

# Memorandum



CITY OF DALLAS  
(Report No. A13-009)

DATE: September 13, 2013

TO: Honorable Mayor and Members of the City Council

SUBJECT: Audit of the Design of the City of Dallas' Pandemic Influenza Continuity of Operations Basic Plan<sup>1</sup>

The Office of the City Auditor's (Office) design assessment of the City of Dallas' (City) Continuity of Operations (COOP) Plan indicated that the City made progress toward establishing and implementing a COOP Plan. Many of the Federal Emergency Management Association's (FEMA) best practices, however, are either not in place or are incomplete.

As a result, the City's COOP Plan does not fully incorporate the ten Continuity Management Functions that FEMA considers essential to support and guide continuity personnel during a significant event. Specifically, the City's COOP Plan:

- Partially satisfies *four* of the Continuity Management Functions; and,

### City of Dallas Continuity of Operations (COOP) Plan

**Definition:** Provides procedures and guidance to sustain an organization's mission essential functions at an alternate site for up to 30 days; mandated by Federal directives.

**Source:** National Institute of Standards and Technology, SP 800-34 *Contingency Planning Guide for Federal Information Systems*, Chapter 2, Page12

**Reference Information:** The City's COOP is titled the Pandemic Influenza Continuity of Operations Basic Plan.

The reference to the "Pandemic influenza" was added by the Office of Emergency Management (OEM) to show compliance with the use of the Federal grant designed to support emergency operations.

The City's COOP is broader and attempts to address all hazards.

**Source:** Office of Emergency Management

<sup>1</sup> We conducted an *Audit of the Design of City of Dallas' Pandemic Influenza Continuity of Operations Basic Plan* (Basic Plan) under the authority of the City Charter, Chapter IX, Section 3. This audit is part of our Fiscal Year 2012 Audit Plan approved by the City Council. This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. The audit objective was to evaluate whether the design of the Basic Plan can continue operating in the event of a disaster and covered the period October 1, 2010 through December 31, 2012; however, certain other matters, procedures, and transactions outside the period may be reviewed to understand and verify information during the audit period. We researched previously issued audit reports and best practices and applied the criteria in the Continuity Guidance Circulars 1 and 2, and the Continuity Assistance Tool (CAT) recommended by FEMA. We obtained supporting documentation to assess the design of the City's Basic Plan.

- Does not satisfy *six* of the Continuity Management Functions (see Attachment I)

The City's COOP Plan also does not apply FEMA's Continuity Program Foundation's supporting continuity planning components, such as risk-based analysis and budgeting for on-going acquisition of resources. Furthermore, the City's COOP plan is not sufficiently developed to provide the Department of Communication and Information Services (CIS) the necessary information to develop a robust Disaster Recovery Plan (DRP). The DRP refers to a coordinated strategy involving plans, procedures, and technical measures that enable the recovery of information systems, operations, and data after an emergency event or a disruption.

The FEMA's Continuity Guidance Circulars (CGCs) 1 and 2, which were the criteria for this design assessment, provides direction to non-Federal entities (States, territories, tribal, and local government jurisdictions and private sector organizations) for developing continuity plans and programs. According to the CGC-1, continuity planning is the good business practice of ensuring the execution of essential functions under all circumstances. Continuity includes all activities conducted by jurisdictions to ensure that their essential functions can be performed. This includes plans and procedures that delineate essential functions, specify succession to office and emergency delegation of authority, provide for the safekeeping of vital records and databases, identify alternate operating strategies, provide for continuity communications, and validate these capabilities through test, training, and exercise programs.

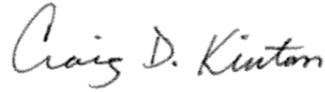
We recommend the:

- I. City Manager and/or designated continuity personnel to develop and implement the ten Continuity Management Functions of the COOP Plan described in Attachment I
- II. City Manager and/or designated continuity personnel provide periodic updates to the City Council on the project to ensure transparency
- III. City Manager and the Director of CIS develop a DRP using the information from the ten Continuity Management Functions of the COOP Plan

Please see Attachment II for management's response to the report recommendations.

