

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Robert Sapien, Jr.

**SUBJECT: FIRE DEPARTMENT LUCAS
DEVICES DEPLOYMENT**

DATE: April 4, 2022

Approved



Date

04/05/22

INFORMATION

In October 2021, the San José Fire Department (Fire Department) deployed 29 LUCAS mechanical chest compression devices, thus strengthening the total number of deployed LUCAS devices to 47 and enabling standardization to all front-line Engines, Trucks, and Rescue Medics (formerly Squads) apparatus across San José.

The 2020-2021 Adopted Operating Budget appropriated one-time funding of \$437,000 for the purchase of 22 LUCAS mechanical chest compression systems. Additionally, through the 2020 Category C EMS Trust Fund, the County of Santa Clara Health System granted funding of \$152,561 to procure an additional 7 LUCAS devices.

The LUCAS device is intended for non-traumatic cardiac arrest in patients 18 years and older. The device performs cardiopulmonary resuscitation (CPR) compression rates at the higher rate of 111 beats per minute (bpm) and is integrated with Bluetooth technology. This new Bluetooth connectivity allows improved quality assurance monitoring to the Fire Department's Emergency Medical Services Division.

The Fire Department responds to more than 1,000 cardiac arrest events per year. Three recently published studies from the *Journal of the American Heart Association*, *American Journal of Nursing*, and *U.S. National Library of Medicine* indicate the survival rate from cardiac arrests could increase by 11% through the deployment of mechanical CPR devices to all response units. This recent deployment of LUCAS devices to all front-line apparatus has the potential to result in approximately 120 additional cardiac survivors each year.

/s/

ROBERT SAPIEN, JR.

Fire Chief, Fire Department

For questions, please contact Scott Coscarelli, Deputy Fire Chief, at scott.coscarelli@sanjoseca.gov or (408) 794-6997.

