

# The Commonwealth of Massachusetts

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**OFFICE OF THE STATE AUDITOR'S  
REPORT ON THE EXAMINATION OF  
INFORMATION TECHNOLOGY CONTROLS  
PERTAINING TO  
BUSINESS CONTINUITY PLANNING FOR  
THE DIVISION OF VETERAN SERVICES**

**May 6, 2008 through February 11, 2009**

**OFFICIAL AUDIT  
REPORT  
MAY 14, 2009**

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## INTRODUCTION

The Department of Veterans' Services (DVS) is organized under Chapter 115, Section 2 of the Massachusetts General Laws (MGL) and is placed within the purview of the Executive Office of Health and Human Services. The Department maintains a single office in Boston Massachusetts with two federal "Contact" offices, one located in Providence, RI and the other at the JFK Building in Boston. In addition, DVS also manages two state cemeteries, located in Agawam and Winchendon.

The stated mission of the DVS is "to be the leading advocate for the more than half-million veterans of the Commonwealth and their families and survivors." In conjunction with this mission, the Department establishes policy, proposes legislation, works to include adequate funding for veterans' programs in the state budget, and represents the interests of veterans before the Massachusetts Legislature. Further, DVS represents state agencies and individual veterans before the federal Department of Veterans Affairs in securing federal compensation and available benefits.

DVS also administers a needs-based benefits program pursuant to Chapter 115 of the MGL through the veterans' service officers (VSOs) in each municipality of the Commonwealth. VSOs are appointed annually by the mayors or boards of selectmen in cities and towns to accept applications from veterans or their dependents, determine eligibility for benefits, and file requests for assistance. DVS provides state funding to organizations offering homeless shelters, transitional housing, and outreach services to veterans. Moreover, DVS administers an annuity program for 100% service-connected disabled veterans. This program also benefits the surviving spouse or parents of service members killed in action or who died from service-connected causes on active duty during wartime.

DVS reimburses for one year in arrears valid benefits expended by the 351 communities of Massachusetts. Reimbursements are made on a quarterly basis through the State Comptroller and the State Treasurer's Office. These reimbursements affect approximately 9,000 veterans and eligible dependents. Annuity payments are made twice a year to the approximately 8,000 hundred-percent disabled veterans, Gold Star Parents, and Gold Star Spouses. All reimbursement and payment information is reported to the State Comptroller and State Treasurer's Office.

## **AUDIT SCOPE, OBJECTIVES, AND METHODOLOGY**

### **Audit Scope**

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, we performed an audit of selected information technology (IT) related controls regarding disaster recovery and business continuity planning at the Department of Veterans Services (DVS). The audit, which covered the period of May 6, 2008 to February 11, 2009, was conducted from April 28, 2008 through May 30, 2008 and from January 15, 2009 through February 11, 2009. The scope of our audit was to assess the extent to which DVS had addressed business continuity planning for business operations supported by technology and had in place adequate on-site and off-site storage of backup copies of magnetic media. Our audit included an assessment of the Department's capabilities to restore critical applications and related business processes and their efforts to partner with the Information Technology Division's (ITD) for business continuity support.

### **Audit Objectives**

We sought to evaluate whether an effective business continuity plan had been developed and that adequate resources would be available to provide reasonable assurance that mission-critical and essential business operations would be efficiently recovered should IT operations be rendered inoperable or inaccessible for an extended period of time. We determined whether the business continuity plan had been tested and reviewed and approved to provide reasonable assurance of the plan's viability. In this regard, our objective was to also assess whether backup copies of electronic application systems and data files were being generated and stored at secure on-site and off-site locations.

The Department of Veteran Services is dependent upon ITD's Massachusetts Information Technology Center (MITC) for the operation of application systems that support budgetary and human resources functions. DVS is connected to MITC by way of servers located at the Executive Offices of Health and Human Services (EOHHS). We sought to determine whether DVS and ITD had collaborated on identifying IT recovery requirements and had developed appropriate business continuity plans. We sought to identify the degree of assistance provided by ITD to help DVS develop viable business continuity plans and to provide alternate processing and backup storage facilities and recovery plans to ensure timely restoration of DVS's data files.

