## INNOVATION FAIR 2022

## Touch-Free Accessible Pedestrian Signal (APS)

DIVISION OF OPERATIONS

**KENNETH XU** 

The commonly deployed and existing Accessible Pedestrian Signal (APS) technology provides audible signal for pedestrian to locate the pushbutton and requires the pedestrian to push a button to notify the traffic signal controller that they want to cross an intersection. The COVID-19 pandemic has prioritized health and safety in California communities. Minimizing the spread of contact-related pathogens is on everyone's mind. In response to a growing need and to advance the implementation of public health safety measures, Caltrans touch-free APS task force including a District 04 member, Ken Xu, developed new specifications for a touch-free APS. The touch-free APS technology is applied to minimize the spread of contact-related pathogens. The touch-free APS allows the pedestrian the option to place a "call" to cross the street by either using the pedestrian push button or by waving their hand in front of the touch-free APS.

Deployment of the touch-free APS technology enhancement is now mandatory for all Caltrans traffic signals. The specifications can be used by local agencies and other DOTs to also implement this technology enhancement thereby further safeguarding our public.

To quickly address the COVID-19 public health concerns, we started a change order for the State first mass deployment of the touch-free APS. The change order was done through a regular APS installation project during the early stage of the pandemic to cover total 17 locations. The project number for the APS installation is 0400021202 (EA 04-2G7304) on Routes: 85, 82, 80, 580-Var in Santa Clara and Alameda Counties of District 04. The total change order cost was \$23,123. A photo of the new system and an exhibit of its operation are included below.



