Description of the Challenge or Opportunity

**Concurrent Freeway and Train Travel Times**

Understanding the Motivation.

This project was initiated by Caltrans Executive Management (Martin Tuttle) in partnership and cost sharing with Metrolink. The main objective was to increase train ridership from Orange County to Los Angeles County which in turn will reduce the number of vehicles on the freeway system thereby reducing congestion and overall commuter travel times.

Describe the Innovation

District 12 developed an application for publishing concurrent freeway and train travel times over two years ago and it is fully operational. It displays both train and freeway travel times on the CMS within Orange County with a destination of Los Angeles Union Station. The train travel time is displayed on the CMS only when it is shorter than the freeway’s. Currently we are using 3 CMS in Orange County to display train versus freeway travel times. Locations are: I-5 NB at Avery, I-5 NB at State College, and SR-91 WB at Euclid.

For the concurrent freeway and train travel to work, they require that the detector stations both in Orange County and Los Angeles County along the designated routes are in working order and the gap between adjacent functioning stations is not more than 1.5 miles.

Defining the Need.

Before this project was implemented, District 12 was displaying only freeway travel times on the CMSs in Orange County. Train travel times were not being displayed. This project raised the commuter’s awareness of train travel by providing valuable information on the options of using the train in lieu of their cars for their daily commute.

Support for the Department’s mission, vision, and goals.

This application improves the safety and efficiency of California’s highways, one of Caltrans’ key Missions, by reducing the vehicles using the freeway system, which in turn reduces congestion and thus travel time, and increases the freeway system’s efficiency.
Have you been approached by other districts interested in implementing this innovation?

Since the implementation of Concurrent Train and Freeway Travel Time, it has been officially adopted as part of the statewide ATMS 5 system. All Districts that adopt ATMS 5 will have the Concurrent Train and Freeway Travel Time application.

Understanding the risks.

Because the Concurrent Train and Freeway Travel Time application was developed by the request from Martin Tuttle of Caltrans in partnership and cost sharing with Metrolink, there were no barriers to the implementation.

There were no risks associated with implementation.

Lessons Learned

The partnership with Metrolink was very successful and we recommend that other Districts deploy this application with the assistance of a competent contractor.

Other Considerations

We did not consider similar processes or products.

Cost-Benefit Analysis

The direct cost of implementing was $80,000

About the Originating Author/Team

This project was a cooperative effort between Caltrans District 12 and Metrolink. On the Caltrans side the team consisted of the TMC support staff under the direction of Mort Fahrtash, Chief Traffic Systems Development.