



**CVR-SAFE Board**  
**Meeting Date:** 9/20/2018  
**Agenda Item No.:** 2018-September-2.

**Subject:** Approve CVR-SAFE Call Box Modernization Plan Phase II (Est. time: 0 minutes)

**Consent**

**Prepared by:** Barbara VaughanBechtold

**Approved by:** James Corless

**Attachments:** Yes

**1. Issue:**

Should the board approve the Capitol Valley Regional Service Authority for Freeways and Expressways (CVR-SAFE) Call Box Modernization Plan Phase II?

**2. Recommendation:**

The CVR-SAFE Committee unanimously recommends that the CVR-SAFE board approve the Call Box Modernization Plan Phase II, and authorize the Chief Executive Officer (CEO) to: (1) submit for approval the Call Box Modernization Plan to the California Department of Transportation (Caltrans) and the California Highway Patrol (CHP); (2) contingent on Caltrans and CHP Plan approval, release a Request for Proposals (RFP) for the Call Box Modernization work; and (3) authorize the CEO to negotiate a contract with the selected vendor.

**3. Background/Analysis:**

Phase I of the Call Box Modernization Plan, which removed 48 percent of the system and upgraded remaining call boxes to 3G cellular service, was completed in Fiscal Year (FY) 2016-2017. In November 2017, Verizon announced that they will be eliminating all 3G service by the end of 2019. Call boxes must either be removed or upgraded to 4G cellular service by December 31, 2019, to continue working. SAFE programs across California are impacted by the technology change.

At the May CVR-SAFE committee meeting, staff identified several potential approaches for the six counties within the CVR-SAFE system. The committee chose the option of removing a majority of call boxes with less than five calls per year and upgrading the remainder, but asked staff to reach out to the appropriate jurisdictional staff within the

CVR-SAFE area to obtain input on the call box locations to be modernized or removed as part of the chosen Plan.

CVR-SAFE staff reached out and received input from most of the jurisdictions in the CVR-SAFE area. A number of jurisdictions and regional transportation planning agencies gave specific direction on removing or retaining and upgrading particular call boxes or groups of call boxes along roadway segments based on their local knowledge of services available in the area, public safety, etc. These include: El Dorado County Transportation Commission, City of Galt, City of Marysville, Sacramento County, San Joaquin Council of Governments, Sutter County, City of West Sacramento, Yolo County, and Yuba City. The other jurisdictions deferred to CVR-SAFE staff and committee recommendations.

#### **4. Discussion/Analysis:**

The Modernization Plan shown in the attachment provides detailed removal, upgrade, and cost estimates by county. The Modernization Plan proposes largely removing call boxes that had fewer than five calls in 2017, installing 511 roadside assistance signage along those roadway segments where call boxes are removed as mitigation for those removals, and upgrading all bike trail call boxes and the remaining roadway call boxes to 4G service. This would remove 154 roadside call boxes in the CVR-SAFE area, leaving 238 roadside and 62 bike trail call boxes in place. This amounts to removing 39 percent of the roadside call boxes remaining in the system after the Phase I modernization. A map with recommended removals and retained locations can be seen here (<https://bit.ly/2Bxveuh>). This Plan does not address Glenn or Placer counties, as they prefer to upgrade all of their existing call boxes and will reimburse SACOG for all related costs.

Staff requests approval of the Phase II Plan with any additional modifications the board may choose to make. After final board approval, staff will take the Modernization Plan to Caltrans and the CHP for their approval, then release an RFP for the Call Box Modernization work.

#### **5. Fiscal Impact/Grant Information:**

The actual number of call boxes removed or upgraded will ultimately determine the fiscal impact to the CVR-SAFE program. Staff estimates there are sufficient funds in the current FY 2018-2019 CVR-SAFE budget for Modernization Plan Phase II work this fiscal year. Any remaining costs for completion by December 2019, will be included in the FY 2019-2020 budget. Regardless of the number of call boxes that are modernized or removed, no fiscal impact to SACOG's operating budget is anticipated. CVR-SAFE is an enterprise program fully supported by the revenue generated through vehicle registration fees.

#### **6. This staff report aligns with the following SACOG Work Plan Goals:**

7. Deliver Key High-Profile Transportation Projects, 9. Better Connect and Communicate with Members and Regional Electeds

#### **ATTACHMENTS:**

**Description**

Attachment: Proposed CVR-SAFE Call Box Modernization Plan Phase II

## Proposed CVR-SAFE Call Box Modernization Plan Phase II

	El Dorado	Sacramento	San Joaquin	Sutter	Yolo	Yuba	Six County
Current # of roadside call boxes	42	83	139	34	65	29	392
# of roadside call boxes to be removed	34	20	57	12	21	10	154
% of roadside call boxes to be removed	81%	25%	41%	35%	32%	35%	39%
<b>Removal cost (\$600/call box)</b>	\$20,400	\$12,000	\$34,200	\$7,200	\$12,600	\$6,000	<b>\$92,400</b>
# of 511 signs added***	17	10	28	6	10	5	76
<b>Signage cost (\$700/sign)</b>	\$11,900	\$7,000	\$19,600	\$4,200	\$7,000	\$3,500	<b>\$53,200</b>
# of bike trail call boxes remaining**	0	48	0	6	3	5	62
# of roadside call boxes remaining	8	63	82	22	44	19	238
Total # of call boxes remaining	8	111	82*	28*	47	24*	300
# of call box sites with coverage of only 3 major cellular carriers	0	0	1*	1*	0	4*	6
<b>Upgrade to 4G Cost (\$1,600/call box)</b>	\$12,800	\$177,600	\$131,200	\$44,800	\$75,200	\$38,400	<b>\$480,000</b>
<b>Total Removal/Upgrade Costs (incl. 10% contingency)</b>	<u>\$45,100</u>	<u>\$196,600</u>	<u>\$185,000</u>	<u>\$56,200</u>	<u>\$94,800</u>	<u>\$47,900</u>	<b><u>\$688,160</u></b>
<b>Annual maintenance cost after removals (\$39.63/call box monthly maint. + \$19.63/retained cost for permanently removed call box)</b>	\$11,814	\$57,498	\$52,423	\$16,142	\$27,298	\$13,769	<b>\$178,944</b>
<b>Estimated cost to upgrade 4G call boxes to 5G in 3 years (assumes 4% annual cost increase &amp; 10% contingency)</b>	\$14,400	\$199,800	\$147,600	\$50,400	\$84,600	\$43,200	<b>\$594,000</b>

\* The number of call boxes remaining includes the 6 call box sites that do not have full cellular coverage.

\*\* No bike trail call boxes will be removed.

\*\*\* 511 signage will only be installed in roadside locations.