LOS ANGELES FIRE DEPARTMENT

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FIRE CHIEF

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| BOARD OF FIRE COMMISSIONERS |
| FILE NO. 19-017 |

TO: Board of Fire Commissioners

FROM: Ralph M. Terrazas, Fire Chief

SUBJECT: LAFD INFORMATION TECHNOLOGY BUREAU QUARTERLY REPORT

| FINAL ACTION: | _____ Approved | _____ Approved w/Corrections | _____ Withdrawn |
| | _____ Denied | _____ Received & Filed | _____ Other |

SUMMARY
This is the second quarter FY18-19 report of the Los Angeles Fire Department's Information Technology Bureau (ITB) to the Board of Fire Commissioners.

RECOMMENDATION
That the Board:
Receive and file.

FISCAL IMPACT
There is no fiscal impact as this report for informational purposes only.

DISCUSSION
The Information Technology Bureau (ITB) is responsible for the implementation, operation and maintenance of the Department's technology assets. In the 2018-2020 Strategic Plan, ITB is responsible for **Goal 3: Implement and Capitalize on Advanced Technology** and supports several of the other goals that have technology dependencies. The focus of this report is to provide additional detail and update on the primary technology initiatives currently underway.

Computer Aided Dispatch (CAD) and Automatic Vehicle Location (AVL) Systems
Ongoing operational support and enhancement of the LAFD CAD and AVL systems is a primary responsibility of ITB's Development Operations (DevOps) Division. In addition to the normal daily support and maintenance duties, the CAD development team and system stakeholders have accomplished a number of significant projects during this reporting period, including:

- The implementation of several location-based (AVL) enhancements so that the CAD considers a unit's actual location at time of dispatch and during various status changes based on the unit's movement;

- A major upgrade to the CAD map, creating a full integration and use of the LAFD's ESRI GIS mapping capabilities and the addition of new features to improve call-taker and dispatcher situational awareness. Additional enhancements are being developed to integrate the RapidSOS mobile phone location service, which will greatly enhance the LAFD call-taker's ability to accurately locate callers using mobile phones;

- The development and testing of an iOS version of the Mobile Data Computer (MDC) to support cycle team paramedics operating at LAX. This new MDC on an iPhone provides the cycle-teams with enhanced situational awareness that improves response times and reduces radio traffic. Future versions for the iPad are planned for Air Operations;

- The development and early field testing of a new iOS app called mCAD, which is used to provide LAFD members with real-time situational awareness of active incidents and units. Development and testing of mCAD is expected to continue with a planned production release in summer 2019;

- A major upgrade of the CAD hardware infrastructure, replacing aging servers and upgrading database and operating systems to the most current versions. This work ensures that the CAD systems are operating at peak performance levels and on the most current hardware and software. The infrastructure upgrade work will continue into 2019, as the CAD clients are upgraded to Windows10;

911 Phone System Upgrade
On October 11, 2018 the DevOps Division and stakeholders from Metro Fire Communications (MFC) began a new project to replace the eight-year-old 911 phone system with the latest version of West Communication's Intrado VIPER system. Working with our partners at California Office of Emergency Services Emergency Communications Branch (911 Office) and AT&T, this upgrade will help to ensure that the LAFD has state-of-the-art call handling equipment and is ready for the Next-Generation 911 system. Planned to be complete by June 2019, this upgrade has several new operational and administrative features and will also ensure full compatibility with LAPD's new system on the same platform, which is planned to be done by late 2019. Once the two new systems are fully operational, the LAFD expects to have lower transfer times and improved end-to-end call reporting.

Radio Preventive Maintenance Program
On January 14, 2019 the Fire Communications and Dispatch Support Section (FC&DSS) in partnership with the City's Information Technology Agency (ITA) implemented a radio communications preventive maintenance (PM) program. For the first time in LAFD history, all field apparatus will be regularly scheduled once per year to receive detailed preventive maintenance of all radio communications equipment. Four

vehicles (2 light, 2 heavy) are now scheduled per day, four days per week to move to PiperTech where they will receive the PM. This work helps to ensure that all of the critical communications equipment including mobile and portable radios and MDC's are in good working order and have the latest versions of software, firmware and channel plans.

Portable Radio Replacement Project
In early September 2018, the LAFD began receiving shipments of nearly 3500 new multi-band portable radios, the Motorola APX 8000 HSE. Under the direction of the Fire Communications and Dispatch Support Section, a cadre of LAFD team members were trained and the first field test of the radios began in early December in Battalion 18. Following this initial field test, which is expected to end in February, 2019, a scheduled, rolling deployment is planned with all of the portable radios to be deployed by no later than the end of December 2019.

Fire Inspection Management System (FIMS)
ITB and Fire Prevention Bureau (FPB) staff continue to work with contractors to develop and implement new Fire Inspection Management Systems. These projects will eventually consolidate and retire the more half-dozen or more disparate systems, spreadsheets and manual processes currently being used to track fire prevention activity into fewer, fully integrated systems.

During the 2018 brush season, the Brush Clearance Unit (BCU) completed several additional enhancements to the Very High Fire Hazard Severity Zone inspection system known as "VMS 3". These latest enhancements greatly improved inspector accuracy and efficiency as well as integration with the City's electronic payments portal and Financial Management System (FMS). While development work on the brush clearance system continues, ITB and FPB are evaluating options to consolidate the remaining systems into a single system. A decision is expected by no later than June and a new project to begin in July 2019.

Network Staffing System (NSS) Replacement
On August 30, 2018 the LAFD released an RFP to solicit professional software development firms to assist the LAFD in the design and development of a new software system for scheduling, hiring and timekeeping of sworn personnel. On October 29, 2018, the Department received 11 bids and is currently evaluating them. We expect to enter into a contract with a vendor by no later than June 30, 2019, begin development work in early July, and have a new system in place by July 2020.

Fire Station Alerting System (FSAS)
In October 2018, the LAFD and ITA began Phase 1 of the FSAS project which is to replace the aging telephone-line network at each fire station with the City's high-speed, high-availability fiber optics network. This work is on-schedule with the first fire station cutover planned for April 2019 and is projected to be completed no later than July 2020. With the network upgrade underway, the LAFD has begun to evaluate alternatives for Phase 2 of the project, which is to replace the aging Station Control Units (SCU) at each of the 106 fire stations. Once replaced with modern, commercially available fire station alerting equipment, the LAFD will have addressed the most vulnerable and

difficult to maintain parts of the FSAS and be well prepared to expand and enhance the system with new features and capabilities as funding is made available. Phase 2 is expected to begin and run parallel to the Phase 1 network upgrade and end no later than July 2020.

Electronic Patient Care Reporting System (ePCR)
The ITB and EMS Bureaus have been working together since October to develop an RFP to solicit proposals from commercial-off-the-shelf software firms that provide electronic Patient Care Reporting (ePCR) systems. The RFP is expected to be released no later than April 1, 2019, vendor selection made by September 1, 2019 and the project completed in early 2021.

In addition to the projects listed above, the ITB has made progress on several internal process improvements designed to enhance the bureau's overall performance and service delivery. For example, the Development Operations team has implemented an iterative and incremental software development methodology called "Agile scrum" and a new project management tool called Jira to improve development speed, quality and accountability. ITB is also expanding its use of an enterprise helpdesk system to improve access, response times and accountability of IT service requests.

Board report prepared by Scott B. Porter, Chief Information Officer.