced Transportation Management Software
- Advanced Traveler Information Website

## **Results**

The result is a comprehensive bi-state traffic management system that operates 24/7 and responds to around 400 incidents per month. Delcan's ATMS software is the primary tool used by operators to respond to incidents, with system generated response plans and DMS message sets tailored for the incident type and location.

Delcan continues to work with KC Scout to add new features to their system. This fall KC Scout will start providing travel times along major freeway corridors into and out of downtown. Expansions are planned to significantly increase the current 90 miles of system coverage, bringing on additional CCTV and vehicle detection.