

Audit Follow-Up

Status As of March 31, 2016



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Tallahassee-Leon County Consolidated Dispatch Agency and Related Motorola Contracts

(Report #1505 issued March 16, 2015)

Report #1613

May 20, 2016

Summary

This is the first follow-up on the Audit of the Tallahassee-Leon County Consolidated Dispatch Agency and Related Motorola Contracts (report #1505 issued March 16, 2015). Twenty-five overall recommendations were made to address issues identified in the audit. As of March 31, 2016, for 16 (64%) of those overall recommendations, actions had been taken and/or are to be taken when applicable future events occur. Accordingly, for purposes of our audit follow-up process, the underlying issues as pertaining to the current systems and circumstances are considered to have been adequately addressed and resolved. For the remaining 9 (36%) overall recommendations, actions have been taken and are in progress to address the underlying issues. Accordingly, we will again follow-up on actions and efforts to address those 9 recommendations in our subsequent follow-up engagement.

In audit report #1505, we noted the establishment of the Tallahassee-Leon County Consolidated Dispatch Agency (CDA) had improved the dispatching of emergency services; however, as a relatively new agency the CDA experienced several issues that at times adversely impacted the public and responding agencies' confidence in the new coordinated dispatch process. We noted risks, which if realized, had the potential to continue to negatively impact CDA operations. Twenty-five overall recommendations were made in

relation to those risks, with 21 related to activities at the CDA and 4 related to the Tallahassee Police Department (TPD) Records System.

During this follow-up, we determined for 16 of the 25 overall audit recommendations, that actions had been taken such that the underlying issues were or should be resolved, and/or that additional actions could not be taken until applicable future events occur. Those overall recommendations and related actions and/or circumstances included the following:

- Hire qualified third party consultants to assist in future system implementations; conduct enhanced analyses to evaluate available systems; and use formal competitive selection processes in selecting the best system. Regarding this recommendation, the CDA and City hired third party consultants to complete risk assessments of the Motorola Computer-Aided-Dispatch (CAD) system and of the computer network on which that system operates. Actions to address some of these recommendations, however, cannot be implemented until the time that applicable new systems are acquired. **(One overall recommendation)**
- Ensure future contracts contain appropriate terms and conditions to protect the City and/or other owners. While some of the specific audit recommendations cannot be implemented until such time that an

applicable new system is acquired, several actions have been taken in relation to the existing CAD system. Those actions include execution of a new maintenance and support agreement with Motorola that provides significant financial incentives for satisfactory system performance. **(One overall recommendation)**

- Invoke the liquidated damages provisions for Motorola's delays in completing an adequately performing CAD system. In lieu of assessing liquidated damages, the owners negotiated a \$369,354 credit to be applied towards the first year's maintenance fee under the new five-year agreement. **(One overall recommendation)**
- Ensure change orders are properly executed and approved by all appropriate authorities. Subsequent change orders for the Motorola CAD system were properly executed and approved. Additionally, all authorities (County and Sheriff's Office) expressed their concurrence and approval of change orders previously executed solely by the City. Regarding the TPD Records System, no new change orders have been executed since the initial audit. **(Two overall recommendations)**
- Ensure future amounts billed by and paid to Motorola are in accordance with contractual provisions governing fees. Procedures for reviewing and approving Motorola invoices have been enhanced. Subsequent amounts billed and paid were correct. **(One overall recommendation)**
- All formal CDA trainers should be certified in the training function. All classroom trainers for the CDA are now certified trainers. **(One overall recommendation)**
- Applicable telecommunicators identified during the audit as not certified should obtain the required certifications. As reported in the initial audit, applicable telecommunicators subsequently obtained

the required certifications. **(One overall recommendation)**

- The CDA should conduct exit interviews with terminating employees and take appropriate actions based on information obtained from those interviews. The CDA is now completing exit interviews and is taking and considering actions to retain employees and reduce turnover. **(One overall recommendation)**
- In regards to premise hazards, the CAD system functionality should be enabled to provide audible alerts to responding units. That functionality has been enabled as reported in the initial audit. **(One overall recommendation)**
- Premise hazards should be color-coded so as to distinguish the level of criticality. The CAD system has been upgraded to provide this feature. **(One overall recommendation)**
- Premise hazards that are no longer applicable or are outdated should be purged and/or updated. Owner and CDA staffs initiated and continue efforts to maintain updated and accurate premise hazards and information in the CAD system. **(One overall recommendation)**
- Formal written procedures addressing premise hazards should be completed as planned; with staff trained accordingly. A formal premise hazard policy was adopted and issued. Staff has been trained on the related procedures. **(One overall recommendation)**
- Owner staff should work with Motorola to extract historical data to determine whether critical premise hazards were opened during the period September 2013 through December 2014. The owners instructed staff to direct and focus their efforts on current activity and development and enhancement of controls that ensure premise hazards are

properly opened and information conveyed to responding units on a proactive basis. Accordingly, the historical analysis will not be conducted. **(One overall recommendation)**

- Enhance the existing process for determining and analyzing response times. Enhancements have been made through additional measurements and analyses. **(One overall recommendation)**
- Adequate records should be maintained to account for portable radios and related chargers. Adequate and updated records are now being maintained. **(One overall recommendation)**

For the remaining 9 overall recommendations, we determined that actions have been initiated and are ongoing to address the underlying issues. We will follow up on these overall recommendations in our subsequent follow-up engagement. Those overall recommendations and actions taken to date included the following:

- Work with Motorola to resolve technical and performance issues. Actions taken to date include: (1) hiring of an experienced consultant (Gartner, Inc.) that completed an objective assessment of the CAD system and provided specific recommendations to address and correct identified issues; (2) the CDA's ongoing efforts to implement those consultant's recommendations, such as execution of a five-year maintenance agreement with Motorola that provides financial incentives for satisfactory system performance; (3) hiring of additional technical staff to assist with the CAD system; and (4) ongoing efforts to complete significant CAD system upgrades to improve the system's performance. **(One overall recommendation)**
- Monitor Motorola's efforts in successfully completing implementation of the new Records System at the Tallahassee Police

Department (TPD) and take actions as appropriate. The City has terminated efforts to complete implementation of the new Motorola Records system and is currently negotiating with Motorola as to reimbursement for the financial consequences suffered by the City. **(Three overall recommendations)**

- Complete remaining policies and procedures for the CDA. The CDA has completed 76 of the 95 (80%) planned policies and is working on completion of the remaining 19 policies. **(One overall recommendation)**
- Add all categories of law enforcement calls to the Quality Assurance (QA) process and evaluate dispatch and response times as part of the QA process. Certain dispatch and response times are being reviewed and evaluated. Plans are to expand the QA process to all categories of law enforcement calls effective the first of June 2016. **(One overall recommendation)**
- A centralized record keeping system should be implemented to track the certification status of CDA telecommunicators and appropriate documentation retained to demonstrate those certifications. A cloud-based system has been selected to track various required certifications. Management plans to implement that system in the summer of 2016. **(One overall recommendation)**
- The CAD system should be updated such that dispatchers are required to acknowledge the existence of a critical premise hazard before the related incident can be dispatched. This feature is currently being developed by Motorola. The CDA expects this feature to be added and functional by the end of June 2016. **(One overall recommendation)**
- Revise the Quality Assurance (QA) process to ensure premise hazards are properly

opened and applicable detail information is provided to responding units. The QA process has been expanded to address dispatching of critical premise hazard information for sampled Fire and Emergency Medical Services (EMS) calls. Plans are to start reviewing the dispatch of critical premise hazard information for law enforcement calls when those calls are incorporated into the formal QA process (addressed in a different recommendation). Until that incorporation occurs, alternative actions have been taken to help ensure critical premise hazard information is properly dispatched to responding agencies. **(One overall recommendation)**

We appreciate the cooperation and assistance provided by staff at the CDA, the City's Technology and Innovations Department, and applicable responding agencies (i.e., Tallahassee Police Department [TPD], Tallahassee Fire Department [TFD], Leon County EMS, and Leon County Sheriff's Office) during this follow-up audit.

