



# City of Fayetteville

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## Legislation Text

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**TO:** Mayor and Members of City Council

**THRU:** Telly C. Whitfield, Ph.D., Assistant City Manager

**FROM:** Dwayne Campbell, Chief Information Officer  
Gina V. Hawkins, Chief of Police  
Tracey Broyles, Budget and Evaluation Director

**DATE:** May 13, 2019

**RE:**  
**Adoption of Budget Ordinance Amendment 2019-13 and Capital Project Ordinance Amendment 2019-35 to Appropriate \$354,000 from General Fund Fund Balance for Replacement of Police Mobile Data Computers**

**COUNCIL DISTRICT(S):**  
All

**Relationship To Strategic Plan:**

Goal V: Sustainable Organizational Capacity

Objective A: To ensure strong financial management with fiduciary accountability and plan for future resource sustainability by aligning resources with City Priorities

**Executive Summary:**

The Council is asked to adopt Budget Ordinance Amendment (BOA) 2019-13 and Capital Project Ordinance Amendment (CPOA) 2019-35 to provide \$354,000 of additional funding needed for replacement of Police mobile data computers.

The City of Fayetteville Police Department (FPD) has used Hewlett Packard (HP) Revolve Laptops, also referred to as mobile computer terminals (MCTs), within all of its patrol vehicles. Current systems are at the end of functional life and the HP replacement models are not compatible with the new Visual Mobile Computer Terminal software that supports Automatic Vehicle Location in the patrol vehicles. The previous replacement cycle for all patrol vehicles was in 2015.

Staff proposes to replace the existing systems with a semi-rugged Panasonic computer and ruggedized secured port replicator docking system designed for in-car utilization. While there is a significant variance in cost between the existing and future equipment, staff is confident that the new

devices will provide enhanced and more secure service to the patrol officers. In addition, the upgraded replacement will allow the police MCT replacement schedule to be adjusted from three years to five years, therefore extending and increasing the return on investment by incorporating a device designed for the actual environment in which it will be used.

### **Background:**

The Information Technology department (IT) is responsible for the management and replacement of City computing resources. The Computer Replacement Plan is designed to ensure desktop and laptop systems are refreshed after the end of the equipment's useful life and before failure. The Computer Replacement Plan is an annual project within the Capital Improvement Plan/Technology Improvement Plan. Due to the 24/7 schedule, public safety equipment is on a three year replacement rotation rather than the typical five-year cycle for other departments. Therefore, 455 police MCTs are in need of replacement.

MCTs are mounted into docks and the cost of these docks currently reside with the vehicle replacement program cost. The docking stations used for the Revolves were configured to support the equipment at the time. The modified desktop docking stations do not secure the HP Revolves properly while the vehicle is in motion or making the equipment increasing susceptibility to damage while removing from docking station to conduct general business.

Staff recommends replacement of 455 existing HP Revolves with Panasonic semi-rugged laptop computers that include port replicator docks designed specifically for in-car use. The Panasonic computers have been reviewed and tested by Police personnel and confirmed as a viable replacement for the existing MCTs. Additional benefits of the proposed replacement model will result in device consistency between patrol officers and detectives, as well as forensics and crash investigation teams.

Staff also recommends that laptop docks be incorporated in the laptop replacement budget to centralize cost management of MCT replacements and ensure proper industry standard level equipment will be used at all times thus, allowing public safety in their service delivery as well as avoid untimely device failure.

The previous replacement cycle was in 2015. Current systems are at the end of functional life and the HP replacement models will not work with the new Visual Mobile Computer Terminal software that supports Automatic Vehicle Location in the patrol cars. IT proposes to replace the systems with a semi rugged Panasonic computer and ruggedized secured port replicator.

