Office of the City Auditor

Committed to increasing government efficiency, effectiveness, accountability and transparency

Department of Emergency Management

Emergency Management Audit

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Executive Summary

August 9, 2016

Ms. Selena Cuffee-Glenn, Chief Administrative Officer

Subject: Office of Emergency Management (OEM)

The City Auditor's Office has completed an audit of the Office of Emergency Management (Emergency Management). Like any other locality, the City of Richmond is susceptible to different hazards such as flooding, hurricanes, winter storms, tornados, hazardous materials incidents, and terrorism. Having an effective plan to respond to these disasters cannot be emphasized more as it can save lives, protect property, and restore essential services.

The audit found that Emergency Management has an effective program for citizen training and public outreach. Also, there is a process for an effective communication between Emergency Management and the support functions. The following are improvement opportunities:

- Auditor noted that the current notification system is rarely used due to its age and lack of modern components such as an ability to reach thousands of Citizens at one time during an emergency via mass texts and Amber and weather alerts. Since the beginning of 2015, the replacement system has been in the procurement process.
- Continuity of Operations Planning (COOP) is designed to develop and maintain a program that enables the City to preserve and maintain its capability to function effectively in the event of an emergency or a disaster, which could potentially disrupt critical operations and services. The Auditor noted that all support functions had COOP plans. However, 10 of the 16 support functions' COOP Plans (eight departments) had not been updated since 2011 or earlier. Currently, Virginia Executive Order 41 requires that each executive branch update their COOP plans by April 1 of each year.

The City Auditor's Office made four recommendations. The Office of Emergency Management concurred with three of the recommendations. The City Auditor's Office appreciates the cooperation of the Emergency Management staff.

Sincerely,

Umesh Dalal

Umesh Dalal, CPA, CIA, CIG
City Auditor

cc: The Richmond City Audit Committee
John Buturla, Deputy Chief Administrative Officer of Operations
Anthony McLean, Deputy Director, Office of Emergency Management

COMPREHENSIVE LIST OF RECOMMENDATIONS

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COMPREHENSIVE LIST OF RECOMMENDATIONS

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Introduction, Objectives, and Methodology

The City Auditor's Office has completed an audit of the Office of Emergency Management (Emergency Management). The audit specifically focused on the City's preparedness for threats such as terrorism, pandemic influenza, and natural disasters. This audit assesses Emergency Management's operations for the 12 months ended June 30, 2015.

The objectives of this audit were to:

- Evaluate the operating effectiveness and efficiency of Emergency Management;
- Validate the adequacy of the emergency management plan and preparedness for emergencies;
- Verify that training and exercise activities are conducted on a regular basis and involve all stakeholders;
- Determine if communication between Emergency Management and other stakeholders is adequate to ensure preparedness for emergencies and disasters; and
- Verify compliance with applicable laws, regulations, and City Code.

The audit was conducted in accordance with the Generally Accepted Government Auditing Standards promulgated by the Comptroller General of the United States. Those Standards require that the auditors plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for their findings and conclusions based on the audit objectives. The auditors believe that the evidence obtained provides a reasonable basis for their findings and conclusions based on the audit objectives.

Methodology

Auditors performed the following procedures to complete this audit:

- Interviewed the Emergency Management staff.
- Interviewed and surveyed all Emergency Support Function (support function) staff, including the Deputy Director of Emergency Management (the City's CAO).
- Conducted a walkthrough of the EOC Mobile Unit and Command Center.
- Reviewed trainings offered by Emergency Management to citizens and City departments.
- Reviewed and evaluated relevant policies and procedures and tested for compliance.
- Verified that each EOC support function had an active COOP plan.
- Reviewed Federal and State emergency management regulations.
- Reviewed City Code.
- Reviewed Emergency Management Accreditation Program requirements.
- Observed Public Safety Management Group meeting.

