



NEWPORT BEACH

City Council Staff Report

March 24, 2026
Agenda Item No. 10

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

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TITLE: Purchase of Replacement Cardiac Monitors and AutoPulse® Automatic Chest Compression Devices

ABSTRACT:

Newport Beach Fire Department (Nbfd) personnel are trained and prepared to respond to medical calls using a variety of specialized emergency medical services (EMS) equipment. Portable cardiac monitors allow staff to monitor patient vital signs, provide defibrillation and transmit electrocardiogram (ECG) data to hospitals to prepare for the patient's arrival. Mechanical cardiopulmonary resuscitation (mCPR) devices provide automated, consistent chest compressions to sudden cardiac arrest victims. New, improved versions of the existing monitors and mCPR devices are now available from Zoll Medical Corporation (Zoll). The Nbfd purchased its first AutoPulse mCPR devices in 2088 from Zoll and the devices have been instrumental in providing sustained high-quality CPR over the years. Staff is requesting approval to purchase new units to replace and upgrade the department's existing inventory.

RECOMMENDATIONS:

- a) Determine this action is exempt from the California Environmental Quality Act (CEQA) pursuant to Sections 15060(c)(2) and 15060(c)(3) of the CEQA Guidelines because this action will not result in a physical change to the environment, directly or indirectly;
- b) Approve the selection and purchase of 24 Zoll Zenix® Monitor/Defibrillators and 11 Zoll AutoPulse® NXT mCPR devices and associated components and warranties, using cooperative selection and pricing under National Purchasing Partners (NPPGov) Contract PS 25850, and authorize the Administrative Services Department to issue the purchase orders; and
- c) Approve Budget Amendment No. 26-064 appropriating \$1,774,636.53 in increased expenditures in Account 75604-911024 (Fire Equipment) from the Newport Beach Fire Department's unappropriated Internal Service Fund (ISF) equipment fund balance.

DISCUSSION:

Electrocardiograms (ECGs or EKGs) are tests that record a heart's electrical activity and are used to monitor and diagnose a patient's heart condition. Portable cardiac monitors

are advanced life support systems that can perform various ECG functions on-scene and during transport. These include heart rate monitoring and pacing, defibrillation, oxygen/CO₂ levels, and whether cardiopulmonary resuscitation (CPR) is being delivered adequately. ECGs serve as key pieces of equipment that assist firefighter-paramedics in providing life-saving care, especially for cardiac patients.

Zoll manufactured cardiac monitors have been purchased and used by the Nbfd for over two decades, and are found on every ambulance, fire engine, and one of the two fire trucks. The current X-Series© monitors have performed well; their durability and reliability, coupled with good warranties and proper maintenance, have allowed the department to operate them beyond the department's standard replacement cycle of five years. The oldest units were built in 2014, with newer units built in 2019 and 2023.

Towards the end of September 2025, Zoll released a replacement for the X-Series© called the Zenix©. The model incorporates various improvements (largely the result of feedback from various public safety agencies and hospitals) and additional features, including a better interface and larger touchscreen, optimization for pediatric patients, and improved workflows. Due to the design of the Zenix, operational procedures are different, and existing X-Series supplies, components and attachments are not interchangeable, requiring a full inventory replacement.

The Nbfd EMS Division requested a demonstration sample from Zoll and conducted various training and field trials. Based on these trials, the Nbfd would like to replace and upgrade its entire inventory of X-Series monitors with Zenix monitors, ensuring the department is utilizing the best lifesaving equipment when serving the community.

Mechanical CPR Devices

Mechanical CPR Devices provide automated chest compressions to sudden cardiac arrest patients and can be an effective alternative to manual chest compressions. They are particularly useful when moving or transporting a patient as compressions can continue uninterrupted, increasing their chances of survival. Orange County EMS guidelines mandate that some form of mCPR device be available for use by every Orange County fire department on every cardiac arrest patient.

AutoPulse© devices, also manufactured by Zoll, are found on every fire engine and fire truck (as they are typically the first apparatus on scene.) The AutoPulse has been in use by the Nbfd since 2008; devices are typically replaced on a seven-year cycle. Six of the 10 devices in the department's inventory were replaced in 2023, and four are due to be replaced in 2026.

Zoll has replaced the original AutoPulse for a new, improved model in early 2025 known as the AutoPulse NXT©. Improvements include a lighter, more compact design, better data integration, battery management and charging, controls on both sides of the device for ease of use, and easier decontamination. The NXT version is also designed to be compatible with the new Zenix monitor.

Attachments, supplies, chargers and batteries for the NXT are not interchangeable with the original AutoPulse, and service and support will be eventually phased out for the model in the department's inventory. In order to maintain consistent inventory and maintain a singular training regimen/operating process, the Nbfd would like to replace its entire inventory of AutoPulse devices with the AutoPulse NXT.

Selection

Per Administrative Policy AP-001, cooperative purchasing may be utilized if the procurement requirements of the cooperative meet the City' of Newport Beach's purchasing requirements. In most cases, cooperative procurements create an economy of scale, allowing manufacturers to sell in greater volume and pass the savings on to participating agencies through reduced pricing. NPPGov is a national cooperative procurement organization that offers publicly solicited contracts to various public agencies. Membership in the organization is free and there is no obligation to purchase through any solicitation. The City is an active member of NPPGov and has previously used cooperative pricing on various purchases (including prior cardiac monitor purchases.)

On May 12, 2025, the League of Oregon Cities served as a lead agency under NPPGov to publicly solicit proposals for medical products, monitors, data transmission, and other medical services. Six firms were awarded agreements, including Zoll. Zoll's Master Price Agreement (Contract No. PS25850) provides various discount rates for different medical product categories, including the Zenix and AutoPulse NXT.

FISCAL IMPACT:

Cardiac monitors and Autopulse devices are currently part of the Nbfd's equipment ISF replacement program. Monitors have a replacement cycle of five years, and Autopulse devices every seven years.

The monitors have proven to be reliable and robust, enabling the department to defer replacement and accrue additional savings into its Internal Service Fund (ISF) fund. There is sufficient funding in the Nbfd's unappropriated ISF equipment fund balance to support complete replacement purchases of its existing inventory of cardiac monitors and mCPR devices to the newest models.

If approved, the Nbfd would purchase 24 monitors (including additional backup/reserve units) for a total of \$1,434,780.60, and 11 AutoPulse NXTs for a total of \$339,855.93, including applicable trade-in credits, associated accessories, four-year warranties, and taxes. This equates to a cost per unit of \$59,783 per Zenix monitor, and \$30,896 per AutoPulse NXT. This is approximately \$1,819 higher per monitor and \$3,839 higher per AutoPulse NXT than previous ISF replacement estimates for existing models.

The Budget Amendment appropriates \$1,774,636.53 in increased expenditure appropriations in Account 75604-911024 (Fire Equipment) from the Nbfd's unappropriated ISF equipment fund balance.

ENVIRONMENTAL REVIEW:

Staff recommends the City Council find this action is not subject to the California Environmental Quality Act (CEQA) pursuant to Sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly.

NOTICING:

The agenda item has been noticed according to the Brown Act (72 hours in advance of the meeting at which the City Council considers the item).

ATTACHMENTS:

- Attachment A – NPPGov Intergovernmental Cooperative Purchasing Agreement
- Attachment B – Zoll Master Price Agreement PS 25850
- Attachment C – Quote 134496 Zoll Zenix©
- Attachment D – Quote 129247 Zoll AutoPulse NXT©
- Attachment E – Budget Amendment