### **Audit Methodology**

To determine the audit scope and objective, we conducted pre-audit work that included obtaining and recording an understanding of relevant operations, performing a preliminary review and documentation

concerning business contingency and disaster recovery planning at DVS. Upon completion of our pre-audit work, we determined the scope and objectives of the audit.

We interviewed senior management to obtain an understanding of their internal control environment, primary business functions, and stated controls. We obtained an understanding of the Department's mission-critical functions and application systems by requesting, obtaining and reviewing agency documentation as well as interviewing business process owners for Contingency Planning and IT staff, which support IT functions for the agency. Documentation was requested but not limited to the agency's plans for the continuation of agency operations, such as the Continuity of Operations Plan (COOP), Continuation of Government (COG), Business Continuity Plans (BCP), and Disaster Recovery Plans (DRP). We also interviewed DVS staff that was assigned business continuity planning responsibilities to determine the extent of DRP/BCP services provided. In addition we determined whether DVS was in compliance with Governor Patrick's Executive Order No. 490 issued September 26, 2007.

Our audit was conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the Comptroller General of the United States and generally accepted industry practices. Audit criteria used in the audit included Executive Orders 144, 475, and 490; management policies and procedures, and control guidelines outlined in Control Objectives for Information and Related Technology (CobiT version 4.1), as issued by the Information Systems Audit and Control Association, July 2007.

## AUDIT CONCLUSION

Regarding disaster recovery and business continuity planning at the Department of Veteran Services (DVS), we determined that although documentation of the strategies for recovering information technology (IT) capabilities under DVS's charge needed to be strengthened, there is a reasonable likelihood that DVS would be able to resume mission-critical business operations, but possibly not within an acceptable period of time. We determined that although DVS had established a disaster recovery and business continuity framework with documented roles and responsibilities, DVS was unable to submit either an approved formal disaster recovery plan or a business continuity plan. The Department could experience delays given that disaster recovery and business continuity plans for IT resources need to be developed, documented and approved. The plans need to be strategic, comprehensive and include detailed user area procedures.

We believe that DVS could reduce the risk of failing to resume business functions supported by technology within an acceptable time period by developing and approving more comprehensive recovery plans and ensuring that all staff having recovery responsibilities are adequately trained. We found that DVS's continuity of operations and government plans (COOP and COG) contained multiple characteristics of disaster recovery and business continuity planning, however DVS does not presently have an approved or tested formal business continuity plan or disaster recovery plan. As a result, DVS is not in compliance with Executive Order No. 490, which requires annual documented training and exercises of all approved recovery plans.

Regarding backup processing, DVS creates daily tapes and weekly encrypted, removable disks of their mission-critical application system, Veterans Services Management Information System (VSMIS) for the department's alternate site in Winchendon. DVS performs annually a disaster recovery test to support the servers at the Winchendon Cemetery site. On-site, backups are performed daily on magnetic tapes, which are kept securely in fireproof safes. In addition, DVS does not have any applications or backup copies of data residing at the Massachusetts Information Technology Center (MITC) in Chelsea, however DVS relies on the Information Technology Division (ITD) at MITC to utilize the state's wide area network, the Massachusetts Access to Government Network (MAGNet), as well as MassMail through DVS's parent, EOHHS.

In regards to MITC, ITD performs an annual disaster recovery test at the out-of-state vendor-supported SunGard facility in New Jersey, however the recovery testing is limited to only a portion of the application systems supported at ITD's data center. In addition, the state does not have an alternate state-owned processing and backup facility for the systems operated at MITC. At the time of our audit, ITD was in the process of establishing a second data center capability to serve as an alternate processing site in

western Massachusetts. Once established, the second data center will significantly benefit business continuity objectives of those agencies, including DVS, that rely on MITC for information technology support.

## AUDIT RESULTS

### **Business Continuity Planning**

We determined that the Department of Veteran Services (DVS) had a high-level continuity of operations plan (COOP), and a continuity of government plan (COG), that all contained multiple elements of business continuity and disaster recovery planning, however both plans need strengthening and updating. Additionally, the Department did not have a formal documented business continuity plan (BCP) nor a disaster recovery plan, which is required under Executive Order No. 490. Planning for a disaster can have many steps or phases in order to minimize the impact on clients. A COOP is a high level documented strategy for executives planning agency continuation of operations. A BCP is more detailed and should encompass a disaster recovery plan and user area plans. DVS should work with the Massachusetts Information Technology Division (ITD) to develop formal approved business continuity and disaster recovery plans that are tested at least annually.