Management Responsibility

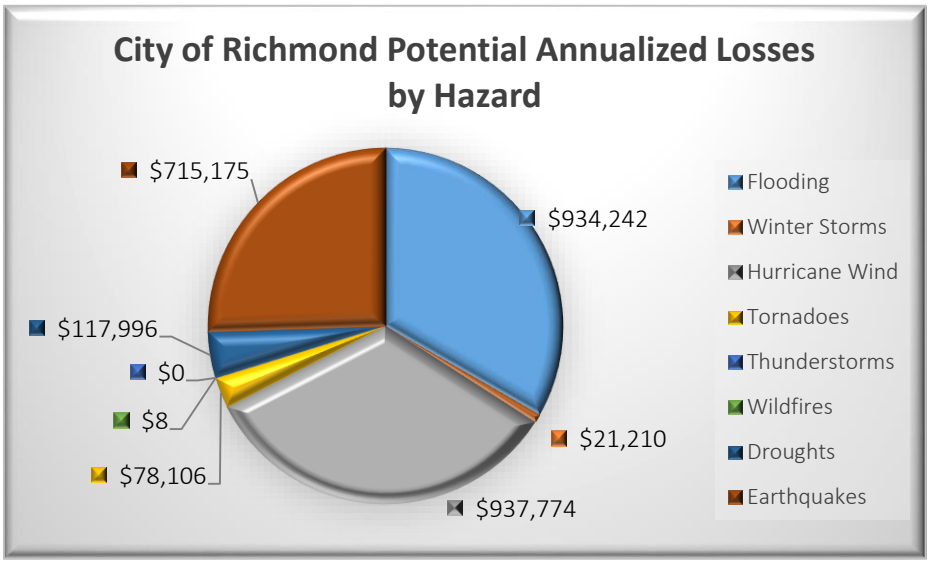
The City management is responsible for ensuring resources are managed properly and used in compliance with laws and regulations; programs are achieving their objectives; and services are being provided efficiently, effectively, and economically.

Background

According to the City of Richmond's website, Emergency Management "seeks to prepare, mitigate, respond, and recover from disasters. Emergency Management does this by educating citizens, employees, and business in the City of Richmond and also by

maintaining relationships with federal, state, and other local emergency management organizations. Additionally, Emergency Management helps to coordinate response resources such as fire, police, and medical. All City departments have a role during disasters large and small. The Office of Emergency Management engages the City of Richmond in becoming a resilient community while lessening the loss of life and damage to property."

The City of Richmond is susceptible to different hazards such as flooding, hurricanes, winter storms, tornados, hazardous materials incidents, and terrorism. Having an effective plan to respond to these disasters cannot be emphasized more as it can save lives, protect property, and restore essential services. These disasters have significant financial consequences that not only impact people, but private and public property as well. Based on the City's Emergency Operation Plan, there is a potential annualized loss by hazards as follows:



Source: Auditor Prepared. Data from Richmond – Greater Multi-Regional Hazard Mitigation Plan

