MEMORANDUM

To: Mayor and City Council

From: Kevin Richardson, Fire Chief

Date: September 22, 2020

Reference: Consider approval authorizing the purchase of four Lucas CPR Chest Compression Systems for the Fire Department from Stryker Medical in the amount of $77,162.32 through CARES Act funds: and authorizing the City Manager to sign any necessary documents.

2030: Sustainable City Government

Introduction:

The Automatic CPR (Cardio Pulmonary Resuscitation) device delivers improved blood flow without interruptions and reduces rescuer fatigue, and provides paramedics better access to the patient, resulting in the possibility of improved survival for cardiac arrest victims.

It provides mechanical chest compressions that are hands free and allows paramedics to perform other lifesaving activities, or while transporting a patient down the stairs or in the back of a moving ambulance. It also, ensures improved blood flow during CPR and allows the paramedics to be properly seat belted for safety during transport.

Some key features of the LUCAS 3, v3.1 device that can help with caregiver safety during COVID-19 include:

- Ability to maintain distance from suspected and confirmed COVID-19 patients during CPR
- Reduced number of caregivers needed to administer chest compressions during a code compared to a rotation of caregivers providing manual CPR
- Improved caregiver safety when providing CPR during transport

Existing American Heart Association (AHA) cardiopulmonary resuscitation (CPR) guidelines do not address the challenges of providing resuscitation in the setting of the COVID-19 global pandemic, wherein rescuers must continuously balance the immediate needs of the victims with their own safety. To address this gap, the AHA, in collaboration with the American Academy of Pediatrics, American Association for Respiratory Care, American College of Emergency Physicians, The Society of Critical Care Anesthesiologists, and American Society of Anesthesiologists, and with the support of the American Association of Critical Care Nurses and National EMS Physicians, has compiled interim guidance to help rescuers treat victims of Cardiac arrest with suspected or confirmed COVID-19. Complicating the emergent response to both out-of-hospital and in-hospital cardiac arrest is that COVID-19 is highly transmissible, particularly during resuscitation, and carries a high morbidity and mortality.

Adjustments to CPR algorithms in suspected or confirmed COVID-19 patients include the use of mechanical CPR devices.

Analysis:

The Coppell Fire Department currently uses a different brand and style of CPR device. The units are nearing their expected life span and are behind recent technology improvements. Additionally, the current units are experiencing mechanical failures, regular maintenance/repairs, and are becoming more and more unreliable.

The new LUCAS 3, v3.1 Chest Compression System provides high-quality, guideline-consistent chest compressions during a sudden cardiac arrest with minimal interruptions. The LUCAS device is designed to improve CPR quality while prioritizing caregiver and patient safety. As a result, victims receive more consistent and high-quality chest compressions, improving blood flow during resuscitation, leading to a higher level of care and successful resuscitations.

Legal Review:

Agenda item did not require legal review.

Fiscal Impact:

The fiscal impact of this agenda item is $77,162.32 total. Funding for this item qualifies for the CARES Act funds.

Recommendation:

The Fire Department recommends approval.