



2008 GLOBAL EXCELLENCE AWARDS

Location

Los Angeles,
California, USA

Client

LA County Metropolitan
Transportation Authority
(Metro), Sponsor

Project Manager

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Key Personnel:

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GREATER LOS ANGELES REGIONAL INTEGRATION OF INTELLIGENT TRANSPORTATION SYSTEM (RIITS)

The Regional Integration of ITS (RIITS) project is one of the largest public partnerships for the sharing of transportation information. It covers the Greater Los Angeles Region, defined as Los Angeles, Ventura, Orange, Riverside and San Bernardino Counties, and involves the exchange of transportation information between 15 agencies, including some of the largest freeway, arterial, transit, and emergency management agencies in the United States. The partner agencies are listed in Table 1.

The project was an initiative sponsored by the Los Angeles County Metropolitan Transportation Authority to implement a county-wide network, interconnecting public agencies for the exchange of transportation-related information to facilitate coordinated transportation system management. RIITS partner agencies include traffic management, transit management, emergency management, as well as air and sea port ground-side operations. The initial deployment of the RIITS Network was completed at the end of 2004. The information that is collected by the RIITS Network is integrated and disseminated to users in four ways:



1. A secure browser-based map display for authorized agency users,
2. A data feed that is made available to Information Service Providers (ISP) to allow private companies to add value and reach a broad audience,
3. A data feed to agencies to allow integration of the data into their existing systems, and
4. A public traveler information webpage.



The shared information includes real-time data and/or video from: 1200 freeway vehicle detector stations (VDS), 350 freeway video surveillance cameras, 110 changeable message signs (CMS), 3500 arterial traffic signals, hundreds of CHP events per day, 2400 buses, and 10 trains. This data is exchanged over a region-wide network consisting of an agency-owned fiber optic backbone, as well as the internet.

Client Impact/Value

The exchange of operational information has known benefits for the Metro bus and rail systems which now have far more information available when they manage incidents. Caltrans and LADOT are increasingly looking at opportunities to use the exchange of data to better manage their systems and add such information as ramp metering status and signal status to perform joint event management.

Industry Impact/Value

There are several aspects of the RIITS Project that can serve as a model for other organizations that desire to deploy a region-wide ITS network. Most important was the institutional framework that facilitated the development of agreements between public agencies to govern the sharing of their data. Leveraging existing communications infrastructure and the use of web services technologies for secure access to RIITS through the public internet saved \$1M in anticipated construction costs for new cable-based communications systems that were not necessary. Finally, the open interface standards allow agencies to develop an interface to retrieve regional transportation data in just a few days.

Community Impact/Value

As a result of RIITS, 19 million people living in the Greater Los Angeles Region now receive the most comprehensive and accurate traffic information in real-time. Far more information is available to the public by numerous means, and transportation agencies are better able to coordinate between each other for more efficient and safer traveling.

Areas of Innovation

The RIITS project is one of the largest public partnerships for the sharing of transportation information using the latest web-based technologies and the latest Center-to-Center (C2C) Extensible Markup Language (XML) standards. After deployment of this project, FHWA contacted Delcan directly for consultation on the NTCIP 2306 standard and these standards were modified significantly based on our input.

Table 1 – Project Partners

Los Angeles County Metropolitan Transportation Authority (METRO) (Lead Agency)	Los Angeles County Metropolitan Transportation Authority (METRO) Bus and Rail Operations	City of Los Angeles Department of Transportation (LADOT)
Port of Long Beach (POLB)	Caltrans District 7	Los Angeles County Department of Public Works (LACDPW)
Port of Los Angeles (POLA)	Long Beach Transit (LBT)	Los Angeles County Fire Department (LACFD)
California Highway Patrol (CHP)	Santa Monica Big Blue Bus (SMBBB)	Los Angeles County Sheriff Department – Transit Services Bureau (TSB)
Southern California Association of Governments (SCAG)	Access Services Inc. (ASI)	Los Angeles World Airports (LAX)