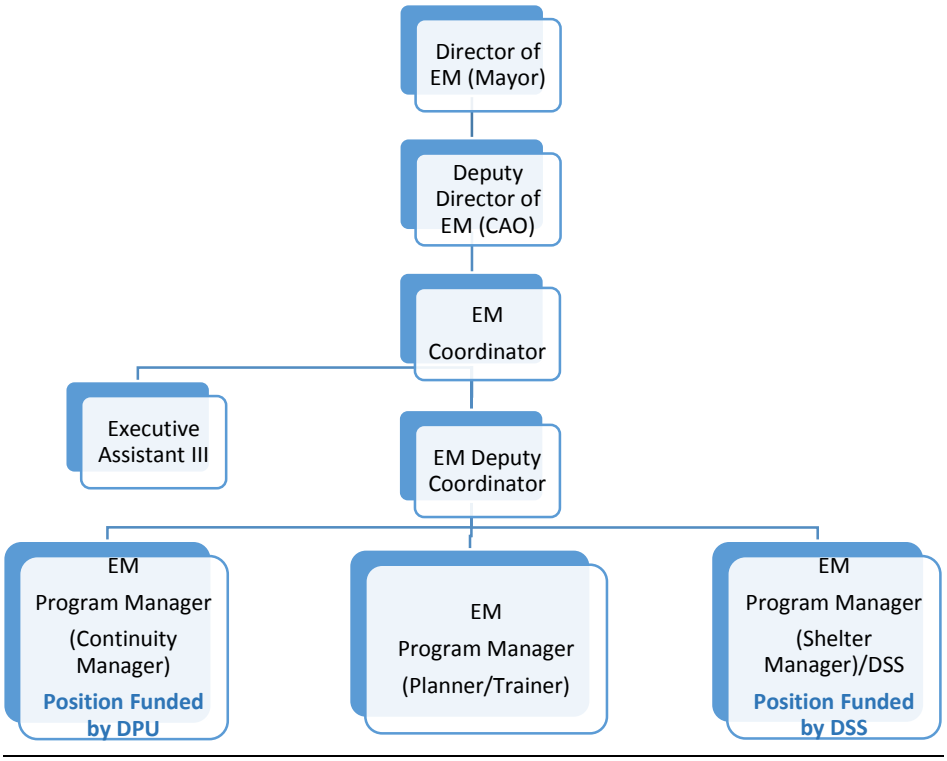
Emergency Operations Plan

Currently, Virginia law requires state and local governments to develop and maintain plans which are called Emergency Operation Plans (Emergency Plan). The City's Emergency Plan "provides the structure and mechanisms for the coordination of support to impact communities and affected individuals and businesses." In addition, the Emergency Plan helps improve the City's capability to respond to and recover from threats of natural or man-made disasters, acts of terrorism, etc. The plan identifies 16 support functions, assigns primary support for each function, and explains in general terms how the City will organize and implement those functions.

Emergency Management Organizational Structure

The Code of Virginia (§ 44-146.19) designates powers and duties for emergency management to political subdivisions. Each entity shall have a director of emergency management. As an independent City, the City of Richmond's Mayor is the Director of Emergency Management. The Chief Administrative Officer (CAO) is the Deputy Director of Emergency Management.

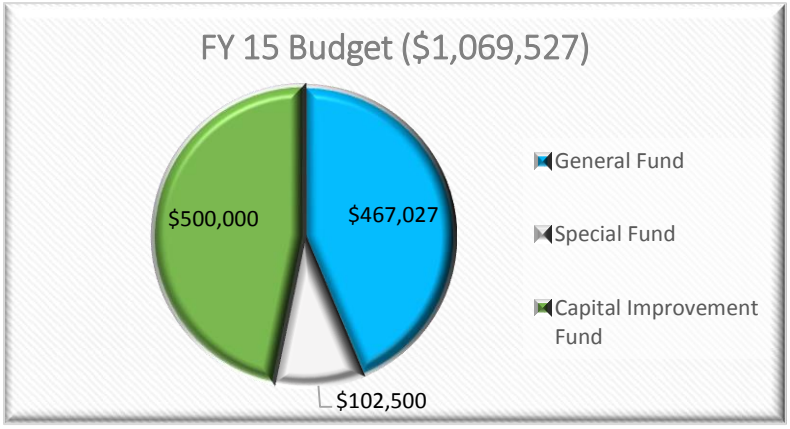
Emergency Management Organizational Chart



Prepared by Auditor

Budget

Emergency Management had a total FY 15 budget of $1,069,527 which included $467,027 from the General Fund, $102,500 from the Special Fund, and $500,000 from the Capital Improvement Fund.



Prepared by Auditor

OBSERVATIONS AND RECOMMENDATIONS

What Works Well

Public Outreach

Public outreach and communication are essential in any emergency management program. Strong partnerships with citizen groups and organizations enable preparedness, response, recovery, and mitigation efforts within the City. Emergency Management uses many different methods for their public outreach strategy such as:

Citizen Training

These trainings help educate the public on how to prepare for emergencies and stay safe during dangerous situations. Citizen trainings can be held anywhere from Schools, Churches, Parks, or Nursing Homes.

