

CITY OF OAKLAND

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OAKLAND

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# AGENDA REPORT

**TO:** Sabrina B. Landreth  
City Administrator

**FROM:** Andrew Peterson  
Chief Information Officer

**SUBJECT:** Status Update on 911 System Upgrade and Prime 2.0 Projects

**DATE:** November 20, 2018

City Administrator Approval

Date:

11/20/18

## RECOMMENDATION

**Staff Recommends That The City Council Receive This Informational Report Which Provides An Update On The Next Generation 9-1-1 Public Safety Upgrade and the Court Mandated Performance, Reporting, Information and Metrics Environment System (PRIME 2.0) Projects.**

## EXECUTIVE SUMMARY

In July 2017, City Council approved Resolution No. 86867 C.M.S that authorized funding to upgrade the City's Next Generation 9-1-1 Public Safety Information System and to implement the next phase of the court mandated early intervention system (PRIME 2.0). As part of the resolution, staff was directed to provide a biannual informational report detailing the status of the project including scope, timelines, and expenditures.

The information contained in this report provides an update of progress made on each of these independent projects (911 Upgrade and PRIME 2.0) since the last semi-annual update to Council on May 8, 2018.

## BACKGROUND / LEGISLATIVE HISTORY

### ***Next Generation Public Safety 9-1-1 System***

On July 18, 2017, City Council Approved Resolution No. 86867 C.M.S., which authorized funding for the Next Generation Public Safety System project and execution of a professional services agreement with Motorola Solutions Inc.

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Finance and Management Committee  
December 04, 2018

In August 2017, Information Technology Department (ITD) opened contract negotiations and project scope with Motorola to define a solution more in line with the strategic needs of the City. As a result, the project has been restructured into three phases, as described below.

On December 22, 2017 staff successfully completed Phase 1 negotiations including statement of work, cost, payment schedule, and professional services agreement with Motorola.

The Phase 1 work started in the first quarter of 2018.

### ***PRIME 2.0***

On July 18, 2017, City Council Approved Resolution No. 86867 C.M.S. authorizing the development and deployment of a version 2.0 of a court mandated Performance, Reporting, Information and Metrics Environment System ("PRIME 2.0").

The goal of PRIME 2.0 includes revamping and the enhance of OPD's in-house developed personnel database, rewriting of the PRIME 1.0 functionality for ease of use and operational efficiency, developing automated key risk management analytics report, integrating training data sources which includes implementing a new commercial training management software for the Academy, and integrating officer-worn camera data for easy search and access to video.

The PRIME 2.0 work started in the first quarter of 2018 and is on target to complete by July 2019.

## **ANALYSIS AND POLICY ALTERNATIVES**

### ***Next Generation Public Safety 9-1-1 System***

Since the last update, the project to implement the selected next-generation public safety system has progressed considerably. As previously mentioned, the project has been divided into three phases:

- *Phase 1:* Including the provision of loaner hardware, the initial configuration of the various software components (including related training), the development of interface specifications and the development of the interfaces themselves.
- *Phase 2:* Agree on the design of a disaster recovery (DR) environment to make the system more resilient, delivery of the configured and tested production hardware and software, delivery of the DR environment and related software, testing of the developed interfaces on the production system, train-the-trainer and end user training on how to use the system, data migration, cut-over to the production system.
- *Phase 3:* Contract negotiation and execution of a maintenance and support with the vendor (Motorola Solutions, Inc.)

The project is approximately one-third of the way through Phase 1. Phases 2 and 3 are still in negotiation with the vendor.

## Phase 1 Update

The following is a high-level update on Phase 1 progress, organized by the major product deliverables.

### PremierOne Computer-Aided Dispatch and Mobile Computing Implementation

- *Kick-Off Meetings:* Motorola conducted a kick-off meeting on March 6, 2018, for the computer-aided dispatch (CAD) and mobile computing work stream of the project with appropriate representation and participation from the Oakland Fire Department (OFD), the Oakland Police Department (OPD) and ITD.
- *Loaner Provisioning Hardware:* Motorola delivered the loaner provisioning hardware and software on March 29, 2018, that OPD and OFD have been using to provision and configure the PremierOne CAD and Mobile products.
- *Provisioning Training:* Motorola delivered over 12 days of training between April 2018 and October 2018 on how to provision and configure the PremierOne CAD and Mobile products. This training was largely attended by the OPD, OFD, and CAD Mobile project teams including representatives from both the OFD and OPD communication centers.
- *Provisioning Work:* OFD, OPD and ITD project team members have started the work of provisioning and configuring CAD and Mobile to function in accordance with OPD and OFD policies, procedures and practices. The teams are also configuring the system to reflect the assets (e.g., cruisers, fire apparatus) and personnel from each department. Due to resource constraints and other priorities, both OFD and OPD project teams were delayed in getting started on these activities which has resulted in a 6-month extension of the project schedule. Provisioning and configuration are now scheduled to wrap up by the end of the first quarter of 2019.
- *Interfaces:* There are 22 interfaces and/or data feeds between CAD and other systems that are in the scope of this project and Motorola is working with the appropriate personnel from OPD, OFD, ITD and third-party organizations to produce interface requirements documents to provide detailed specifications from which they will later build the actual interfaces. This requirements-gathering activity has been initiated, but it is a complicated activity that requires the active cooperation of organizations outside the City of Oakland. It is scheduled to be completed in the second quarter of 2019.

