May 24, 2021

The Honorable Gavin Newsom
Governor of California
1303 10th Street, Suite 1173
Sacramento, CA 95814

The Honorable Steve Bennett
Assembly Member, 37th District
State Capitol, Room 4164
Sacramento, CA 95814

The Honorable Monique Limón
Senator, 19th District
State Capitol, Room 3092
Sacramento, CA 95814

Mr. Mark Ghilarducci
Director, CalOES
3650 Schriever Avenue
Mather, CA 95655

RE: Budget Item for Independent Mobile Cell Towers For Wildfire Response

Dear Governor Newsom, Senator Limón, and Assembly Member Bennett,

California’s 2020 wildfire season was the largest in the state’s recorded history. Over 4 million acres were burned as firefighters battled over 10,000 fires. As you may be aware, first responders experienced numerous breakdowns and other life-threatening emergency communications failures while fighting these deadly fires. The vulnerability of existing cellular communication infrastructure, to this end, cannot be overstated. The destruction of just one standing cell tower has the potential to impact emergency notification systems and communications between both civilians and emergency response personnel.

Reports following the 2017 Sonoma County fires stated efforts by emergency personnel to send urgent messages to local residents over Nixle and SoCalAlert – which were capable of reaching over 21,000 cellphones – largely failed because nearly 80 cell towers were damaged or destroyed. This collapse of infrastructure resulted in the responding emergency personnel being unable to restore communications and a tragic loss of life. Cell reception along the Central Coast is unreliable as well as the region is prone to major fires, such as the Thomas Fire in 2017. To better protect life and property in 2021 and beyond, California’s Firefighters and the other emergency personnel they serve alongside require fully infrastructure independent communications capabilities that are more reliable, more versatile, and much more robust than even the best tools at their current disposal.

The Santa Barbara County Board of Supervisors joins in support of the California State Senate funding request to purchase Mobile Operations Emergency Satellite Systems (M.O.S.E.S.), in order to establish wifi and LTE connectivity in a communications dead zone and push connectivity out to a simulated fire line. These devices would be purchased through CalOES and deployed both under its Mutual Aid program and directly to selected county fire departments including Santa Barbara County.
In 2020, the Santa Clara County Fire Department (SCCFD) received two MOSES units through state funding (FY2019). In testing conducted during the summer and fall of 2020, and documented by SCCFD in a White Paper, MOSES connection speeds over the three major wireless carriers outperformed more typical connections by 5-10 times. This capability means that California firefighters will not be “invisible” to incident command, planes dropping fire retardant, or life-threatening changes in a fire’s progression. Lives lost in past fires because this communication capability was not possible can now be prevented.

The platforms include the ability for hundreds of simultaneous users to communicate over LTE, Land Mobile Radio (LMR), and WiFi via connectivity to satellite, network cable, or cellular towers. Bandwidth sourced from cellular towers will include access to bands 12 and 14, at distances of up to 10 miles (scalable through tactical mesh with other regional platform assets). The platform will include the ability to provide connectivity and location awareness among front line firefighters and remote incident command along multiple points of active fire lines. This technology will save lives.

M.O.S.E.S. is a rapidly deployable, highly mobile, highly durable and infrastructure independent platform that provides various and robust communications capabilities, while also improving the performance and durability of traditional emergency communications tools. This non-technical, single-personnel “set-up and go” communications platform with on-board power capabilities allows a single firefighter to provide an array of communications capabilities over a wide area to multiple simultaneous users within 15 minutes of deployment – which can be by small vehicle tow, helicopter lift, or pre-placement.

M.O.S.E.S. delivers uninterrupted connectivity through cellular (4G/LTE), satellite (geosynchronous), or wired connection and fully supports Land Mobile Radio (LMR) users. M.O.S.E.S.’ high-speed, low-cost cellular connections significantly outperform more traditional cellular connections and, where cellular is unavailable, the satellite connectivity provides reliable, high-speed low-cost bandwidth in nearly any scenario, including widespread failures resulting from fires, earthquakes, and significant acts of terrorism or sabotage.

The M.O.S.E.S. platform will not only serve as a powerful standalone resource for California’s fire fighters, it has also been proven to dramatically increase the functionality of other assets, including the Mobile Command Units, and other communications tools.

The Board of Supervisors adopted a 2021 Legislative Platform that includes Inter-Agency Collaboration that supports partnering with neighboring cities, special districts, and other local agencies on infrastructure and other large-scale projects when possible that include mutually beneficial issues such as disaster prevention and response and recovery amongst others while upholding the principles of efficient service delivery and operations, fiscal stability and local control.

In addition, the Legislative Platform also includes a Public Safety and Criminal Justice Reform Plank that provides the tenet of the public safety departments in the County of Santa Barbara is the protection of life and property through highly competent delivery of emergency response, fire prevention services, constitutional and effective law enforcement, custody, and rehabilitation services that provide a high level of safety to residents and visitors.

For these reasons, the Santa Barbara County Board of Supervisors is pleased to support the funding request for the Mobile Emergency Satellite Operating System (M.O.S.E.S.)
questions about the Board’s position, please contact the County’s Legislative Coordinator, Jasmine McGinty at 805-568-3108 or jmcginty@countyofsbc.org. Thank you for your consideration.

Sincerely,

Jasmine McGinty
Legislative Coordinator
County of Santa Barbara

cc: Members, County of Santa Barbara Board of Supervisors
    Mona Miyasato, County Executive Officer
    Nancy Anderson, Assistant County Executive Officer