During each meeting, the discussion includes getting a kit, making a plan, and staying informed. Additionally, handouts are provided such as:

- Citizens Emergency Preparedness Guidebooks;
- Flood Preparedness Tips; and
- Tornado Brochures.

Office of Emergency Management Facebook Page

Basic resources such as flashlights, can openers, emergency preparedness wheels, file of life magnets, and AM/FM radios are provided to participants. During calendar years 2014 and 2015, Emergency Management offered 33 and 14 Citizen Preparedness Trainings, respectively.

Auditor also noted that Emergency Management offers numerous documents/guides for citizens on their website such as:

- Safe winter driving video,
- Make a plan,
- Build an emergency response kit,
- City of Richmond Citizens Emergency Preparedness Guide,
- Emergency preparedness 101 video,
- Flooding preparedness,
- Tornado preparedness, and
- Additional videos and brochures for emergency situations.

CERT Training

The City's Emergency Response Team (CERT) is one of the more noteworthy citizen trainings provided by Emergency Management. CERT is comprised of volunteer citizens who are trained in basic life safety and emergency preparedness skills. It is a community-based program designed to provide rapid and safe care for the City's residents and support to the City's emergency personnel in the event of a major incident or a large scale disaster.

Office of Emergency Management Facebook Page

The Program supports non-emergency activities to promote emergency preparedness. The training sessions benefit the City and its citizens by having certified volunteer members assisting families, neighbors, and co-workers during an emergency situation where professional responders are not immediately available.

The CERT training is a 20 hour course that includes classroom and hands-on learning. Individuals train with community CERT members and participants from other jurisdictions. The following topics are covered during the CERT training:

- Disaster Preparedness
- Fire Safety
- Disaster Medical Operations
- Light Search and Rescue
- CERT Organization
- Disaster Psychology
- Terrorism
- Disaster Simulation

Currently over 400 individuals have successfully completed the CERT program since its inception in late 2004.

Survey Identified Effective Communication between Emergency Management and Support Functions

Auditors interviewed/surveyed all support functions to gain an understanding of their interactions with Emergency Management and preparedness for EOC activations. Overall, the support functions were aware of EOC responsibilities and had positive comments about their interactions with Emergency Management personnel.

Acquisition of WebEOC

WebEOC is a web-based information management system that provides a single access point for the collection and distribution of emergency or event-related information. It allows users to log on from any computer connected to the Internet and does not require a user to be physically present in the EOC.

WebEOC communicates real-time information provided by the users that can be used during the planning, mitigation, response, and recovery phases of any emergency. WebEOC allows for sharing of information in a variety of ways, including document

sharing, photo uploading, and displays for map and other GIS information. The system is customizable and flexible based on the users' needs.

Being able to share real time information with other agencies in the City can allow for more rapid support to incident commanders in the field and deployment of resources to help accomplish the mission. It also provides the ability to update key decision makers with the most up to date information so that they can make timely and informed decisions.

Emergency Management implemented the WebEOC system in May 2016. The initial training for major support functions was provided on June 28, 2016. Additional training sessions commenced July 20, 2016.

Improvement Opportunities

According to the Government Auditing Standards, internal control, in the broadest sense, encompasses the agency's plan, policies, procedures, methods, and processes adopted by management to meet its mission, goals, and objectives. Internal control includes the processes for planning, organizing, directing, and controlling program operations. It also includes systems for measuring, reporting, and monitoring program performance. An effective control structure is one that provides reasonable assurance regarding:

- Efficiency and effectiveness of operations
- Accurate financial reporting
- Compliance with laws and regulations

Based on the audit test work, the auditors concluded that the internal controls are satisfactory, however, there are some opportunities to enhance the existing controls as discussed below:

Public Alert System is Outdated

According to VA Code §44-146.19(G), by July 1, 2005, all localities with a population greater than 50,000 shall establish an alert and warning plan for the distribution of adequate and timely warnings to the public in the event of an emergency or threatened disaster. Currently, the City has an Emergency Notification System which is capable of transmitting notifications to multiple individuals or groups defined by predetermined geographic locations via a prerecorded message. However, Auditor noted that the current notification system is rarely used due to its age and lack of modern components. Components available with the new system that are not available with the City's current system include, but are not limited to:

