OVERVIEW

California is the most populated state in the union and consistently among the most congested. Especially in areas such as Los Angeles and the Bay Area, adding capacity is not an option, due both to funding and lack of space to do so. As a result, Caltrans is looking towards technology to better utilize the roads it does have to more effectively move goods and people.

COMMUNICATIONS PLANNING

Three big technologies being explored and starting to be implemented as part of the department's infrastructure planning are:

- Autonomous/semi-autonomous vehicles
- Connected Vehicles (Vehicle-to-Infrastructure and Vehicle-to-Vehicle)
- Truck Platooning (use technology to connect semis so they can travel as one unit)

Since these are new technologies, communications efforts internally and externally are part of setting the department's course and essential to defining Caltrans' role and commitment to deploying such new tech for the next generation of transportation. The department's key message is using technology as a tool for traffic congestion and a safer and more efficient system.

Legislation gave the state DMV the lead on regulations and guidelines for the testing and future deployment of autonomous vehicles. Caltrans has focused its messaging on testing and updates to its infrastructure – such as more reflective and wider striping and the potential removal of Botts' Dots – in consideration of such future technologies.

ORGANIZATIONAL INTEGRATION

Caltrans continues to make a significant push internally to promote the need for and value of innovation and technology. Most recently, this included:

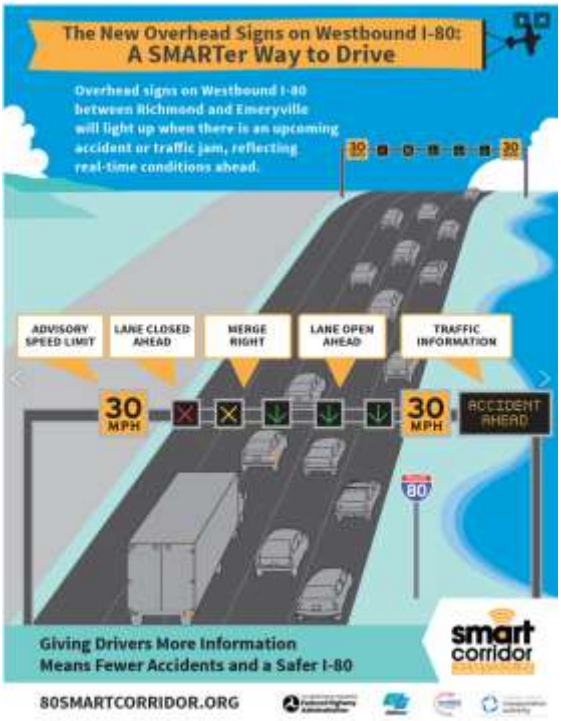
- An internal video from Director Dougherty, sent to all staff, about the department's involvement in a truck platooning demonstration in Los Angeles.
- A Director's Town Hall on innovation.

Caltrans HQ has also worked closely with its district PIO teams on the messaging, materials and rollout for events surrounding these new technologies, such as a new connected vehicle test bed in Palo Alto and a SMART corridor in the Bay Area. Caltrans also works closely with the DMV to coordinate complementary statements to the media regarding autonomous vehicles and the highway improvements that support the new technology.

COMMUNICATIONS IMPLEMENTATION

Several events showcasing new technologies have taken place across the state. In the case of the I-80 SMART corridor, where displays above a congested Bay Area highway provide commuters with real-time congestion information, there was an educational push prior to the sign activations through

written materials, a website, social media and Caltrans News Flashes. Caltrans also conducted a media bus tour to show them how the new technology would work. Tutorials and graphics were also necessary to educate the public about the new directions the signs would provide when there was a lane-blocking incident. Caltrans continues to make a significant push internally to promote the need for and value of innovation and technology.



The ribbon cuttings and the media attention generated by each were opportunities not only to educate the public how the devices work, but to detail the value that would be added by the investment.

On March 8, with FHWA and local partners, Caltrans was part of a truck platooning demonstration on I-110 near the Port of Los Angeles. Besides promoting the event via a press release and social media, Caltrans is utilizing that demonstration and an upcoming one in the Bay Area as platforms for its messaging regarding efficiency and innovation on the state highway system.

LESSON LEARNED

- Communications coordination with local and regional agencies is a must, especially for connected vehicles issues. While Caltrans is responsible for more than 6,000 signalized intersections, most of those actually belong to regional and local transportation agencies. Not only must we work with them to install the technologies, they are an ally in educating the public about the value of those systems.

- Old, outdated technologies have their fans who can be vocal. Caltrans is looking to phase out Botts' Dots which testing has shown is not "readable" as a lane delineator by some autonomous vehicles. Several transportation columnists have encouraged "fans" to write in to Caltrans to save Botts' Dots. As a result, Caltrans needed to conduct several interviews to explain its decision and create talking points for its districts to use when receiving media and constituent calls on the topic.

- There is a delicate balance to be kept when talking about paying for new, often expensive technology while also advocating for more money to maintain current infrastructure. There is a risk that the public may balk at Caltrans spending money on "shiny toys" while also saying it needs significantly more money to maintain crumbling, aging infrastructure. The value of these such technological investments needs to be discussed as part of broader dialogue of how Caltrans will improve the state infrastructure system.