

Client

Orange County
Transportation Authority
(OCTA)

Location

Orange County, California

Services

- Advanced Traveler Information System (ATIS)
- System Design
- Systems Integration
- Software Development
- Graphic User Interface Development
- Website Development
- Testing
- Communications Design

Date

2002

Key Personnel

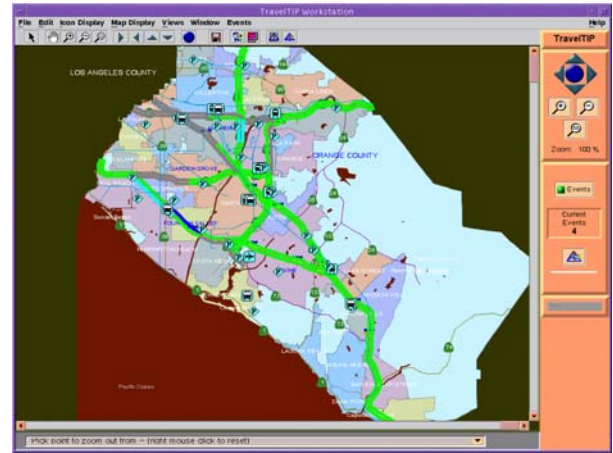
Glenn Murphy, P.E.

TravelTIP System Integrator

Scope of Services

Delcan was retained to provide detailed design and implementation of an ATIS to perform the following functions:

- Collect real-time traffic data from local traffic management agencies in Orange County by developing software interfaces for the Econolite master controller, the IDC/Multisonics signal system master, the Caltrans ATMS; City of Anaheim TMC, City of Irvine TMC, the City of Santa Ana TMC, and OCTA bus probes;
- Collect incident and traveler advisory information from Caltrans and local traffic management agencies;
- Interface to collect OCTA transit schedules, bus fares, and bus schedule adherence data;
- Provide travelers with a graphical map displaying real-time congestion levels and travel times for various roadway segments throughout Orange County;
- Disseminate traveler information through the Internet, information kiosks located throughout the county, and a highway advisory telephone system; and,
- Provide an open interface through which Information Service Providers (ISP) can obtain raw and processed traveler information.



The software development task included development of interfaces for the Caltrans District 12 ATMS, VMS-330 master controller, Econolite ASC/2M master controller, ISP outlet, a highway advisory telephone server, a web server, and operator workstation and kiosk GUIs; all based on current Showcase Intermodal Distribution Lanes (IDL). The system integration and testing task included on-site installation, end-to-end integration, and acceptance testing of 17 remote centers with the TravelTIP Traveler Information Center (TIC) over a wide-area network based on Frame Relay technology. The TravelTIP system was supported initially by a wide-area network using frame relay technology, which can be migrated to a fiber-based backbone network in the future.

**TravelTIP System
Integrator (Continued)**

Project Description

TravelTIP consisted of the deployment of an Advanced Traveler Information System (ATIS) that included the collection and dissemination of traffic and transit information, including an interface for value-added information resellers, and used a design approach that enabled the Southern California corridor and statewide ATIS efforts.

Results

Notable project attributes included the first implementation of CORBA for the exchange of data between centers on the TravelTIP network (including a subset of the Showcase Kernel Services) and the development of a Web page using a Java-based map "servlet" to display traffic congestion segments to the end user.