- Ability to reach thousands of citizens at one time during an emergency whereas the current system can only place about 50 phone calls at one time. During emergencies, time is of the essence, therefore slow notifications could hinder the process of alerting the public.
- The new system has the ability to ping off of cell towers, allowing it to communicate to a greater range of individuals. The City's current system is limited to land lines.
- Mass text alerts
- Amber alerts
- Weather alerts
- Integrated self-registration portal

Having an up-to-date Emergency Notification System is essential to save lives and protect property during times of national, state, regional, and local emergencies.

Currently Emergency Management is working with Procurement and the City Attorney's Office to acquire a new notification system. However, according to OEM

staff, the process began in early 2015, but it has not been implemented due to numerous delays in the procurement and legal processes.

Recommendation

1. The CAO needs to work with the City Attorney's Office to seek appropriate approvals for the procurement of an Emergency Notification System.

City Departments' Emergency Plans are Outdated

Continuity of Operations Planning (COOP) is designed to develop and maintain a program that enables the City to preserve and maintain its capability to function effectively in the event of an emergency or a disaster, which could potentially disrupt critical operations and services. A COOP plan is designed to address the following events:

- Loss of access to a facility or building;
- Loss or reduction of services due to a reduction in workforce; and
- Loss of services due to equipment or system failure.

COOP planning is one component of the City of Richmond's comprehensive emergency management program. It addresses the preparation, mitigation, response, and recovery from hazardous situations. By focusing on efforts to continue the essential functions of the City, COOP planning ensures that the government continues to operate in the event of a major emergency. Not having a COOP plan results in a lack of proper guidance to City operations for dealing with an emergency.

Auditor requested the COOP plans from all support functions to assure that they had active plans. Auditor noted that all support functions had COOP plans.

However, 10 of the 16 support functions' COOP Plans (eight departments) had not been updated since 2011 or earlier. Currently Virginia Executive Order 41 requires that each executive branch update their COOP plans by April 1 of each year.

Recommendation

2. The CAO needs to ensure that support functions have an effective process to maintain updated COOP plans.

Opportunities Exist to Strengthen Training Activities

In order to respond in emergency situations, Emergency Management and support function personnel need to be properly prepared and trained. The National Incident Management System (NIMS) defines preparedness as a "continuous cycle of planning, organizing, equipping, exercising, evaluating, and taking corrective action" in an effort to ensure effective coordination during an incident response. The picture below depicts the emergency preparedness cycle:

NIMS Training
ProgramFEMA.gov

Emergencies do not occur frequently in Virginia. However, when they do, the local governments need to be ready to respond for public safety and continuity of public services. Therefore, during emergencies, all the support functions such as Public Works, Public Utilities, and Finance must have proper training to deliver services in accordance with public expectations.

ICS/EOC Trainings

According to the NIMS training program, "everyone involved in emergency management (to include emergency operation center personnel in support of the field), regardless of discipline or level of government, should take the NIMS baseline curriculum courses."

"The NIMS Training Program defines the national NIMS training program as it relates to the NIMS components of Preparedness, Communications and Information Management, Resource Management, and Command and Management." The training gives specifications for "stakeholder responsibilities and activities for developing, maintaining, and sustaining NIMS training".

At the City of Richmond, Emergency Management offers NIMS training. The City's safety departments, such as Police, Emergency Communications and Fire are required to have some sort of Incident Command System (ICS) training. However, other City departments with support function responsibilities are not mandated to obtain ICS training. Although the training is not mandated, it may make good business sense to require support functions to take the training to prevent interruption in public service during emergencies.

In addition, the Auditor noted the internal EOC training has not taken place for the past few years. Per Emergency Management Training Multiyear Plan, "Each July,

EOC personnel are required to attend the annual EOC refresher training conducted by Emergency Management." Annual EOC training is critical for new EOC employees and continuing support function leaders. The ongoing training prepares the essential emergency personnel for a more seamless emergency activation and execution. These trainings are especially important as high employee turnover continues within the City.