Scope, Objectives, and Methodology

We conducted this audit follow-up in accordance with the International Standards for the Professional Practice of Internal Auditing and Generally Accepted Government Auditing Standards. Those standards require we plan and perform the audit follow-up to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our follow-up audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our follow-up audit objectives.

Original Report #1505

The initial audit was conducted to address concerns regarding the performance of the CDA in receiving and processing emergency calls for fire, law enforcement, and medical services. Some of those concerns related to the performance of technology recently implemented

to assist the CDA in providing services, and to the contract executed for implementation of that technology. Other concerns related to the performance of CDA staff. An ancillary purpose of the audit was to determine the impact technology issues experienced at the CDA had on the City's project to implement a new Records System at TPD.

To address those concerns we established seven specific audit objectives: (1) Identify and evaluate the technology issues that have adversely impacted the CDA and identify actions taken to resolve those issues; (2) Determine the impact technology issues pertaining to the new Computer-Aided-Dispatch (CAD) system at the CDA had on the implementation of the new Records System at TPD; (3) Identify and evaluate the contracts with Motorola Inc. to implement the new CAD system at the CDA and the new Records System at TPD; (4) Determine if payments for maintenance and support for the various Motorola systems were proper, reasonable, and in accordance with governing contractual provisions; (5) Identify and evaluate the policies and procedures, quality assurance and training processes, and staffing of the CDA; (6) Identify and evaluate the CDA process for informing responding (service) units of pertinent information regarding the locations (premises) to which the responding units have been dispatched; and (7) Determine the CDA "response times" relating to emergency calls processed by the CDA and compare those times to that of other jurisdictions.

Overall, we concluded the CDA provides area citizens with significantly enhanced dispatch operations compared to the previous separate dispatch operations that were performed independently by TPD and the Leon County Sheriff's Office. Notwithstanding the CDA's success, as a relatively new agency, we reported it has experienced several operational issues that have, at times, adversely impacted the public and responding agencies' confidence in the new coordinated dispatch process. Those issues were magnified due to the problems that occurred with some of the new technology implemented at the CDA. We found that actions have been taken to

address those issues and that the CDA, under the guidance of a Director hired in February 2014, continued to advance in regard to technology, processes, policies, and procedures. Several areas were identified by our audit for which improvements and enhancements were recommended. Those areas pertained to CDA technology; implementation of the new TPD Records System; contract execution and management; maintenance payments; CDA policies, processes, and staffing; premise hazards; and response time measurement.

Report #1613

This is our first follow-up on action plan steps identified in audit report #1505. The purpose of this follow-up is to report on the progress and status of efforts to address the recommendations made in the initial audit as of March 31, 2016. To determine the status of these efforts, we interviewed staff and reviewed relevant documentation.

Background

Prior to the creation of the Tallahassee-Leon County Consolidated Dispatch Agency in 2013, there were two separate public safety dispatch operations available to the citizens of Tallahassee and Leon County. The Leon County Sheriff's Office operated a dispatch center for law enforcement (Sheriff deputies) and emergency medical services. TPD operated a dispatch center for law enforcement (police officers) and fire services. In September 2006, for the purpose of providing citizens a more efficient and effective emergency response process, the City of Tallahassee, Leon County, and the Leon County Sheriff's Office entered into a Memorandum of Agreement for the eventual consolidation of public safety communications.

As a result, the CDA was created in April 2013 pursuant to a May 2012 inter-local agreement (agreement) between the City, County, and Sheriff's Office. The CDA operates under that initial agreement and subsequent agreements executed by the three entities. Under those agreements, the responsibilities of each entity

were established. Those responsibilities included the following:

- Leon County (County) will provide support for the CDA's telephone system.
- The Leon County Sheriff's Office (Sheriff's Office) will provide support for the emergency 911 system.
- The City of Tallahassee (City) will provide support for the CDA's computer hardware and software for the Computer-Aided-Dispatch (CAD) system and related systems, to include installation, maintenance, training, and management.
- The City and the County will provide support for the Geographical Information System (GIS) used by the CDA.

The May 2012 agreement provided for the creation of a governing board and empowered the CDA Board to hire (and terminate) a Director, adopt a budget, and oversee the CDA. The CDA Board is comprised of the Sheriff, County Administrator, and City Manager. The May 2012 agreement also created a Management Committee to make recommendations for the hiring of the CDA Director and to monitor and review overall operations of the CDA. The Management Committee is comprised of the TPD Police Chief, Tallahassee Fire Department (TFD) Fire Chief, County EMS Chief, and a Sheriff's appointee.

Funds to operate the CDA are appropriated by the City, County, and Sheriff's Office pursuant to the May 2012 agreement and a subsequent May 2013 agreement. Specifically, funding for operating costs other than the radio system are to be allocated between the City and Leon County (including the Sheriff's Office) based on the relative percentages of the County population that live inside and outside the City's corporate limits. Operating costs of the radio system are to be allocated among the respective entities based on the proportionate share of radios used by each of the entities.

The CDA's first Director was hired by the CDA Board and started work in February 2014; several months after the CDA began operations. Prior to the hiring of the Director, the CDA was managed

by two interim co-Directors appointed by the CDA Board, one from the Leon County Sheriff's Office and one from TPD. (Note: The first CDA Director was subsequently replaced by a second Director [Interim Director] effective December 3, 2015.) The CDA is continuously in operation, seven days a week and 24 hours a day, including holidays.

The primary benefit to the public under the CDA is that an emergency call for assistance is now received, processed, and dispatched to all appropriate responding agencies (TPD, TFD, Sheriff's Office, and EMS Agency) in a single coordinated process; as opposed to past practices in which emergency calls were often transferred (sometimes several times) between the separate dispatch agencies, with each dispatch agency sometimes dispatching responding units to the same incident in separate processes. Specific benefits resulting from the establishment of the CDA include:

- The first person answering an emergency call can provide assistance as there is no need to transfer the call to a different dispatch agency.
- There is a single "computer-aided-dispatch (CAD) system" that all responding agencies utilize instead of separate systems, resulting in a more coordinated and effective response effort through facilitated sharing of information and communications. The single CAD system also allows for more efficient technological support of the infrastructure necessary to operate a dispatch agency such as the emergency 911 system, geographical information systems (GIS), paging system (e.g., fire station alarms), and radio system.
- Locating all call takers and dispatchers for all responding agencies in a single room enhances the ability of staff and supervisors to coordinate the response process and increases the level of situational awareness.
- There is one set of radio channels that are utilized by all responding agencies thereby facilitating communications and helping ensure

the "closest" available units respond to an incident.

Ultimately, these benefits facilitate shorter and more appropriate responses to emergency incidents.