### PremierOne Police Records Management System (RMS)

The structure of the RMS portion of the project closely parallels the structure of the CAD/Mobile piece. Specifically:

- *Kick-Off Meetings:* Motorola conducted a kick-off meeting on March 8, 2018, for the OPD RMS work stream with appropriate representation and participation from OPD and ITD.
- *Loaner Provisioning Hardware:* Motorola delivered the loaner provisioning hardware and software on March 29, 2018, that OPD has been using to provision and configure the RMS.
- *Provisioning Training:* Motorola delivered over 9 days of training between May 2018 and August 2018, on how to provision and configure the PremierOne Police RMS. This training was attended by RMS project team members from OPD and ITD.

- *Provisioning Work:* OPD project team members, with unusually high, hands-on support from Motorola, have started the work of provisioning and configuring the Police RMS to function in accordance with OPD policies, procedures and practices. Due to other priorities, the OPD RMS project teams was delayed in getting started contributing to the 6-month extension of the project schedule mentioned above. RMS provisioning and configuration are now scheduled to wrap up by the end of the first quarter of 2019.
- *Interfaces:* There are 12 interfaces and/or data feeds between RMS and other systems that are in the scope of this project and Motorola is working with the appropriate personnel from OPD, ITD and third-party organizations to produce interface requirements documents to provide detailed specifications from which they will later build the actual interfaces. This requirements-gathering activity has been initiated, but it is a complicated activity that requires the active cooperation of organizations outside the City of Oakland. It is scheduled to be completed in the second quarter of 2019.

#### *Locution Fire Station Alerting System*

- *Kick-Off Meetings:* Locution and Motorola conducted a kick-off meeting on March 30, 2018 for the Locution work stream with appropriate representation and participation from OFD and ITD.
- *Data Provisioning & Analysis:* Data from OFD concerning fire stations, incident types, Oakland street names and other information has been delivered to Motorola's subcontractor Locution and they have reviewed and analyzed the data in preparation for the implementation of their fire station alerting system.
- *Infrastructure Readiness:* For the Locution system to work effectively, the supporting infrastructure in the OFD communications center and at each OFD fire station must be functioning properly. Given the age and questionable condition of certain elements of that infrastructure, particularly the public-address (PA) system at the fire stations, this work stream of the project has been delayed until project stakeholders can agree on an affordable mitigation plan for the PA system. *Schedule:* Assuming the PA system issues gets resolved, then the remainder of this project work stream should be completed by the end of the 2019 (other than that part of the work stream that depends on going live with the new PremierOne CAD system, that is currently scheduled to occur in 2020).

#### *Deccan Decision-Support Software*

- *Kick-Off Meetings:* Deccan and Motorola conducted a kick-off meeting on March 29, 2018, for the Deccan work stream with appropriate representation and participation from OFD and ITD.
- *Data Provisioning & Analysis:* Coupled with an extensive collaborative effort between Deccan and OFD, fire-station apparatus, coverage zones, incident types, historic response statistics, response targets and other data has been provided to Motorola subcontractor Deccan. They have reviewed and analyzed the data to inform the configuration and provisioning process for the products of theirs that are included in project scope.
- *Product Delivery:* Deccan has recently delivered their configured Computer-Aided Dispatch Analyst (CADA) and the Apparatus Deployment Analysis Module (ADAM) software packages and they have been installed. The Deccan Live Move-Up Module

(LiveMUM) software is the last major component and is scheduled to be configured, built and installed before the end of the first quarter 2019.

#### *Zoll Fire Records Management System Upgrade*

- OFD currently uses a Zoll Fire RMS; a major upgrade to that system is included in the scope of this project along with an interface between the upgraded software and the Motorola P1 CAD system. The upgrade is scheduled to occur during Q1 of 2019 and the interface specifications will be approved, the interface developed and deployed by the time the P1 CAD system is scheduled to go live in 2020.

#### *Other*

- *County & State Approvals:* Prior to going live with the new PremierOne system, the City must apply for and receive approval from County and State public safety authorities with respect to the security architecture of the system. This is a lengthy process that can take up to 12-months; ITD has recently initiated the application process.

