

Client

Lake County Department of Transportation

Location

Lake County, Illinois

Services

- Concept of Operations
- Prepare TMC Conceptual Design
- ITS Architecture
- Communications Architecture
- Architectural Renderings

Date

2003

Key Personnel

Joseph Brahm, P.E.

Lake County TMC Study and Implementation Plan

Project Scope

Lake County selected Delcan for the TMC Study and Implementation Plan Project. Delcan's specific scope of work included the development of a concept of operations, a review and inventory of current systems, policies and procedures and the development of an inventory of all traffic signal systems and communications network throughout the County. In addition, Delcan developed interface requirements, identified communications needs and issues, and developed user and system requirements.

Delcan was also charged with the development of an ITS and communication architectures, including ensuring compliance with national and regional architectures, as appropriate. Delcan conducted trade-off studies, developed staffing plans, reviewed site options for the TMC facility, and developed TMC layout design options. Delcan prepared an architectural rendering of the selected preliminary layout, prepared cost estimate and a phasing plan, and developed an ITS system deployment phasing plan. Finally Delcan prepared preliminary estimates of the phases for the first 7 years of the plan



Project Description

The Lake County TMC architecture provides for a state of the art arterial based event and congestion management system. This project design includes automated arterial congestion management, semi-automated event management, integration of County maintenance activities and integration of several ITS elements including; DMS, CCTV, arterial traffic signal system across jurisdictional boundaries, Public Safety CAD, HAR, HAT, WEB and ISP providers.

Results

This project provided Lake County with the opportunity to set the foundation for their regional ITS Program. This study established short and long term ITS upgrade and integration goals, developed requirements, provided architecture, high level design cost estimates as well as a plan for deployment and integration efforts. Several agencies were involved in the project including Lake County DOT, Illinois Department of Transportation, Illinois Tollway, Lake County Emergency Telephone Service Board (ETSB), Lake County IT Department, as well as several Cities within the County.