During the eleven-month period November 2013 through September 2014, CDA call takers answered 412,755 calls, of which 152,543 came in through the 911 phone system and 260,212 came in through the administrative phone system. Many calls through the administrative system represented instances where: (1) TPD or the Sheriff's Office called the CDA to request they dispatch a unit to respond to an incident reported directly to them instead of the CDA, (2) other agencies such as the Florida State University (FSU) or Florida Agricultural and Mechanical University (FAMU) police departments called the CDA requesting a unit (from TPD for example) be dispatched for assistance, or (3) an alarm company called to request a unit be dispatched based on alarm going off at a residence or business or as a result of a medical bracelet/necklace going off. Other calls on the administrative phone system were administrative in nature (individual requesting information only) and did not result in a responding unit being dispatched.

Previous Conditions and Current Status

In report #1505, we provided 21 recommendations regarding areas that need to be addressed at the CDA. Those areas pertained to CDA technology; contract execution and management; maintenance payments; CDA policies, processes, and staffing; premise hazards; and response time measurement.

In addition, we provided four overall recommendations relating to the City's efforts to implement a new TPD Records System. Table 1 that follows shows the status of management's efforts to address those audit recommendations as determined by our follow-up.

Table 1
Audit Recommendations from Audit Report #1505
Current Status of Efforts to Address Those Recommendations as of March 31, 2016

Audit Recommendations	Current Status as of March 31, 2016
A. Technology Issues	
<p>1. We recommend the owners (City of Tallahassee, Leon County, and Leon County Sheriff’s Office) continue to work with Motorola to resolve remaining technical and performance issues pertaining to the Motorola Premier One CAD and Mobile System. In the event the significant issues are not resolved in the near future and/or additional significant system stability or functional issues occur or reoccur, we recommend the owners negotiate a fair and appropriate contract amendment providing for: (1) a deadline for resolution of remaining system performance issues; (2) restitution to the owners for any adverse financial impacts resulting from the system performance issues (e.g., cost of a system administrator position to manage the system after Motorola technical staff are no longer onsite); and (3) a remedy in the event the owners determine it is in the CDA’s best interest to discard the PremierOne CAD and Mobile System and acquire and install a replacement system, to include Motorola providing continued support of the PremierOne CAD and Mobile System until such time a replacement system is in place and operational.</p> <p>Additionally, if the outcome of those efforts are not successful and system instability issues continue, the owners should consider exercising their right to submit a claim to the applicable surety company invoking the provisions of the contractually required performance bond that guarantees Motorola’s performance (i.e., to provide an acceptable system). Provisions of that bond provide for reimbursement to the owners if Motorola defaults on the contract.</p>	<p>◆ <u>Recommended actions have been taken and are ongoing.</u> As explained below, several actions have been taken and are ongoing to work with Motorola to resolve technical and performance issues.</p> <ul style="list-style-type: none"> – The owners hired an experienced consultant, Gartner, Inc. (Gartner) to provide an independent and objective assessment of the Motorola PremierOne CAD and Mobile System (CAD system) implemented at the CDA. The consultant’s report noted that, notwithstanding the periods of instability, the system is mostly performing at an acceptable level and able to support CDA call taking and dispatch operations. After considering all factors, Gartner noted and /or recommended: <ul style="list-style-type: none"> • The relationship with Motorola should be continued only if an appropriate maintenance and support agreement was executed that included system performance and service level requirements with associated financial incentives (<i>similar recommendation made in the initial audit</i>). • If unsuccessful in executing such an agreement, the CDA should discontinue with Motorola and immediately begin the process to find a suitable replacement system using a market-based competitive bid process (<i>similar recommendation made in the initial audit</i>). • An independent assessment of the network infrastructure supporting the CAD system should be performed to identify and resolve any network performance issues that could be

	<p>affecting performance of the CAD system.</p> <ul style="list-style-type: none">• Other factors were identified that contributed to system performance instability issues and/or efforts to resolve those issues, for which 37 specific recommendations were made. <p>– The CDA is implementing those Gartner recommendations as applicable and appropriate. Examples of some of the more significant actions taken to date include:</p> <ul style="list-style-type: none">• The CDA executed a five-year maintenance and support agreement with Motorola that provides, among other things, significant monthly financial penalties in the event defined system performance standards are not met.• Four additional technical staff have been hired and assigned to the CDA to assist with the CAD system. Those positions include a support manager, a systems administrator, a CAD administrator, and a technical administrator. Responsibilities of those positions include, for example, addressing CAD system issues and problems as they occur, performing CAD system updates and upgrades, adding and removing system users and user roles, and supporting the desktop computers used in conjunction with the CAD system. Furthermore, plans are in place to create a network administrator position in the subsequent fiscal year.• Efforts are ongoing to complete significant CAD system upgrades to improve system performance. One system upgrade that was completed in December 2015 resulted in the color coding of premise hazards, such that more significant hazards can be more
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	<p>easily distinguished from the less serious hazards. Another significant upgrade currently being worked on will require the use of virtual servers. Accordingly, some of the existing equipment (e.g., physical servers) will be replaced. Testing of that upgrade is being and will continue to be performed. City Technology and Innovation (formerly Information System Services, or ISS) staff indicated that upgrade should be completed in late June 2016.</p> <p>Because of the CAD system performance issues and problems which were identified in the initial audit report, the owners successfully negotiated a <u>\$369,354 credit</u> towards the first year's maintenance fee (\$500,155) under the five-year agreement noted above.</p> <p>As to CAD system performance since our initial audit, we determined there have been three days in which the Motorola CAD system experienced temporary outages. Those outages, as well as the known or possible causes, actions taken to resolve the underlying issues, and durations are described in Table 2 on page 30 of this report. As to current CAD system performance, City Technology and Innovation managers assigned to the CDA indicate the more significant issues, for which efforts are ongoing to resolve in connection with the current upgrade project, include the following:</p> <ul style="list-style-type: none"> - Instances are occurring where the triage software (ProQA as described in the initial audit report) does not launch when call takers receive and commence processing emergency calls. When such instances occur, the call takers must rely on memory or manual guides to ascertain the sequence of questions to ask the caller based on the circumstances. - Instances are occurring where critical information captured by the call takers using the triage software does not
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	<p>automatically transfer into the CAD system for the benefit of the dispatchers and responding units. In such instances, the call takers must manually enter (type) the information into the CAD system.</p> <p>Regarding those triage issues, information as to the system efforts to launch the triage software and transfer the recorded information is not always being captured (logged) by the system, thereby hindering staff efforts to resolve the underlying problems. <u>We recommend</u> efforts to resolve these issues be continued.</p> <p><i><u>Additional Related Issue.</u></i> In the initial audit, we reported two instances in which the CDA was temporarily unable to receive 911 emergency calls due to problems with the 911 emergency phone system, a system separate from the Motorola CAD system. As reported, the underlying issues were timely identified and corrected. However, on February 26, 2016, subsequent to our initial audit, a hardware failure (unrelated to the Motorola CAD system) resulted in another 911 emergency phone system outage. Specifically, the switches connecting the phone servers and the 911 floor phones failed. The resulting outage lasted approximately 32 minutes. CDA staff identified 18 calls that were not answered during that outage, but indicated there may have been more missed calls as the system became more dysfunctional (i.e., trunks backlogged). For the 18 identified calls, CDA management reported that staff contacted the callers after the outage to determine if their circumstances were addressed.</p> <p>Once the cause (switch failure) was identified the switches were immediately reset and the system was again operational. Other actions taken in response to this instance included:</p> <ul style="list-style-type: none"> - The CDA drafted a 911 phone system outage plan that considers several steps to be taken in the event of a future outage. Those steps include, for example, (1) distributing to the media for dissemination
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	<p>to the public an alternate phone number that can be called and answered at the CDA and (2) deploying CDA staff to the backup dispatch center at the Leon County Sheriff’s Office Complex where emergency 911 calls can be answered.</p> <ul style="list-style-type: none"> - The owners created a critical infrastructure team to identify, review, and/or assign responsibility for the various CDA infrastructure components, and to help ensure proper monitoring and maintenance of those components. - The CDA commenced monthly activations of the backup dispatch center at the Leon County Sheriff’s Office Complex to facilitate its readiness in the event of a future outage. - Leon County Emergency Management commenced reconfiguration of the infrastructure path such that the switches are no longer needed as the 911 phone system will be directly connected to the call taker work stations. - Two traditional analog phones are to be installed at selected workstations and directly cabled to the 911 system, thereby allowing emergency calls to be received on those phones in the event of a subsequent outage of the primary 911 emergency phone system.
<p>2. In future circumstances where systems critical to the public’s health, safety, and welfare are being acquired and implemented, we also recommend the owners:</p> <ul style="list-style-type: none"> • Consider hiring a qualified third-party consultant to assist designated project staff oversee and administer the implementation and configuration of the system, to include assistance in the development and performance of adequate and appropriate testing of the system. • Conduct enhanced determinations and risk analyses as to the systems (products) 	<p>✓ Recommended actions taken as appropriate with additional actions to be taken when future events occur. As previously mentioned, the owners hired Gartner, Inc. (Gartner) to perform a risk assessment of the CAD system. Through their risk assessment, Gartner examined vendor support, testing, and infrastructure. As part of their research, Gartner spoke with other dispatch agencies using Motorola’s CAD system, as well as other CAD vendors besides Motorola. In addition, the City’s Technology and Innovations Department hired PC Solutions and Integration, Inc. (PCS) to perform a</p>