#### **PRIME 2.0**

As previously noted, the development of PRIME 2.0 will proceed in tandem with PRIME+ (reengineering PRIME 1.0), and includes the four functional areas of development, for a total of five development or project streams. For ease of reporting, we will call the aggregate of the five projects PRIME 2.0. Following is a summary of the progress in each of the five areas.

- 1) A new personnel database to track employee and supervisor assignments that is easier to use and integrates with other PRIME functions.** ITD completed its development of this system (now referred to as "OPD HRM") in July 2018, and moved the system into full production in August 2018. The system has been successfully utilized by OPD Human Resources since going live. Data from the new system has been successfully integrated into the data workflow of PRIME 1.0. Outside of some minor correction and cleansing of data from the old database, the system has performed as expected to date.
- 2) PRIME+ reengineering of PRIME 1.0 – operational data collection and reporting.** As previously reported to the Independent Monitoring Team (IMT), the Scope of Work (SOW) and Professional Services Agreement (PSA) with Sierra was completed in May 2018. Since then, work on the project stream has proceeded as planned. The Discovery and Gap Analysis phase was completed in September 2018 and consisted of several workshops with OPD personnel to establish the requirements for each module of the application and identify the gaps between those requirements and Sierra's baseline application. Following the Discovery and Gap Analysis phase is the Design phase of the project stream, which was completed in October 2018. In this phase, design of the modifications needed to address the gaps were developed. In addition, a list of requirements outside of the scope of the project is compiled and presented to the City. The City is currently awaiting this list, however it should be noted that the list will contain requirements beyond those of the IMT and the Negotiated Settlement Agreement (NSA). The project stream is currently in the

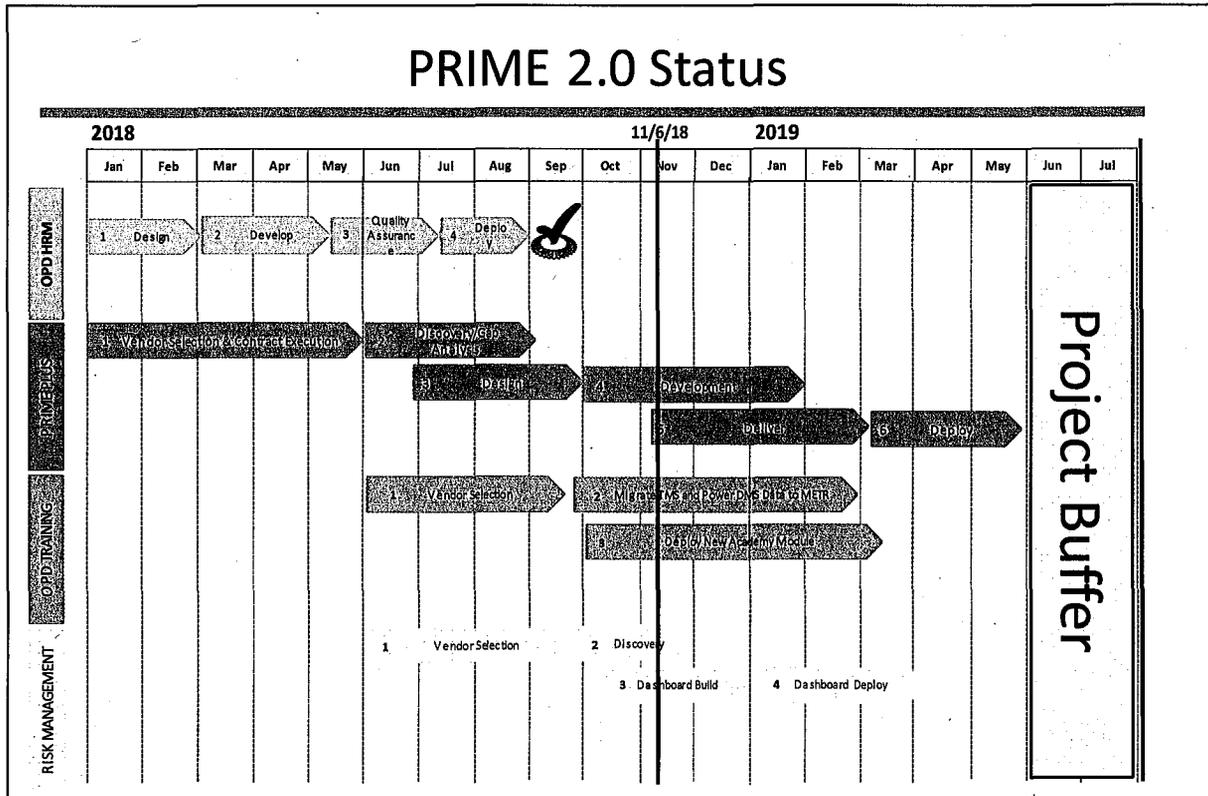
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Development/Implementation phase and tracking according to plan with a projected completion date of May 2019.