DVS reimburses the cities and towns one year in arrears for valid benefit expenditures. The reimbursement amount is calculated approximately six months after expenditure so there is a six month lag between the calculation of reimbursement and actual payment. Benefit reimbursement payments are made March 31<sup>st</sup>, June 30<sup>th</sup>, September 30<sup>th</sup>, and November 10<sup>th</sup> on a yearly basis. Annuity payments are made twice annually in February and August. Although the annuity is a financial benefit, it is not a required survivor benefit. Although, DVS had received and returned a questionnaire from MEMA in the past 18 months, no follow-up communication had occurred by the end of our audit.

The DVS computer room, which is approximately 200 square feet, is located in a large office area. From an environmental protection control perspective, the computer room which houses two file servers relies on a single air conditioning system and a single power feed. We found that the computer room was neat and well maintained and subject to appropriate fire prevention, detection and suppression controls.

The Department's primary application Veterans' Services Management Information System (VSMIS), which is located at 600 Washington Street, Boston, executes on one SQL server and contains processed information for both the benefit and annuity functions. Access to application systems residing at MITC is performed through EOHHS's central office. Additionally, access to the Federal VA offices in Virginia, is accomplished through VPN access.

We confirmed that DVS had performed a risk assessment of their functions and had designated VSMIS as their mission-critical application. Although the Department had designated VSMIS as a mission-critical application, they had not designated the system as requiring quick turn-around recovery.

According to the Department, in the event of a disruption of IT services, employees would be relocated to some or all other DVS regional offices to perform their functions. In addition, all DVS employees have access to MassMail, and communication could be accomplished via use of a domain server at One Ashburton Place. At the time of our review, DVS was unable to provide a copy of a business continuity plan, documentation of any recovery test results, or “user area” plans.

DVS relies on MITC to provide IT services for approximately 25% of the Department’s required IT processing. At the time of our audit, the Department was considering electronic transmission of files from their Washington Street facility to an alternate recovery site after the implementation of VOIP, when sufficient bandwidth is believed to be available. According to the Department, there is currently no BCP workaround in the event that MITC were to become unavailable.

We found that the Department performs daily and weekly backups of its functions. Daily backups are recorded onto magnetic tape media while weekly backups are recorded onto encrypted CDs. The daily backups are stored on site, and the weekly backups are stored at the alternate recovery site. DVS has designated the Winchendon Cemetery Massachusetts site as its alternate processing recovery site. This site has direct connection to MAGNet, Massachusetts Management Accounting and Reporting System (MMARS), MassMail, and the Human Resources Compensation Management System (HR/CMS). The recovery process for the Department’s application systems residing at DVS’ data center have been tested periodically with the last test being conducted at the end of April 2008.

State agencies have been required to perform and document their planning efforts for the continuity of operations and government per executive orders of the governor. Between 1978 and 2007, Governors Dukakis, Romney, and Patrick issued three separate executive orders (see Appendices I, II, and III) requiring agencies of the Commonwealth to develop plans for the continuation of government services. In 1978, Executive Order No. 144 mandated that the head of each agency within the Commonwealth to “make appropriate plans for the protection of its personnel, equipment and supplies (including records and documents) against the effects of enemy attack or natural disaster, and for maintaining or providing services appropriate to the agency which maybe required on an emergency basis.” In 2007 Executive Order No. 475 mandated “...Each secretariat and agency shall conduct activities on a quarterly basis that support the implementation of its Continuity of Government and Continuity of Operations plans and shall submit a quarterly report...” and “...Each secretariat and agency shall regularly, and in no event less than once per calendar year, conduct trainings and exercises to put into practice... Continuity of Operations plan...” In September 2007 Executive Order No. 490 mandated “Whereas, to achieve a maximum state of readiness, these plans should be incorporated into the daily operations of every secretariat and agency in the executive department, and should be reviewed on a regular basis and, with respect to agencies

supplying services critical in times of emergency, exercised regularly; In addition, each critical secretariat and agency shall submit an annual report to the Executive Office of Public Safety and Security.”

