



case studies

customer success stories from the paramics community

Project

Corridor Management Plan Demonstration

Organization

California Center for Innovative Transportation (CCIT), University of California, Berkeley
University of California Irvine
University of Minnesota
Caltrans

Sector

Transportation Planning, Traffic Operation

Objective

Integrate detailed traffic analysis to corridor planning to assess corridor current and future performances, evaluate and recommend improvement strategies.

Highlights

- Three demonstration sites: I-880 in the Bay Area, SR-41 in Fresno, and I-5 in Orange County
- Large scale: 40 miles in length, hundreds of traffic signals and ramp meters
- Models are calibrated against observed data based on the FHWA guideline
- Both baseline and future year scenarios are studied

Contact Point

Lianyu Chu/Jeff Ban
Research Engineer
CCIT, UC Berkeley

2105 Bancroft Way, Suite 300,
Berkeley CA 94720

www.calccit.org

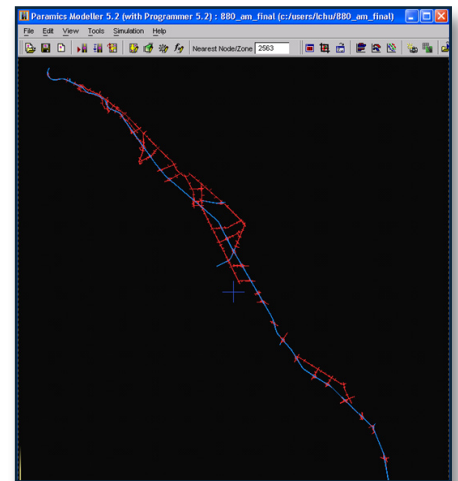
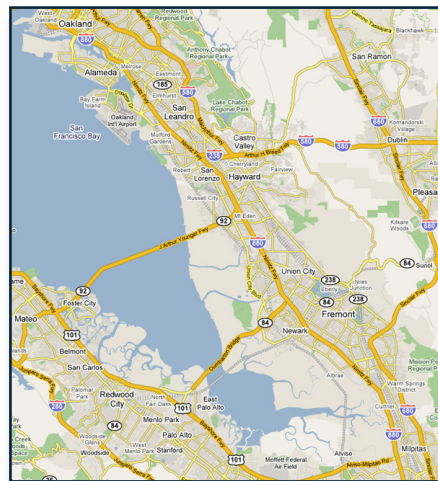
lchu@berkeley.edu

Corridor Management Plan Demonstration

A successful Corridor Management Plan can be an important part of developing comprehensive transportation system management strategies for an entire region. Corridor management planning aims to improve mobility by incorporating detailed multi-modal performance measurement and state-of-the-art operational analysis into traditional transportation planning processes for congested urban corridors. The Corridor Management Plan Demonstration (CMPD) project stems from Caltrans recognizing the importance of promoting systematic management strategies that optimize the current California freeway corridor system. Corridor System Management Plans (CSMP) are now a requirement in California following the passage of the Proposition 1B Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act in the November 2006 election.

This project demonstrates new methods of evaluating different investment strategies using PeMS, dynamic traffic network modeling, and new traffic simulation techniques. Three corridors, including I-880 in Bay Area, SR-41 in Fresno, and I-5 in Orange County, were selected for concept demonstration and the template development.

The I-880 network is a heavily congested urban corridor that serves the San Francisco-Oakland Bay Bridge, the Port of Oakland, and the Silicon Valley. The I-880 network being modeled includes a 37-mile long freeway corridor and its major parallel streets and interchanges. There are a total of 163 actuated signals, 20 fixed-time signals, and 55 traffic-responsive ramp meters.



The SR41 network being modeled in Paramics is in Central Fresno, which is about 16 miles long in North-South and 4 miles wide in East-West. It contains one major freeway (SR41) and two parallel streets with 99 signalized intersections.