<p>available and the proven performance (“track record”) of those available systems; and use the information obtained in those determinations and analyses as part of the process in identifying and selecting the “best” system.</p> <ul style="list-style-type: none"> • Use a formal competitive selection process (e.g., RFP process) to identify and select the “best” system. 	<p>formal risk assessment of the City’s network, to include the CDA’s network. PCS completed the risk assessment and issued a report to the City on August 21, 2015. Their report outlines several areas where improvements can be made to the CDA network. Technology and Innovations management stated staff has evaluated the recommendations from PCS and implemented those applicable to the CDA.</p>
<p>B. TPD Records System Delays</p>	
<p>1. We recommend City management and project staff continue to monitor Motorola’s efforts to resolve those issues delaying implementation and continue to work with Motorola to help facilitate installation and cutover to the new system.</p>	<p>◆ Recommended actions have been taken and are ongoing. Subsequent to the issuance of the initial audit report in March 2015, the City’s former Chief Information Systems Officer sent a letter, dated April 17, 2015, to Motorola requesting reimbursement in the amount of \$350,000 for the financial consequences suffered by the City as a result of the delays in implementation of the new TPD Records System. In response to our request in October 2015, City staff responded that: (1) the planned go live date for the new Records System was now February 2016 and (2) they had temporarily suspended negotiations with Motorola for financial reimbursement attributable to the Records System delays until the contracted consultant (Gartner) had completed their evaluation on the Motorola CAD System (i.e., as the outcome of that consultant study could have resulted in a recommendation to not continue the Motorola systems). As the consultant report was completed in August 2015 and recommended the City and CDA continue working with Motorola and the existing CAD system based on specific caveats that were subsequently met (i.e., execution of an appropriate maintenance agreement), the City resumed negotiation efforts relative to the TPD Records System on October 21, 2015.</p> <p>As of the end of February 2016, City staff indicated Motorola had not responded to the April 17, 2015, letter or other efforts by the City to contact them regarding financial reimbursement. Furthermore, as of that date</p>

	<p>the new TPD Records System still had not been properly implemented. Because of those circumstances, City management indicated that consideration is currently being given to alternatives, including termination of efforts to implement the new Motorola Records System and initiation of efforts to identify, acquire, and implement a new system that meets the needs of TPD.</p> <p><u>We recommend</u> City management, in conjunction with the City Attorney’s Office, continue appropriate avenues to obtain reimbursement from Motorola for the financial consequences suffered by the City due to the significant delay (and, to date, unsuccessful efforts) in implementation of the new Records System. City management should also follow through on its consideration of alternatives in the event the new Records System is not implemented with adequate functionality in the near future.</p> <p><i>(NOTE: Subsequent to the completion of our follow-up fieldwork, City management indicated Motorola was notified that the City was terminating efforts to implement the new Motorola Records system. Additionally, City management provided a letter from Motorola, dated April 18, 2016, showing Motorola’s response to the City’s letter requesting \$350,000 for financial consequences suffered by the City. That letter offers the City credits towards other Motorola services totaling \$202,613. City management indicated they are negotiating with Motorola on this matter. We intend to address the resolution of those negotiations in our subsequent follow-up engagement.)</i></p>
<p>2. The City should consider seeking financial restitution from Motorola for the adverse financial impacts incurred by TPD as a result of the delays.</p>	<p>◆ Recommended actions have been taken and are ongoing. As noted in Step B1 above, the City sent a letter dated April 17, 2015, to Motorola requesting reimbursement in the amount of \$350,000 for the financial consequences suffered by the City. As of the end of February 2016, City staff indicated Motorola had not responded to the April 17,</p>

	<p>2015, letter or other efforts by the City to contact them on this matter. Furthermore, as of that date the new Records System still had not been properly implemented.</p>
<p>3. As a last resort, the City should consider legal actions for breach of contract in the event Motorola does not complete installation and achieve the City’s final acceptance within a reasonable period.</p>	<p>♦ Recommended actions have been taken and are ongoing. As noted in Step B1 above, due to the unresponsiveness of Motorola to the April 17, 2015 letter, City management indicated that consideration is currently being given to alternatives, including termination of efforts to implement the new Motorola Records System and initiation of efforts to identify, acquire, and implement a new system that meets the needs of TPD. Consideration may be given to appropriate legal action depending on the outcome of ongoing efforts.</p>
<p>C. Contract Payments, Compliance, and Adequacy</p>	
<p>1. <u>CAD and Radio Systems</u>: We recommend for future projects involving systems that impact the public’s safety:</p> <ul style="list-style-type: none"> • Contractual terms be established that provide for a significant percentage (e.g., 20% to 30%) of the contract price to be withheld until the owners have accepted the system as completely installed and working properly and adequately (e.g., operating without significant performance issues). • Management ensure all applicable contractual terms and conditions are followed by the owners so as to protect the owners’ (and public’s) best interest (e.g., obtain or provide written consent or notice for specified actions as provided by contractual terms and conditions). • Contractual terms be established that provide the owners the ability to assess liquidated damages in amounts that provide a greater (i.e., in relation to the current Motorola contract) incentive for the contractor to ensure a properly performing system is timely installed and placed into operation. 	<p>✓ Recommended actions taken as appropriate with additional actions to be taken when future events occur. Although the audit recommendations were made in relation to new system purchase contracts, there have not been any new system purchase contracts at the CDA since the initial audit. Notwithstanding that circumstance, the CDA considered those recommendations when executing the new maintenance and support contract with Motorola. Specifically, after the first instance within a month that Motorola misses an agreed upon performance standard, they can be assessed a 10% reduction of the monthly service charge. A 15% reduction is allowed in the event of a second occurrence within the month, while for the third and any subsequent occurrence within a month, a 25% reduction may be assessed.</p>