We would like to acknowledge City management's cooperation in providing the information needed to complete this audit. If you have any questions or need additional information, please contact me at 214-670-3222 or Carol A. Smith, First Assistant City Auditor, at 214-670-4517.

Sincerely,



Craig D. Kinton  
City Auditor

#### Attachments

C: A.C. Gonzalez, Interim City Manager  
Ryan S. Evans, Interim First Assistant City Manager  
Charles Cato, Interim Assistant City Manager  
Jill A. Jordan, P.E., Assistant City Manager  
Theresa O'Donnell, Interim Assistant City Manager  
Forest Turner, Assistant City Manager  
Joey Zapata, Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Rocky Vaz, Director – Office of Emergency Management  
William Finch, Director – Department of Communication and Information Services  
Michael Frosch, Director – Department of Business and Development Procurement Services  
Edward Scott, Controller, City Controller's Office  
Chief Louie Bright, Dallas Fire-Rescue  
Chief David O. Brown, Dallas Police Department  
Kevin Oden, Emergency Specialist – Office of Emergency Management

Elements of a Viable Continuity Capability

Attachment I

Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>1 Essential Functions</b></p> <p><i>The limited set of organization level functions that should be continued throughout, or resumed rapidly after, a disruption of normal activities.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. Specifically:</p> <ul style="list-style-type: none"> <li>(1) The essential functions were not identified using a business process analysis which incorporates the elements of risk, prioritization, and mapping interdependencies inherent in an organization.</li> <li>(2) Specific criteria for defining essential functions were not available for departments to distinguish between general operational functions and those that are critical for continuity planning.</li> <li>(3) Sufficient guidance on how to evaluate recovery times for essential functions was not provided and departments identified recovery times based on "would like" instead of "criticality." Out of the approximately 215 essential functions, 35 percent of the essential functions are expected for immediate recovery (24 hours).</li> <li>(4) The essential functions are missing key information (interim process, phone numbers, vital records, key equipment needs).</li> <li>(5) The manual interim process, related vital records, procurement needs, and security considerations for essential functions are not included.</li> </ul>

Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>2 Orders of Succession</b></p> <p><i>Provisions for the assumption of senior agency offices during an emergency in the event that any of those officials are unavailable to execute their legal duties.</i></p>	<p><b>Partially satisfies</b></p>	<p>The City <u>partially satisfies</u> this Continuity Management Function as it has identified orders of succession for most of the essential functions; however:</p> <ul style="list-style-type: none"> <li>(1) The orders of succession are not always three positions deep (e.g., Department of Business Development and Procurement Services) or identified for certain essential functions (e.g., City Controller's Office).</li> <li>(2) Personnel identified as the primary lead also serve as the backup for other essential functions. For example, the Director may serve as the primary lead for essential function one and also serve as the secondary lead for essential function two.</li> <li>(3) The methods of notification for the personnel in the orders of succession are limited to work phone numbers and e-mails. These methods of notification are generally the first form of communications that are not operating or functional during an emergency event.</li> <li>(4) The orders of succession are not reviewed periodically and are not accurate or complete.</li> </ul>

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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>3 Delegations of Authority</b></p> <p><i>Identification, by position, of the authorities for making policy determinations and decisions at headquarters, field levels, and all other organizational locations. Generally, pre-determined delegations of authority will take effect when normal channels of direction have been disrupted and will lapse when these channels have been re-established.</i></p>	<p><b>Partially satisfies</b></p>	<p>The City <u>partially satisfies</u> this Continuity Management Function since delegations of authority are included; however:</p> <ul style="list-style-type: none"> <li>(1) Each delegated position's authority and responsibility for making policy determinations and decisions at headquarters, field levels, and all other organizational locations are not stated.</li> <li>(2) The identified delegates and their roles are not communicated and included appropriately in the Continuity Management Functions including Vital Records, Continuity Facilities, and Continuity Communications.</li> <li>(3) The list of pre-delegates is not reviewed periodically and therefore does not account for changes in personnel.</li> </ul>