### **Issues/Analysis:**

The City of Fayetteville Police Department (FPD) has made investments in this area building citizen trust through the use of body cams and in-car cameras, along with operational improvements by equipping patrol cars with mobile computing terminals (MCTs) for officers. This specific improvement

allows for immediate direct access to CJIS (Criminal Justice Information System) data, improving officer safety during citizen engagement, and decreasing response time, through the use of AVL (Automatic Vehicle Location). AVL allows 911 Communication Dispatchers to dispatch the closest available patrol unit when a citizen requires aid, and lends to officer safety by tracking the last known location of an officer's vehicle, in case assistance is required. Operational efficiencies have also been improved by allowing the officer to complete and submit reports to RMS (Report Management System) immediately versus the traditional re-writing of previous report at the end of each shift.

Although these advancements have been beneficial, they come with requirements. CJIS Compliance governs the access to CJIS data, and mandates the transfer of data to and from the CJIS network be secured to protect its network and the integrity of its data. These mandates are met by the introduction of 2-factor authentication (something the user has and something the user knows, such as an auto generated pin code and a password) to provide secure access from the MCT, hard drive encryption to ensure devices are unusable if lost, and all data traffic is encrypted to and from computing networks via the use of Netmotion VPN (Virtual Private Network) software. MCTs also must be configured to operate efficiently. Devices must survive the extreme temperature changes within a vehicle and movement while the vehicle is in motion. This requirement is met by the use of semi-rugged computing devices.

To achieve this synergy IT staff along with FPD reviewed laptops from Dell, HP, and Panasonic. The Dell laptop exhibited continuous Wi-Fi connection failures and did not pass review. The replacement model for the existing HP Revolve, an HP Elite Book (840) computer, has a built-in Gobi Air Card which is used for cellular connectivity back to City and CJIS networks, but does not support virtual communication ports. Virtual communications ports are required for AVL to function properly. Therefore, the HP Elite Books did not pass review. The Panasonic semi-rugged computer with port replicator dock designed for in-car use passed the review by PD personnel and also works properly with AVL. The device is designed to work within a patrol vehicle, reducing the number of failures related to environment and vehicle mobility. Using the proper device increases the device's useful life.

Current devices in use are end of life, failing in the field, and need to be replaced.

If proper equipment is not budgeted for and used, the potential to have an officer without a MCT is imminent, impeding the officer's efficiency while on duty.

The HP Revolves cost at time of purchase was \$1,514, and the desktop docking station cost was \$180, for a total cost of \$1,694 per unit. The proposed Panasonic semi-rugged laptop computer costs \$1,843 and the in-car docking station port replicator costs \$619 (a \$439 increase in cost), resulting in an overall increase of \$768 per unit for a total cost of \$2,462 per unit.

Although implementing the proposed proper equipment increases the purchase cost, it will also extend the useful life of the laptops, thus decreasing the overall cost per year.

- HP Revolves - \$1,694 / 3 yrs. useful life = \$564.66 cost per year
- Panasonic Semi-Rugged - \$2,462 / 5 yrs. useful life = \$492.40 cost per year

Although implementing the proposed proper equipment increases the purchase cost, it will also extend the useful life of the laptops decreasing the overall cost per year.

The total impact of the cost increase for fiscal year 2019 is \$454,000.

**Budget Impact:**

**\$666,210** funding was planned for Computer Replacement Plan in FY2019 of the 5-year CIP. A Budget Ordinance Amendment (BOA) and Capital Project Ordinance Amendment (CPOA) are necessary to appropriate \$454,000 of additional funding needed for replacement of Police mobile data computers.

\$354,000 is proposed to be funded from General Fund balance and \$100,000 is proposed to be funded using State Forfeiture Funds.

**Options:**

Adopt Budget Ordinance Amendment 2019-13 and Capital Project Ordinance Amendment 2019-35 to Appropriate Additional Funding for Replacement of Police Mobile Computers.

Do not adopt Budget Ordinance Amendment 2019-13 and Capital Project Ordinance Amendment 2019-35 and provide further direction to staff.

**Recommended Action:**

Staff recommends that Council move to adopt Budget Ordinance Amendment 2019-13 and Capital Project Ordinance Amendment 2019-35 as presented.

**Attachments:**

Budget Ordinance Amendment 2019-13  
Capital Project Ordinance Amendment 2019-35