<p>2. <u>CAD and Radio Systems</u>: The owners should consider invoking the current liquidated damages provisions for Motorola’s delays in completing an adequately performing system.</p>	<p>✓ Alternative actions taken and completed. In lieu of assessing liquidated damages, the CDA and owners successfully negotiated a \$369,354 credit to be applied towards the first year’s maintenance fee (\$500,155) under the five-year agreement, as previously noted in the status reported above for Step A1.</p>
<p>3. <u>CAD and Radio Systems</u>: We recommend for future change orders:</p> <ul style="list-style-type: none"> • Appropriate authorized representatives from each entity (City, County, and Sheriff’s Office) should approve and execute each subsequent change order (if any) to the existing contract. • For those change orders executed to date only by the City and Motorola, documented concurrence and approval should be obtained from the County and the Sheriff’s Office as to the additional services and costs. • In future projects with a nature and characteristics similar to the contract with Motorola (e.g., other entities partnering with the City), the appropriate authority for approving change orders within the City should be established. At a minimum, that approval authority should be the applicable department director, if not the City Manager or other appropriate member of the City’s Executive Team. 	<p>✓ Recommended actions taken as appropriate with additional actions to be taken when future events occur. Subsequent to the initial audit two change orders have been executed. Justification for both change orders was adequately documented. Each change order was properly executed by appropriate individuals from the City, County, and Sheriff’s Office. Also, as reported in the initial audit report, representatives from the County and the Sheriff’s Office expressed their concurrence and approval of the change orders executed as of that time.</p>
<p>4. <u>TPD Records Systems</u>: We recommend:</p> <ul style="list-style-type: none"> • Applicable City management ensure that contracts for future projects contain provisions: (1) requiring a surety/performance bond guaranteeing the contractor’s performance and (2) the ability of the City to assess liquidated damages in the event the contractor does not complete the project in a timely manner. • For future change orders, applicable City management ensure: (1) the purpose and justification for each change order is 	<p>✓ Actions not yet appropriate as recommendations relate to future events that have not occurred. (Recommended actions considered completed and ongoing for purposes of the audit follow-up process.) To date no new projects (for new systems) have been established. Furthermore, as of this date no additional change orders have been executed. (However, as noted in the status reported for Recommendation C3, subsequent change orders executed for the Motorola CAD system contained appropriate justifications and approvals.)</p>

<p>properly and adequately documented within the change order, (2) appropriate approvals are obtained from the City Attorney’s Office, and (3) the appropriate authority (e.g., City Manager or his designee and department head) approves and executes the change orders.</p>	
<p>D. Maintenance and Support Agreements</p>	
<p>1. We recommend project managers assigned to manage and oversee projects similar to the one at the CDA ensure amounts billed by and paid to contractors are in accordance with contractual provisions governing fees for services.</p>	<p>✓ Recommended actions completed and ongoing. The City enhanced its procedures to ensure future amounts billed by Motorola are in accordance with contractual provisions that govern fees. We identified payments to Motorola since the release of the initial audit on March 16, 2015, and determined that as of the date of our audit fieldwork there were no payments made in relation to the CAD system or the TPD Records System, but there were eight payments made for the radio system. We sampled six of those eight payments and determined each of the six was made in accordance with applicable contractual terms and agreements.</p>
<p>E. Policies and Procedures, Training, and Staffing</p>	
<p>1. <u>Policies and Procedures</u>: We recommend efforts continue to complete, obtain CDA Board approval for, and place into operations all appropriate policies and procedures.</p>	<p>◆ Recommended actions have been taken and are ongoing. At the time of our follow-up, the CDA had completed and received approval from the CDA Board for 76 of the 95 (80%) planned policies. CDA management stated the final 19 policies are more detailed and longer than policies already approved and in place, and as such require more time to complete. They anticipate completing these remaining policies and receiving CDA Board approval by the end of spring 2016. <i>(NOTE: At the time of our initial audit report, the CDA had identified 76 needed policies and procedures and was in the process of determining what additional policies and procedures were needed. As indicated above, the CDA has subsequently identified the need for 19 more policies and procedures.)</i></p>
<p>2. <u>Quality Assurance</u>: We recommend the CDA continue ongoing efforts to add all categories of law enforcement calls to the Quality</p>	<p>◆ Recommended actions have been taken and are ongoing. The CDA has not yet expanded the QA process to include most categories of</p>

<p>Assurance (QA) process (i.e., after the new triage application is applied to law enforcement calls), add the dispatch function and response times to the QA process, and improve in areas where call takers and dispatchers are not meeting established goals and performance expectations.</p>	<p><u>law enforcement calls</u>. Plans are to eventually incorporate those calls into the formal QA process after the Motorola CAD system is appropriately upgraded and the ProQA system (triage software application) is upgraded to include all categories of law enforcement calls. Once those upgrades are completed, the ProQA triage application for law enforcement calls can be interfaced with the QA software application (Aqua) to facilitate the review of law enforcement calls similar to Fire and EMS calls. However, as those upgrades are still being developed, CDA management has established an alternative plan to begin performing QA reviews of all categories of law enforcement calls effective the first of June 2016. Under that alternative and interim process, samples of all categories of law enforcement calls will be selected and reviewed using a process outside of the QA software application (Aqua) that currently is used for Fire and EMS calls. Furthermore, management indicated that once all categories of law enforcement calls are reviewed as part of the QA process, they will incorporate radio dispatches of <u>law enforcement calls</u> into that process as well.</p> <p>Regarding <u>fire</u> and <u>medical</u> calls, the CDA has implemented a process such that when an incident containing a critical premise hazard pertinent to the call is selected for a quality assurance review, that review also includes a review of the related radio dispatch. Feedback from these reviews is provided to the dispatcher and the dispatcher's supervisor.</p> <p>While the QA process does not include a review and analysis of call answer times or any times associated with the call or dispatch process, management monitors these times as part of a separate review process, as explained in section G below.</p> <p>In addition, as a supplemental quality assurance review, the CDA surveyed 339 citizens who called the CDA during the fall of 2015 to determine the level of satisfaction</p>
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	<p>those citizens have with how well their calls were handled. Six questions were asked of each citizen with responses ranging from very satisfied to dissatisfied. An analysis of the responses revealed 99% were either “somewhat satisfied” or “very satisfied,” with 90% being “very satisfied.”</p>
<p>3. <u>Training and Required Certifications</u>: We recommend documentation (e.g., copies of certifications and/or assertions from applicable certifying entities) be obtained to demonstrate the certification of all telecommunicators. Additionally, a centralized record keeping system should be established, implemented, and maintained to track the certification status of all CDA telecommunicators.</p>	<p>◆ Recommended actions have been taken and are ongoing. The CDA selected Intellex, a cloud-based system, to track and monitor the various certifications required of employees. The system will allow the CDA to more easily track which employees are missing required certifications and also retain appropriate documentation to support the employees’ certifications and licenses. Additionally, the software has the capability to email alerts when an employee’s certification is approaching its expiration date. CDA management anticipates all employee certification records will be loaded into Intellex in the next few months, and the system will be fully operational in the summer of 2016.</p>
<p>4. <u>Training and Required Certifications</u>: The CDA should complete plans to require all trainers that provide formal training to newly hired telecommunicators, including the 232-hour course required by State statute, to be certified through APCO in the training function.</p>	<p>✓ Recommended actions completed and ongoing. All classroom trainers currently being used by the CDA are certified trainers. While the recommended action has been completed, the CDA also plans to have more telecommunicators and supervisors, as well as all QA staff, certified as trainers within several months. In addition, management reported certified trainers receive a 7% pay increase to reward and recognize their training certification and the additional responsibilities that come with being a trainer.</p>
<p>5. <u>Training and Required Certifications</u>: CDA management should ensure telecommunicators identified through our testing as not properly certified obtain the required certifications.</p>	<p>✓ Recommended action completed. As reported in the initial audit, the applicable telecommunicators subsequently obtained the required certifications.</p>
<p>6. <u>CDA Staffing</u>: We recommend the CDA continue ongoing efforts to attract and retain trained telecommunicators. As part of those efforts, the CDA should conduct exit interviews with terminating employees and take appropriate actions based on useful</p>	<p>✓ Recommended actions completed and ongoing. The CDA has seen a positive change in the turnover ratio among telecommunicators, which has fallen from 38% as reported in the initial audit to 29% during this follow-up period. Including all</p>