- 3) **Ability to access an officers' complete training history.** The City issued a purchase order to Law Enforcement Field Training Applications (LEFTA) corporation in August 2018 to develop a new Academy Training Module, and to migrate OPD's existing training data from TMS and Power DMS (product names), the current field training applications. On both accounts, work is proceeding and is on schedule. LEFTA had done significant work on the Academy Module prior to our formal engagement. A demo of the system was given to OPD and the vendor has worked with OPD to identify gaps between the prototype and OPD requirements. Implementation of the identified gaps are underway. The project stream is projected to be completed in March 2019, including the Academy Module, existing data migration, and integration of ongoing data into the PRIME application.
  
- 4) **Risk Management analytical reporting (being developed in collaboration with Stanford) and dashboards that assist in automatic analysis of stop data and other early warning indicators.** The City selected Slalom as the vendor of choice to complete the Risk Management project stream. The SOW, terms and conditions, and execution of the Professional Services Agreement was completed in September 2018. The Discovery phase of the project began in September and is nearing completion. Several workshops were held with various divisions of OPD including various department Subject Matter Experts (SME), as well as Professor Monin from Stanford and various ITD technical resources. Given the findings, mock-ups of the various dashboards and reports have been created and used as a vehicle to simulate Risk Management scenarios/walkthroughs with the team. This project stream is currently on track but has some risk of slippage due to the timing of data availability from the PRIME+ project stream. If slippage does occur, we anticipate it will be limited to a couple of weeks and will not impact the completion of the overall PRIME 2.0 project.
  
- 5) **Integration of body worn camera (BWC) footage into PRIME to allow immediate review of stops, arrests and uses of force.** The City executed a contract earlier this year (April 2018) with VieVu for new body worn cameras and has worked with VieVu on the requirement for including body worn camera footage in PRIME. A final solution has not been agreed upon. The City is currently awaiting a design proposal from the vendor. This is the least complicated of the work streams and staff does not anticipate this work impacting the overall schedule. It is staff's desire to have the incident related footage automatically included in the PRIME system. However, in the event this is not doable in the short term, links to the relevant footage can manually be copied to the PRIME system as required.

The City anticipates final implementation of PRIME 2.0 in July 2019 (Table 1).

**Project Timeline**



Since the last update, the project to implement the version 2.0 of PRIME system has progressed well. As of October 31, 2018, the PRIME 2.0 project is within budget and on target to complete by July 2019.

**FISCAL IMPACT**

*Next Generation Public Safety 9-1-1 System*

Funding for this project was approved by Council in Resolution No. 86867 C.M.S., dated July 18, 2017. As of October 31, 2018, the only project-related contractual financial obligation to the City is for the \$4,446,659.45 Motorola Solutions, Inc. Phase 1 contract and related deliverables and payment milestones. Contractual project milestones requiring payments of \$961,821.90 have so far been met and paid leaving \$3,484,837.55 in remaining payment milestones and related deliverables.

*PRIME 2.0*

Funding for this project was also approved by Council by Resolution No. 86867 C.M.S., dated July 18, 2017. As of October 31, 2018, the only project-related contractual financial obligation to

the City is for \$1,585,775.00 (includes contracts signed with Sierra, Slalom, and LEFTA). Payment milestones of \$256,490.00 have so far been met and paid leaving \$1,329,285.00 in remaining payment milestones and related deliverables.

### **COORDINATION**

In the preparation of this staff report, the Information Technology Department coordinated with the Oakland Police Department, the Oakland Fire Department, the City Administrator's Office, the Controller's Bureau and the Office of the City Attorney.

### **SUSTAINABLE OPPORTUNITIES**

***Economic:*** Where feasible, equipment purchases for this project will be made locally to help support the local economy.

***Environmental:*** Every effort will be made to select state of the art hardware and software that is energy efficient and environmentally preferred.

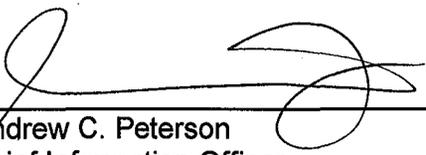
***Social Equity:*** Implementation of this project will result in increased effectiveness of critical public safety information systems which will aid in the timely response of emergency services and the health and safety of Oakland residents.

**ACTION REQUESTED OF THE CITY COUNCIL**

**Staff Recommends That The City Council Receive This Informational Report Which Provides An Update On The Next Generation 9-1-1 Public Safety Upgrade and the Court Mandated Performance, Reporting, Information and Metrics Environment System (PRIME 2.0) Projects.**

For questions concerning the contents of this report, please contact Randhir Singh, Project Manager III, Project Management Office, Information Technology Department at (510- 238-6751).

Respectfully submitted,



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