

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: January 31, 2018 **REF:** EXE-026-18

To: The Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Honorable Monica Rodriguez, Chair, ITGS

From: Ted Ross, General Manager 
Information Technology Agency

Aram Sahakian, General Manager 
Emergency Management Department

Subject: **INFORMATION TECHNOLOGY DISASTER RECOVERY (CF# 17-1130)**

OVERVIEW

At no time do City residents and departments rely on City systems more than during a disaster. As technology becomes more ubiquitous in business processes and digital services, the City of Los Angeles requires adequate protections and recovery for vital IT systems affected by a limited or citywide disaster event. As described in the Council Motion on IT Disaster Recovery (CF# 17-1130), "much of the foundation of our City depends on IT infrastructure". This report seeks to provide a summary of existing City of Los Angeles policies and processes, as well as, recommendations for the creation of an IT Disaster Recovery Committee comprised of key City departments and subsequent steps to improve City disaster recovery preparations.

BUSINESS CONTINUITY VS IT DISASTER RECOVERY

"Business Continuity" is the organizational planning and preparation to ensure that key functions can be performed during a disaster. In other words, Business Continuity is having the appropriate measures in place so a department can still perform their critical functions during an emergency. This is typically the responsibility of City Departments and detailed in their annual Continuity of Operations Plans (COOP) submitted to the Emergency Management Department every year. This includes planning for scenarios in which technology (or even electricity) is unavailable and critical functions must still be performed. Within the larger Business Continuity process is the IT Disaster Recovery component. Information Technology Disaster Recovery leverages a risk-based approach to ensure the availability of both citywide and department critical systems in an emergency. In other words, these are the business continuity preparations in place to restore key IT systems during a disaster. This is the responsibility of City Department management and IT staff that operate these systems. While this report works to improve IT Disaster Recovery processes across the City of Los Angeles, it does not address the larger role of Business Continuity by City departments. Needless to say, every City department should actively practice Business Continuity Planning, which includes an understanding of their critical functions and processes in place to perform those functions even with limited or no technology available.

BACKGROUND ON CITY OF LOS ANGELES IT DISASTER RECOVERY

In 2016, the City of Los Angeles IT Policy Committee (IT managers from every department) adopted an IT Disaster Recovery Policy. The IT Disaster Recovery Policy (DRP) provides a roadmap whereby each department with technology investments can perform an annual assessment, planning, data backup, testing and review of their critical systems. Meeting the requirements laid out in the DRP ensures the availability and recovery of these systems in a timely manner following a disaster.

The following summarizes the responsibilities laid out for each department:

- **IT Risk Assessment** - Each department must identify, prioritize and detail the functionality of each of their systems. All system dependencies should be determined as part of this process as well.
- **Department IT Disaster Recovery Plans** - Every department shall have specific plans for their critical systems that detail the steps needed to restore applications and make them available to users in the event of a disaster.
- **Data Backup Requirements** - Data backup is implemented to ensure the protection and availability of data. The frequency of the backups is determined by the criticality of the system.
- **Annual Responsibilities** - The Risk Assessment and Department Disaster Recovery Policy should be reviewed, updated and submitted to EMD on an annual basis as part of the Department Emergency Plan update. An annual test of the Disaster Recovery Policy must also be conducted.

Acknowledging the importance of disaster recovery for critical systems, the ITA and other City departments have worked to establish and annually test disaster recovery for critical Tier 1 City systems. For the ITA, our systems are supported by the following components:

- **Data Backup & Offsite Storage** - Data is backed up on a schedule defined by each critical application. All data is stored off-site to prevent data loss during an incident.
- **Mainframe Restoration and Testing** – ITA utilizes a managed service, SunGard Availability Services, for mainframe disaster recovery in the event of a disaster. Testing is conducted twice annually. The critical mainframe applications include:
 - Automated Property Information Management System (APIMS)
 - Consolidated Crime Analysis Database (CCAD)
 - Management Information Deployment Allocation System (MIDAS)
 - Decentralized Automated Booking Information System (DABIS)
 - Traffic Information System (TIS)
 - Street Improvement Bond (SIB).

- **Distributed Systems Restoration and Testing** - ITA has established a DR backup site (“hotsite”) at a highly reputable and secure facility outside California (Nevada). System data is replicated in real-time which allows rapid recovery in the event of a disaster. Testing is conducted annually. The critical distributed (client-server) systems include:
 - Payroll system (PaySR)
 - Business Tax Revenue system (LATAX)
 - Financial Management System (FMS)
 - Supply Management System (SMS)
 - Grand Central Distribution (GCD)
 - Document management system (Documentum)

PROPOSED IT DISASTER RECOVERY STEERING COMMITTEE

The proposed IT Disaster Recovery Steering Committee should strike a balance between larger citywide department representation and a smaller body that can meet as needed and make timely decisions. The ITA recommends the following departments participate in this Steering Committee:

- Information Technology Agency (Co-Chair)
- Emergency Management Department (Co-Chair)
- Aging
- Animal Services
- City Administrative Officer
- Controller’s Office
- General Services
- Library
- Los Angeles Fire Department
- Los Angeles Police Department
- Office of Finance
- Recreation and Parks
- Public Works - Sanitation
- Water and Power

The IT Disaster Recovery Steering Committee will review Controller’s report and existing City policies/processes. The Committee will assist with the development of recommendations to improve IT Disaster Recovery at the City of Los Angeles. A critical success factor for these recommendations will be to ensure City departments maintain and actively practice these recommendations. These recommendations may include necessary additions to the annual Department Emergency Plan and Continuity of Operations (COOP) plans submitted to EMD on an annual basis.

RECOMMENDATIONS

That the Council, subject to the approval of the Mayor:

1. Instruct the Emergency Management Department, with assistance from the Information Technology Agency, to convene, and instruct the Departments listed above to participate on, the IT Disaster Recovery Steering Committee; and,
2. Direct the IT Disaster Recovery Steering Committee to develop policies and process recommendations and practice exercises to test IT system recovery; and,
3. Direct that these policies and processes be included in the respective Departments' Emergency Plans and Continuity of Operations plans.

FISCAL IMPACT STATEMENT

There is no fiscal impact from these recommendations.

cc: Councilmember Monica Rodriguez, Chair of ITGS
Councilmember Bob Blumenfield, Vice Chair of ITGS
Councilmemeber Mitch O'Farrell, Member of ITGS
Felicia Orozco, CD 7
Trina Unzicker, CAO
Cheryl Banares, CLA