

Technology Planning and Integration

OVERVIEW

Caltrans is committed to using technology with communication to improve travel times, safety, and the efficiency of the highway system through new innovative approaches.

COMMUNICATIONS PLANNING

- Caltrans' Public Affairs works closely with our Traffic Operations, Information Technology (IT), Research, Innovation, and System Information (DRISI) divisions, and outside partners, to promote new technologies and innovations.
- We share information with our 20,000 employees, who act as ambassadors to champion the department's innovations and initiatives.

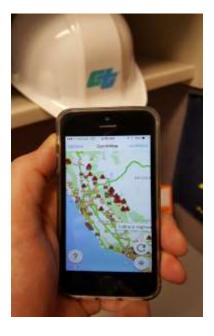
ORGANIZATIONAL INTEGRATION

- Caltrans Director Malcolm Dougherty is engaged and sits on the Intelligent Transportation Society of America Board and is Chair of the Transportation Research Board.
- Caltrans incorporates multiple sources of data in to QuickMap
 - o Google maps, real-time traffic-ops data, & CHP incident data.
 - o Field-maintenance information from Caltrans crews
 - WAZE app data layer is planned
 - Weather data and an app for truckers will be released this year.
- Caltrans recently partnered with Volvo, local agencies, and U.C. Berkeley to test truck platooning technology in Los Angeles.
 - Truck platooning allows semis to be linked with cooperative cruise control, which is safer and improves traffic flow.
 - Platooning saves time, money, and fuel, while reducing emissions.
- Caltrans works with partners and is looking at ways to improve the infrastructure to accommodate the advent of the autonomous vehicle.
 - o Caltrans is enhancing striping and installing reflective markers to assist with autonomous vehicles.

COMMUNICATIONS IMPLEMENTATION

 Our "News Flash" videos on YouTube have been highly successful in showcasing several technology innovations.

- Wrong-way driver pilot program.
- o The SMART corridor along I-80.
- o The automated warning system.
- o Caltrans' hydrogen vehicle fleet.
- Road charge pilot program.
- Traditional methods like news releases are used to promote our achievements, as well as social media and our YouTube channel.
- Caltrans uses a monthly calendar to coordinate statewide social media statistics on a monthly basis to analyze results and effectiveness of our efforts.







NCOE PEER EXCHANGE Technology Planning and Integration

LESSONS LEARNED

Using video to tell our story and posting on social media has been very successful. Whether it's a News Flash video, or our Donner Pass superintendent sending traffic updates on Twitter while in a snowstorm, the public and media have really embraced our messaging.

- Our statewide social media messaging reached nearly 40 million people from January through March this
 year. We have had an increase of media coverage through our social media efforts and due to major
 storms.
 - o Social media implementation was initially met with resistance, but has now become a very powerful tool.
 - o It took a lot of time to get institutional buy-in, and Caltrans still remains relatively conservative to this day.



This "outside the box" tweet proved effective and popular, while also staying relevant to the department and tying into trending topics on Twitter.

 Maintaining open communication with internal divisions and developing

relationships with outside partners is key to providing the public with information to enhance safety and quality of life.

- Getting QuickMap approved for the iOS (iPhone) platform took longer than Android. Apple has a more difficult process for approving apps.
- Be careful when working with third-party consultants or with multiple accounts. A vendor once placed an advertisement for avocados on our Facebook page, as they had the accounts mixed up.