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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>4 Continuity Facilities</b></p> <p><i>Continuity facilities are locations from which leadership and critical positions may operate during a continuity event. These may include one or many facilities or virtual offices from which to continue essential operations.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. The City's preliminary planning does not include certain elements, such as:</p> <ul style="list-style-type: none"> <li>(1) The continuity location's selection is not based on identifiable criteria, such as geographic location, electricity grids, potential road hazards, or accessibility to location during severe weather conditions.</li> <li>(2) Out of the 107 business processes, 21 business processes have no primary location identified, 37 business processes do not have continuity location # 1 identified, and 66 business processes do not have continuity location # 2 identified.</li> <li>(3) For those business processes where continuity locations are identified, the continuity location references are indistinct and vague (e.g., any fire station, any library, space in City Hall).</li> <li>(4) Several City departments identified the same continuity location and the continuity location may not be able to support all those who wish to use it (e.g., City Store, Dolphin Road, and Airport).</li> <li>(5) The identified continuity locations have not been tested or validated to determine whether they have the capacity to support essential functions for up to 30 days, such as health, safety, and security of employees.</li> <li>(6) Memorandums of Understanding, where City departments intend to use other City department's primary locations as an alternate location for emergencies, are not outlined (e.g., Library).</li> <li>(7) Agreements with vendors, other cities, or entities that the City is placing reliance upon during emergencies have not been developed (e.g., AT&amp;T building for CIS' personnel).</li> </ul>

Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>5 Continuity Communications</b></p> <p><i>Continuity communications are the systems that support full connectivity among leadership, internal elements, and other organizations to perform Essential Functions during a continuity event.</i></p>	<p><b>Partially satisfies</b></p>	<p>The City <u>partially satisfies</u> this Continuity Management Function since the Office of Emergency Management (OEM), Dallas Police Department (DPD), and Dallas Fire-Rescue (DFR) communication systems can be used to support some emergency activities; however, the City does not have effective communication systems to support full connectivity under all conditions, including:</p> <ul style="list-style-type: none"> <li>(1) Minimum communication requirements for primary and alternate continuity facilities</li> <li>(2) Interoperable and available communication capabilities in sufficient quantities to support essential functions for at least 30 days</li> <li>(3) Sufficient communication capabilities to support senior leadership and City staff when alternate facilities are being used by more than one department</li> </ul>

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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>6 Vital Records Management</b></p> <p><i>Vital records management is the identification, protection, and availability of information systems and applications, electronic and hardcopy documents, references, and records needed to support Essential Functions during a continuity event.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. Specifically, the City does not have:</p> <ul style="list-style-type: none"> <li>(1) An inventory of key records for emergency operating records or rights and interests</li> <li>(2) The appendices in each City department's plan, where vital records are generally identified, are not limited to essential functions</li> <li>(3) Memorandums of Understanding between the City departments and CIS outlining the data classification needs; instead, the departments state that CIS is the vital record program</li> <li>(4) Alternate location(s) where hard or electronic copies of data are stored along with the appropriate media necessary to read the vital data including network support</li> <li>(5) Protection for vital records, including passcodes, access codes, keys, and other means for disbursing sensitive information during emergencies</li> <li>(6) An annual review that includes rotations and cycles of latest versions of vital records at various locations</li> <li>(7) A training program for City personnel to focus on identifying, inventorying, protecting, storing, accessing, and updating vital records</li> </ul>