<p>information obtained through those interviews.</p>	<p>CDA employees, the turnover ratio has dropped from 33% to 25% since the initial audit. Of the telecommunicators who left the CDA in the last year, 23 resigned, 3 were dismissed by the CDA, and 1 retired.</p> <p>The CDA is now conducting exit interviews to better identify why employees are leaving the CDA to determine what can be done to improve the work environment and retain employees. Based on our discussions with CDA management and review of the completed exit interviews forms, three significant areas for which improvements are warranted include: (1) work hours and schedule, (2) training, and (3) relationships between telecommunicators and their floor supervisors. CDA management indicated actions being taken or planned in response to those circumstances and feedback include the following:</p> <ul style="list-style-type: none"> - Continuing efforts to fill vacancies by attending career fairs and partnering with career centers at FSU, FAMU, and Tallahassee Community College. Management indicated that filling vacancies should allow for a more balanced work schedule and work hours. At the time of our audit fieldwork, management had hired 13 individuals to fill 15 telecommunicator vacancies (out of 84 telecommunicator positions). Those 13 individuals were currently participating in the CDA’s telecommunicator training class which started in early February 2016. They will move to the floor and commence work as telecommunicators upon completion of that training. CDA management indicated that they also planned to hire additional telecommunicators for the next training class that begins in May 2016. - Enhancing training of floor supervisors to improve their leadership and communication skills.
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	<p>In regards to training, CDA management indicated the concerns expressed by some departing employees are believed to be attributable to an updated training curriculum and change in training styles that occurred when a different CDA employee was reassigned as the training coordinator. CDA management believes employees will become more satisfied with training activities as they acclimate to the new curriculum and new training coordinator. Management also reported they are negotiating with Motorola to hire Motorola for the purpose of assessing and making recommendations to improve the training provided by the CDA to new employees.</p> <p>In addition to the areas addressed above, some of the departing employees stated low salary was one of the reasons that they were leaving. Management indicated they were conducting a salary study of other call centers around the country to obtain additional information on this matter.</p> <p>An additional action taken by the CDA to relieve the work load of telecommunicators is the creation of a “Tier 1 Call Taker Program.” Under that program, which began March 17, 2016, a different group of employees are trained and hired to process only non-emergency calls, such as request for towing services. The “true” emergency calls are still processed by the regular 911 call taker positions. Through the Tier 1 Program, all calls coming through either the 911 or administrative lines will still be answered by a 911 call taker, but any call coming through the administrative line requiring a non-emergency law enforcement response may be transferred to a “Tier 1” call taker for further processing, which frees up the 911 call taker for emergency calls. An example of such a call would be a car burglary where the suspect (burglar) was not at the scene at the time the car owner discovered the incident and made the call. From April 1 through April 19, a total of 1,905 calls have been transferred to and</p>
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	<p>processed by the Tier 1 call takers. A quality assurance process for calls processed through the Tier 1 program is still being developed.</p> <p>Although utilizing the Tier 1 call takers allows 911 call takers to be available for more critical calls, there is an inherent risk that a non-emergency call may become an emergency call while the Tier 1 call taker is on the call. This means a call taker who is not trained to handle emergency calls would need to transfer the call back to a 911 call taker, if one is available, which could delay the response time of appropriate emergency personnel. CDA Management believes this risk is minimal, but to mitigate the risk, a process has been developed for Tier 1 call takers to follow in the event their non-emergency call unexpectedly turns into an emergency situation.</p>
<p>F. Premise Hazard</p>	
<p>1. CAD system functionality should be enabled to provide for an audible alert on the dispatched responding unit's mobile device.</p>	<p>✓ Recommended action completed. As reported in the initial audit and reconfirmed during our follow-up, the audible alert feature was activated.</p>
<p>2. The CAD system should be updated such that dispatchers will be required to acknowledge the existence of a critical premise hazard (e.g., officer safety) before the incident can be dispatched.</p>	<p>◆ Recommended actions have been taken and are ongoing. A future enhancement to the CAD system is being developed by Motorola that will require call takers and dispatchers to acknowledge the existence of certain critical premise hazards before they can process associated incidents within the CAD system. Specifically, for those premises with a <u>critical officer safety</u> hazard or <u>critical hazardous materials</u> hazard recorded in the CAD system, the call taker and dispatcher will be required to acknowledge the existence of the hazard before they can process an incident associated with those premises. Those premise hazards that contain "non-critical information" will not have to be acknowledged under this revised process. As described in the status reported for the following recommendation, the critical and non-critical premise hazards will be color-coded so as to facilitate the ability of call takers and dispatchers to quickly distinguish the types.</p>

	<p>As explained by CDA and owner staff, the enhancement will <u>not</u> require the critical premise hazard to be opened before the incident can be processed, it will only require the existence of the associated premise hazard to be <u>acknowledged</u> within the CAD system before the incident can be processed. CDA and owner staff anticipates the enhancement will be completed and implemented by the end of June 2016.</p> <p><i>NOTE: The CDA recently made refinements to the concept and definitions relating to premise hazards. Specifically, information recorded in the premise hazard field within the CAD system is now classified as either “premise information” or “premise hazards.” Premise information is any notice not related to officer safety or hazardous materials. Examples include gate codes or owner contact information. Premise hazards which include officer safety and hazardous materials information are now further classified as either “normal” or “critical.” An example of a normal officer safety premise hazard may be a report that the resident of the premises has an aggressive nature but has not threatened law enforcement officers. Conversely, an example of a critical officer safety premise hazard may be where there was a report that the resident of the premises had made a specific threat towards law enforcement officers or other first responders. Exact definitions for these types and classifications are currently being developed. For purposes of this follow-up audit, we continued to use the term “premise hazards” to address the related issues addressed in the initial audit.</i></p>
<p>3. As part of the planned upgrade of the CAD system, premise hazards should be color coded so as to distinguish the level of criticality.</p>	<p>✓ Recommended action completed. As mentioned in Recommendation A1 above, in December 2015 the CAD system was upgraded such that premise hazards are now color-coded to allow for quicker and easier identification of the more critical hazards. Specifically, officer safety and hazardous materials premise hazards labeled as “critical” are now colored red, while all other less</p>