Recommendation

3. The CAO and Emergency Management need to offer EOC Training and ensure attendance of support function staff.
4. The CAO needs to consider requiring all support function leaders to have the appropriate level of ICS training.

MANAGEMENT RESPONSE FORM **APPENDIX A**

2017-02 Office of Emergency Management

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
1	The CAO needs to work with the City Attorney's Office to seek appropriate approvals for the procurement of an Emergency Notification System.	N	The City is working to exercise a cooperative provision of a federal GSA contract. This will be handled through Procurement Services.
[illegible]	TITLE OF RESPONSIBLE PERSON		TARGET DATE
[illegible]			The nofiticaiton system is number 2 in the queue, it will be next week (August 1-5, 2016) before the City Attorney's Office reviews the contractual terms.
[illegible]	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
[illegible]			

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
2	The CAO needs to ensure that support functions have an effective process to maintain updated COOP plans.	Y	The newly hired COOP Manager began work on July 25, 2016. The COOP Manager will immediatly begin coordinating the review of COOP Plans with Department Directors and COOP Liaisons. The COOP Manager will also develop and add COOP exercise/training to OEM's multi-year training and exercise plan.
[illegible]	TITLE OF RESPONSIBLE PERSON		TARGET DATE
[illegible]	Coordinator and COOP Manager - Office of Emergency Management		FY17 1st Qtr (Jul-Sept 2016) to begin review and updating process; FY17 3rd Qtr (Jan-Mar 2017) to begin testing/exercising departmental plans.
[illegible]	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
[illegible]			

MANAGEMENT RESPONSE FORM **APPENDIX A**

2017-02 Office of Emergency Management

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
3	The CAO and Emergency Management need to offer EOC Training and ensure attendance of support function staff.	Y	This is already being done. OEM's multi-year training and exercise plan offers exercises and training for Emergency Support Function (ESF's) personnel. Most recently WebEOC, a crisis management software, was purchased to support EOC management. Mandatory training workshops were developed and included in the training plan. Basic EOC Overview training has been historically provided to staff. Further, each activation of the EOC serves as an opportunity to put training into practice. Upon deactivating the EOC, After Action Reports (AAR) are completed and reviewed. Updates to procedures can then be made, with knowledge gained from actual experiences. OEM already have an EOC Overview training module which is ready to reimplement.
BRIEF	TITLE OF RESPONSIBLE PERSON		TARGET DATE
BRIEF	Coordinator and Emergency Planner/Trainer - Office of Emergency Management		FY17 4th Qtr (Apr-Jun 2017) to reimplement a basic EOC Overview training session.
BRIEF	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
BRIEF			EOC training consist of a varierty training opportunities, Drills, Tabletop & Functional exercises, WebEOC, Basic EOC Overview Training, Incident Command System (ICS) Training to include Just In Time Training. Most recently the Office of Emergency Management accquired WebEOC, a crisis management software, by which mandatory training was implemented to ensure all EOC staffing would get this training. Additionally, an annual tabletop, drill or every 2nd or 3rd year a functional exercise is developed for EOC staff. OEM already have a basic EOC overview training module that we will reimplement to ensure all EOC staff understand their roles and responsibilities.

MANAGEMENT RESPONSE FORM **APPENDIX A**

2017-02 Office of Emergency Management

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
4	The CAO needs to consider requiring all support function leaders to have the appropriate level of ICS training.	Y	*ICS Trainng is already provided three times per calendar year ICS 300 (twice), ICS 400 (once) and is based on volunteer atttendance as well as the departmental need. Implement a manadory ICS training for all Emergency Support Functions.*
[illegible]	TITLE OF RESPONSIBLE PERSON		TARGET DATE
[illegible]	Coordinator -Office of Emergency Management		FY17 1st QTR (Jul-Sept 2016) training is schedule; FY 17 4th QTR (Apr-Jun 2017) implement mandatory training.
[illegible]	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
[illegible]			