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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>7 Human Capital</b></p> <p><i>Human capital involves policies, plans, and procedures that address human capital needs during a continuity event, such as guidance on pay, leave, work scheduling, benefits, telework, hiring, authorities, and flexibilities.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. The City has not established, developed, and identified the following components necessary to provide for the human capital:</p> <p><b><u>Continuity Leadership and Staff</u></b></p> <ul style="list-style-type: none"> <li>(1) The City has not established an emergency relocation group with the specific skill sets to perform essential functions or support tasks in an emergency event.</li> <li>(2) The City has not developed and implemented a process to document, communicate, and train continuity personnel of their roles and responsibilities, including preparedness planning.</li> </ul> <p><b><u>All City Personnel</u></b></p> <ul style="list-style-type: none"> <li>(1) The City has not developed a process to communicate with staff on how to report to work during emergency events.</li> <li>(2) The City has not implemented a process to contact and account for all staff during an emergency event, such as a toll free telephone number or a website that would allow employees to notify the City of their status.</li> </ul> <p><b><u>Human Capital Considerations</u></b></p> <ul style="list-style-type: none"> <li>(1) The City has not identified a continuity coordinator to work with the City's Department of Human Resources to resolve human capital issues related to an emergency planning (e.g., policies that will remain in effect).</li> </ul>

Continuity Function	Auditor's Design Assessment	Missing Components
		<p>(2) The City has not developed key policies related to emergency planning, including employee leave and compensation, telecommuting, social distancing, and other human resource related activities, such as work scheduling and benefits.</p> <p>(3) The City's Administrative Directive 2-5 <i>Emergency Evacuation</i> is obsolete and does not include physical infrastructure changes, such as restriction to stairs and changes to evacuation strategies since 1995.</p>

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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>8 Test, Training, and Exercise Program</b></p> <p><i>An effective Test, Training, and Exercise Program identifies, trains, and prepares personnel capable of performing their continuity responsibilities and implementing procedures to support the continuation of Essential Functions. Training provides the skills and familiarizes personnel with procedures and tasks. Tests and exercises serve to assess and validate all the components of continuity plans, policies, procedures, systems, and facilities.</i></p>	<p><b>Partially satisfies</b></p>	<p>The City <u>partially satisfies</u> this Continuity Management Function as the City can demonstrate the Exercise component of the Testing, Training and Exercise Program. The City, however, does not sufficiently address the following:</p> <p><b>Testing</b></p> <p>The City does not have an annual testing program that includes validation of:</p> <ul style="list-style-type: none"> <li>(1) Alert, notification, and activation procedures for continuity personnel</li> <li>(2) Recovery of vital records, critical information systems, services, and data</li> <li>(3) Primary and backup infrastructure systems and services (e.g., power, water, fuel) at continuity facilities</li> <li>(4) Physical security capabilities</li> <li>(5) Equipment to ensure internal and external interoperability and viability of communication systems</li> <li>(6) Personnel capabilities to perform essential functions</li> <li>(7) Dependencies, internal and external, with respect to essential functions</li> </ul>

Continuity Function	Auditor's Design Assessment	Missing Components
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**Training**

The City does not have a training program that includes continuity training for:

- (1) The entire workforce
- (2) Continuity personnel who assume authority and responsibility and/or assigned to activate, support, and sustain continuity operations
- (3) Continuity leadership
- (4) Department-delegated personnel authorized for making policy determinations
- (5) Using or relocating to continuity facilities
- (6) Communication capabilities
- (7) Identification, protection, and availability of vital records
- (8) Devolution
- (9) Reconstitution of operations

Continuity Function	Auditor's Design Assessment	Missing Components
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**Exercise**

Between 2010 and 2012, the City participated in two actual events and implemented one desktop exercise. The After Action Reports for the two actual events identified similar issues that were not addressed. These issues included:

- (1) Inadequate training for DPD and DFR personnel on the implementation of Incident Command System
  - (2) Inconsistent resource staffing where personnel were overstaffed or not available
  - (3) Deficiencies in continuity facilities where the facilities were not identified or were not sufficient for operations
  - (4) Insufficient communication equipment and/or missing communication equipment
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Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>9 Devolution of Control and Direction</b></p> <p><i>Devolution is the capability to transfer statutory authority and responsibility for Essential Functions from primary operating staff and facilities to other employees and facilities. It also provides the means to sustain that operational capability for an extended period.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. The City does not have devolution plans that:</p> <ol style="list-style-type: none"> <li>(1) Include a program plan and procedures; budgeting and acquisitions; essential functions; orders of succession; delegations of authority; continuity communications; vital records management; human capital; test, training and exercise program; and, reconstitution elements of a viable continuity of operations capability</li> <li>(2) Identify prioritized essential functions for devolution, define tasks, and resources to facilitate immediate transfer to devolution site</li> <li>(3) Include a roster that identifies fully equipped and trained personnel who will be stationed at the devolution site with the authority to perform essential functions</li> <li>(4) Identify what would likely activate or “trigger” the devolution option</li> <li>(5) Specify how and when direction and control of organization will be transferred to and from the devolution site</li> <li>(6) List the necessary resources to facilitate the performance of essential functions at the devolution site</li> <li>(7) Establish and maintain reliable processes and procedures for acquiring the resources necessary to continue essential functions for extended periods</li> <li>(8) Establish and maintain capability to resource or reconstitute organization authorities to their pre-event status upon termination of devolution</li> </ol>

Continuity Function	Auditor's Design Assessment	Missing Components
<p><b>10 Reconstitution Operations</b></p> <p><i>Reconstitution planning is the process by which organizations / personnel resume normal operations from the original or a replacement primary operating facility.</i></p>	<p><b>Does not satisfy</b></p>	<p>The City <u>does not satisfy</u> this Continuity Management Function. The City does not have a reconstitution plan to return to normal operations consisting of:</p> <ul style="list-style-type: none"> <li>(1) An executable plan for transitioning back to efficient normal operational status once a threat or disruption has passed</li> <li>(2) Options to move operations from the devolution sites to either the original operating facility, or, if necessary, to a new operating facility</li> <li>(3) Necessary procedures for conducting a smooth transition from the relocation site(s) to a new facility(ies)</li> </ul>

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## Management's Response

Memorandum

**RECEIVED**  
AUG 30 2013  
City Auditor's Office



DATE: August 30, 2013

TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report: Audit of the Design of the City of Dallas' Pandemic Influenza Continuity of Operations Basic Plan

Our responses to the audit report recommendations are as follows:

### Recommendation I

We recommend the City Manager and/or designated continuity personnel to develop and implement the ten Continuity Management Functions of the COOP Plan described in Attachment I.

### **Management Response / Corrective Action Plan**

Agree  Disagree

The City of Dallas Office of Emergency Management will work to coordinate the dissemination of this information to other City departments in order to address and rectify deficiencies within the ten Continuity Management Functions as described in Attachment I. Our corrective action plan will involve hiring an experienced vendor who will work with all City Departments to address deficiencies using the Continuity Guidance Circular as guidance.

### **Implementation Date**

Final Deliverable: December 31, 2015

### **Responsible Manager**

Rocky Vaz, Managing Director

### Recommendation II

We recommend the City Manager and/or designated continuity personnel provide periodic updates to the City Council on the project time to ensure transparency.

### **Management Response / Corrective Action Plan**

Agree  Disagree

The Office of Emergency Management will provide periodic updates to the City Council of the corrective action plan identified in Recommendation I.

"Dallas: The City That Works: Diverse, Vibrant, and Progressive."

**Implementation Date**  
December 31, 2015

**Responsible Manager**  
Rocky Vaz, Managing Director

**Recommendation III**

We recommend the City Manager and the Director of the Department of Communication and Information Services develop a Disaster Recovery Plan (DRP) using the information from the ten Continuity Management Functions of the COOP Plan.

**Management Response / Corrective Action Plan**

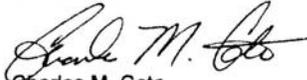
Agree  Disagree

After completion of the City Department's COOP plans and upon funding approval, CIS will engage the services of an experienced Disaster Recovery Planning firm to develop departmental Information Technology (IT) Disaster Recovery Plans.

**Implementation Date**  
One year after final completion of all City Department COOP plans

**Responsible Manager**  
Tony Aguilar, Assistant Director, Communication and Information Services

Sincerely,

  
Charles M. Cato  
Interim Assistant City Manager

C: Jill A. Jordan, P.E., Assistant City Manager  
William Finch, CIO, CIS  
Rocky Vaz, OEM