	critical hazards are white.
<p>4. Premise hazards that are no longer applicable or are outdated should be purged or updated.</p>	<p>✓ Recommended action completed and ongoing. Owner and CDA staff provided evidence they have continued efforts on an ongoing basis to maintain updated premise hazards by periodically purging or updating premise hazards within the system.</p>
<p>5. Formal written procedures addressing premise hazards should be completed as planned; and those procedures should be provided to call takers and dispatchers. Training on premise hazards should be enhanced.</p>	<p>✓ Recommended actions completed. The CDA adopted and issued a formal premise hazard policy on April 20, 2015, that identified steps call takers and dispatchers must take when premise hazards are present for an incident. In addition, the CDA Director issued an internal written directive in May 2015 instructing call takers to include in their notes transferred to the dispatcher through the CAD system whether or not there is a premise hazard associated with the incident. That directive also requires the dispatchers to inform the responding units if there is an associated premise hazard. A unique radio code was established for that purpose. Specifically, the code “10-38” is used by both call takers and dispatchers to communicate there is an associated premise hazard. Once a dispatcher has informed a responding unit there is an associated premise hazard, the dispatcher is required to provide the responding unit with the options of either: (1) the dispatcher opening and conveying the pertinent information within the hazard by radio transmission or (2) the responding unit opening and reading the pertinent information through their mobile unit. The CDA also developed a formal “Premise Hazard 10-Code Procedure” to assist trainers and call takers and dispatchers in following this new process. We observed documentation and instances demonstrating this process is being followed.</p> <p><i>NOTE: CDA management indicated those procedures and processes as described herein will be revised as appropriate upon implementation of the enhancements being developed as noted above in item F2.</i></p>

6. The quality assurance process should be revised to incorporate reviews to ensure premise hazards are properly opened and applicable detail information provided to responding units.

◆ **Recommended actions have been taken and are ongoing.** The Quality Assurance (QA) process has been enhanced to specifically review sampled Fire and EMS incidents to verify that critical premise hazard information is being identified and conveyed by call takers to dispatchers and by dispatchers to the responding units. As previously noted within this follow-up report, the QA process has not yet been expanded to most categories of law enforcement calls. When these law enforcement calls are incorporated into the QA process, we recommend the review of those calls also ensure applicable critical premise hazards are properly opened and applicable detail information is provided to law enforcement responding units.

We identified other actions being taken by owner and CDA staff to ensure critical premise hazards are being properly opened and applicable information dispatched. Specifically:

- Notwithstanding that the QA process discussed above currently does not include law enforcement calls, the Sheriff’s Office IT staff liaison to the CDA is pulling judgmental samples of law enforcement incidents for which there are associated “officer safety” premise hazards. Those judgmentally selected incidents are reviewed to ascertain whether the call takers or dispatchers recorded appropriate notes in the CAD system relaying the existence of the premise hazards. In those instances where such documentation was not recorded in the CAD system, the Sheriff’s Office liaison indicated the instance and information is forwarded to CDA management for follow up and review. To date the Sheriff’s Office IT staff liaison reported reviewing over 50 incidents with only two instances where notes about the premise hazard were not properly entered into the CAD system.

	<ul style="list-style-type: none"> - A report is now being generated that shows the total number of incidents created within the CAD system for which premise hazards were attached. The report also shows the aggregate number of times those hazards were opened in connection with the incidents. For example, the report for calendar year 2015 shows there were 235,862 CAD incidents with an attached premise hazard and there were 242,607 openings associated with those hazards, indicating that some hazards were opened multiple times. (Note: These include incidents where there are premise hazards associated with properties adjoining or nearby to the property at which the incident occurs.) Because this report only provides aggregated totals, it does <u>not</u> provide evidence that a premise hazard was opened for <u>each</u> incident for which such a hazard was attached. Accordingly, while the report does provide useful information as to the number of incidents with associated premise hazards and the total number of times those premise hazards were opened, it cannot be relied on to determine that the hazard for <u>each</u> incident was opened. In addition, this report does not currently distinguish between “critical” and “non-critical” premise hazards and premise information. - Sheriff’s deputies have been instructed by the Sheriff’s Office to report any instance in which a dispatcher does not communicate the existence of a critical premise hazard for an incident to which they are responding. Sheriff’s Office staff indicated there have been two such instances since the initial audit. In both instances the incident was created in the CAD System by the dispatcher at the request of a deputy, and not by a CDA call taker (i.e., incident resulted from an observation by a Sheriff’s deputy and not in response to an emergency 911 call). Under those circumstances, it was
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	<p>determined premise hazards do not display on the screen like they do when the dispatcher receives the incident from a call taker or when a call taker is entering information based on an emergency 911 call. The enhancements in the CAD upgrade previously noted where call takers and dispatchers must acknowledge the existence of a premise hazard before being allowed to continue processing a call is expected to correct this issue. EMS, Fire, and TPD have similar processes in place for their responding units to report instances in which critical premise hazard information is not properly communicated.</p>
<p>7. Owner staff should work with Motorola to extract historical data from the CAD system to allow for a meaningful analysis and determination as to whether critical premise hazards (e.g., officer safety) had been properly opened by call takers and dispatchers for the period September 2013 through December 2014 (i.e., representing the period the CDA commenced operations through the end of our initial audit fieldwork).</p>	<p>✓ Alternative action completed. During this follow up, we were informed that the owners instructed applicable staff to direct and focus their efforts on current activity and the development and enhancement of controls that ensure critical premise hazards are properly opened and information conveyed to responding units on a proactive basis. Accordingly, the historical analysis has not been conducted.</p>
<p>G. Response Times</p>	
<p>1. We recommend the CDA consider enhancing the existing process for determining and analyzing response times to provide additional information on a regular ongoing basis (e.g., weekly and/or monthly) that would also be useful for management oversight purposes. Several potential useful enhancements include ongoing measurements of:</p> <ul style="list-style-type: none"> - Average call answering times segmented by: <ul style="list-style-type: none"> • Day of week. • Time of day. • Shift. - Average response times segmented into components such as those identified in this report, and further segmented by: <ul style="list-style-type: none"> • Day of week. • Month of year. 	<p>✓ Recommended actions completed and ongoing. During this follow-up process we re-evaluated the CDA’s process for determining and analyzing response times. Those processes are as follows:</p> <ul style="list-style-type: none"> - Processes already in place during the initial audit: <ul style="list-style-type: none"> • <u>Call answering times:</u> The CDA generates and reviews quarterly reports that reflect average call answering times for all call takers. This report stratifies data into 15 second intervals, and reflects the percent of calls answered within the first 15 seconds and for subsequent 15 second intervals (e.g., 16-30 seconds, 31-45 seconds, etc.).

