

CALIFORNIA 511

“You can’t solve today’s problems, with yesterday’s ideas and be in business tomorrow” - Tamil Nadu Province, India

Traveler Information

California’s 30 million citizens travel over 62 billion miles annually on its roads. Efficiency of travel has a direct impact on quality of life and an enormous impact on the economic vitality of the State.

The California Department of Transportation (Caltrans) developed the California 511 web site to inform the traveling public on road and traffic conditions across the state. In addition to providing travel information, California 511 provides a technical architecture based on web service technology and open data formats that serve as the foundation for sharing transportation data. The data services can be consumed by government agencies, the media, private sector companies, and the public at large. The data services support congestion relief by providing real-time traffic information to travelers and give them the knowledge to avoid congestion. The impact to the economy by creating efficiencies in goods movement and the quality of life by reducing hours of vehicle delay can be estimated in the millions of dollars.

Traveler information is an essential component of *GoCalifornia*, the transportation element of Governor Schwarzenegger’s Strategic Growth Plan.

Designed to be easy to use and navigate, CA 511 collates information from a myriad of text based web pages into a handful of easily understandable map displays. The web site provides information on speeds and congestion from UC Berkeley’s Performance Management Systems (PeMS), traffic incidents from the California Highway Patrol (CHP), the Caltrans Lane Closure System, traffic cameras from various Traffic Management Centers (TMC), Changeable Message Signs, and fog sensors. The web site also provides information on trucking, bicycling, state rail, and scenic travel.

Technology

At the core of the CA 511 system, the Caltrans TSI XML Message Bus is an open ended information technology infrastructure designed to facilitate flexible and scalable integration of transportation system related spatial and non-spatial data sources and services. The entire system utilizes standard-based open-source software. Unifying the disparate and often inconsistent data sources for this purpose presented not only a challenge, but also an opportunity to devise an infrastructure that would ease similar integration efforts in the future, and form the basis for a spatial enterprise application infrastructure.