<ul style="list-style-type: none"> • Time of day. • Shift. • Telecommunicator (call taker and dispatcher). • Incident type. • Responding agency. <p>- Stratification of response times (e.g., classifying response times into time intervals) and evaluation of specific calls that exceed predetermined benchmarks.</p> <p>Such enhanced analyses should be used in determining and evaluating performance and in identifying areas where improvements should be made.</p>	<ul style="list-style-type: none"> • <u>Call taking and dispatch times</u>: As explained in the initial audit, call taking time represents the length of time from when the call is answered to the time the information about the incident is submitted to the dispatcher. Dispatch time, as explained in the initial audit, is the length of time from when the initial alert about the incident is received by the dispatcher to the point the dispatcher dispatches a responding unit. Quarterly reports continue to be generated that reflect both call taking and dispatch times. Those reports are delineated by agency (EMS, fire department, police department, and Sheriff's Office). They are also segmented into calls that come in through 911 (emergency) lines and calls that come in through the administrative phone lines. The CDA also further categorizes those response times by priority level of the call (i.e., level 1 through 5 with level 1 being the most urgent type of call such as a life threatening situation, and level 5 being non-emergency calls such as those handled by the Leon County Sheriff's Bailiff Office). Additionally, as also documented in the initial audit, response times can be identified and reviewed by individual day, week, month, or shift. • <u>Quality Assurance</u>: As described in the initial audit, the CDA selects samples of calls and grades how call takers performed by determining whether the call taker (1) asked the correct questions in the correct order based on the circumstances, (2) obtained necessary information and properly recorded that information in the CAD system, (3) made appropriate and correct determinations based on the obtained information and circumstances, and (4) delivered an appropriate level of customer service.
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	<p>Although the quality assurance process does not measure response times, it inherently helps with managing and reviewing response times by evaluating whether call takers are promptly and appropriately moving through the triage process with callers based on the nature of the emergency.</p> <ul style="list-style-type: none">- Enhancements made subsequent to the initial audit include the following:<ul style="list-style-type: none">• <u>Agent Statistics Report – Ready or On Call</u>: The CDA generates and analyzes quarterly reports detailing what percent of time each call taker is logged on to the CAD system and either ready to answer a call or processing a call. While this report does not directly measure response times, it does measure the degree to which CDA call takers are poised to answer incoming calls, which does directly impact call answering times. These reports can be generated for a specific day or shift, if needed.• <u>Agent Statistics Report – Average Call Count</u>: The CDA records and reviews on a quarterly basis the number of calls answered by each individual call taker for comparison to the average number of calls answered by all call takers during the quarter. As with the previous action, this process does not directly measure response times but may help CDA management identify call takers that may not be aggressive in answering calls (i.e., thereby delaying the overall response times). This report can also be generated for a specific day or shift, if needed. <p>Our initial audit reported the CDA follows the response time calculation and measurement standards set forth by the National Fire Protection Association and the International Academies for Emergency Dispatchers. Management believes those standards, plus the other steps described above, establish an</p>
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	<p>adequate means to properly evaluate the success of staff in processing and dispatching calls in a timely and expeditious manner. As appropriate, corrective actions are taken by CDA management when the response times are determined to be inadequate. One such action taken based on these analyses was the CDA’s implementation of a process whereby each time a 911 emergency call is received at the CDA, the software now automatically determines which in-service call taker has gone the longest period without processing a 911 call. The software then routes the incoming call to that call taker’s workstation. As a safeguard, in the event that particular call taker does not answer the phone call within eight seconds, the call will be re-routed such that the call will ring at the desk of every available in-service call taker. CDA management implemented this process in an effort to ensure each call taker answers an appropriate share of calls which, in turn, should help ensure all calls are answered in a timely manner. (NOTE: Another safeguard already in place is a separate audible alert which can be heard throughout the 911 floor when there is an incoming 911 call.)</p>
<p>H. Equipment Record Keeping</p>	
<p>1. We recommend the CDA ensure that adequate records are maintained on an ongoing basis for portable radios and related chargers.</p>	<p>✓ Recommended action completed and ongoing. The CDA owns 25 portable radios, 13 single unit chargers, and 2 multiunit chargers. CDA management created a log to record and track which staff were assigned custody of the radios and chargers. Of those, we judgmentally sampled and observed 11 radios, 7 single unit chargers, and both multiunit chargers.</p>

Table Legend:

✓ Recommendation addressed and underlying issues resolved, and/or actions to be taken when applicable future events occur.

◆ Recommended actions have been taken but not yet completed.

Table 2
CAD Outages Subsequent to the Initial Audit

	Description	Impact	Known or Possible Cause	Actions Taken and Current Status	Length of Outage
1.	<p><u>March 7, 2015:</u> System froze and locked up (temporarily stopped working).</p> <p><i>(This outage occurred after completion of our initial audit fieldwork, but immediately prior to the issuance of the initial audit report (#1505.)</i></p>	CDA call takers must rely on a manual process to record information from callers and relay that information to dispatchers; all information must be dispatched to responding units solely through radio transmissions. In certain instances this manual process may lengthen the time to identify and dispatch the most appropriate unit.	A mobile unit was logged into the CAD system after being inactive (not logged in) for a relatively long period; as a result, the system became stressed when attempting to apply multiple past updates/upgrades to that unit, causing the system to temporarily lock up.	Motorola corrected this in an upgrade applied on April 2, 2015.	6 minutes
2.	<p><u>April 23, 2015:</u> System slowed down and eventually froze and locked up (temporarily stopped working).</p>	CDA call takers must rely on a manual process to record information from callers and relay that information to dispatchers; all information must be dispatched to responding units solely through radio transmissions. In certain instances this manual process may lengthen the time to identify and dispatch the most appropriate unit.	Completed transactions were not being removed from the system queue, causing the system to attempt to process previously completed transactions in addition to new transactions, eventually slowing the system to the point it locked up.	Motorola corrected this in an upgrade on May 28, 2015.	8 minutes
3.	<p><u>October 8, 2015:</u> System locked up 3 separate times (temporarily stopped working).</p>	CDA call takers must rely on a manual process to record information from callers and relay that information to dispatchers; all information must be dispatched to responding units solely through radio transmissions. In certain instances this manual process may lengthen the time to identify and dispatch the most appropriate unit.	Application server performance issue.	Motorola corrected this in an upgrade on December 10, 2015.	28 minutes (combined total for all 3 outages)

Conclusion

Table 1 within this report shows for 16 of our initial audit recommendations that, as of March 31, 2016, actions have been completed and/or are to be taken when applicable future events occur. Accordingly, for purposes of our audit follow-up process, those areas are considered to have been adequately addressed and resolved. For the remaining nine initial audit recommendations, Table 1 shows that actions have been taken and are in progress to address the underlying issues. Accordingly, we will again follow up on subsequent actions and efforts to successfully address those areas in our next follow-up engagement.

We appreciate the cooperation and assistance provided by staff at the CDA, the City's Technology and Innovations Department, and applicable responding agencies (i.e., TPD, TFD, EMS, and the Leon County Sheriff's Office) during this follow-up audit.

Management's Response

CDA Board (CDA Issues):

The CDA Board would like to take this opportunity to thank the City Auditor's staff for their thorough work on the recent CDA audit. We are pleased with the progress staff continues to make toward completion of the action items and recommendations contained in the original audit. We are confident that all action items and recommendations will be addressed by their respective follow-up date.

City Manager (TPD Records System Issues):

We appreciate the thoroughness of the City Auditor's staff on the Consolidated Dispatch Agency Audit. We are pleased with the progress that staff is making towards the completion of the audit action items. The City has terminated the TPD Records System Project with Motorola and requested a \$350,000 reimbursement. Additionally, Motorola has made a counter-offer to the City's request and have offered \$202,613 in the form of services and hardware in lieu of payment. Management is currently reviewing and considering the offer. We recognize the value of strong internal controls and will continue to make strides to improve operations and performance within these areas.

Copies of this audit follow-up #1613 or audit report #1505 may be obtained from the City Auditor's website (<http://www.talgov.com/auditing/auditing-auditreports.aspx>) or via request by telephone (850 / 891-8397), by FAX (850 / 891-0912), by mail or in person (Office of the City Auditor, 300 S. Adams Street, Mail Box A-22, Tallahassee, FL 32301-1731), or by e-mail (auditors@talgov.com).

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