Business continuity plans should be tested to validate their viability and to reduce both the risk of errors and omissions as well as the time needed to restore computer operations. In addition, an effective recovery plan should provide specific instructions for various courses of action to address different types of disaster scenarios that would render IT systems inoperable. Specifically, the plan should identify how essential services would be provided for each scenario without the full use of the data processing facility, and the manner and order in which processing resources would be restored or replaced. Furthermore, the plan should identify the policies and procedures to be followed, including details of the logical order for restoring critical data processing functions, either at the original site or at an alternate site. The plan would also identify and explain the tasks and responsibilities necessary to transfer and safeguard backup magnetic copies of data files, program software, and system documentation from off-site storage to the site being used for restoration efforts.

Sound management practices, as well as industry and government standards, support the need for comprehensive and effective backup procedures and business continuity plans for organizations that depend on technology for information processing. Contingency planning should be viewed as a process to be incorporated within an organization, rather than as a project completed upon the drafting of a formal documented plan. Since the criticality of systems may change, a process should be in place that will identify a change in criticality and amend the contingency plans accordingly. System modifications, to IT equipment configurations, and user requirements should be assessed in terms of their impact to existing business continuity plans. (See Appendix IV for other criteria.)

### Recommendation

We recommend that the Department of Veteran Services (DVS) expand and strengthen its business continuity process to develop and maintain appropriate recovery strategies to regain mission-critical and essential processing within acceptable time periods. We further recommend that DVS develop, document, and test a formal strategic cohesive business continuity plan, which incorporates a disaster recovery plan, in conjunction with ITD. The business continuity plan should document DVS’s recovery strategies with respect to various disaster scenarios. The recovery plan should contain all pertinent information needed to effectively and efficiently recover critical operations within the needed time frames. At a minimum, DVS should develop user area plans to continue its operations should IT resources be unavailable. A copy of these plans, in both hard copy and electronic media, should be stored off-site in secure and accessible locations. As part of disaster recovery planning, DVS needs to identify and make viable an alternate processing site. The site should have a similar operating system, so

that the system software will be accessible for usage in the case of emergency, in order to implement the disaster recovery plan. After the plan has been tested, DVS should evaluate the scope of the tests performed and document the results of the test.

DVS should specify the assigned responsibilities for maintaining the plans and supervising the implementation of the tasks documented in the plans. DVS should specify who should be trained in the implementation and execution of the plans under all emergency conditions and who will perform each required task to fully implement the plans. Further, the completed business continuity and user area plans should be distributed to all appropriate staff members. We recommend DVS's IT personnel be trained in their responsibilities in the event of an emergency or disaster. Also, personnel should be made aware of manual procedures that are to be used when processing is delayed for an extended period of time.

In conjunction with ITD, DVS should establish procedures to ensure that the criticality of systems is evaluated, business continuity requirements are assessed on an annual basis, or upon major changes to user requirements or the automated systems, and appropriate business continuity plans are developed for the applications residing on DVS's regional servers. DVS must also collaborate with the Division of Capital Asset Management to identify and implement an alternate processing site to ensure the continuity of operations.

We recommend that DVS follow Executive Order No. 490 for continuity of operations and business continuity planning. We also recommend DVS continue working with ITD on business continuity and disaster recovery planning.

**Auditee Response:**

*This letter is in response to your draft audit results of DVS dated April 7, 2009. DVS reviewed your letter with emphasis on your recommendations. We take your recommendations quite seriously and we are making changes immediately to accommodate these recommendations.*

*Although we are making immediate changes to incorporate the recommendations, DVS is in the process of implementing a new benefit tracking and reimbursement software package. This new program and ancillary processes will negate any current, business continuity plan (BCP) in its entirety. DVS plans to have the new system implemented and processes completed by the second fiscal quarter of 2010.*

*The new program, Web-VSMIS, is an outward facing web application utilizing the Virtual Gateway as the human interface. Operations become "Virtual" and are no longer constrained by a set, physical location. Both VSOs and DVS users can work from any location in the world having Internet access. The software and data become a part of the MITC thereby eliminating DVS from the day-to-day process of*

*backup and storage. DVS will spell this out in detail in the new BCP. DVS will start work on the BCP during the integration process of the new Web-VSMIS.*

*The Annuity program will continue with the current processes and software in place for the time being. The original plan put in place by DVS for recovery in the off chance of a catastrophic disaster is still workable. However, with the implementation of Web-VSMIS, the Annuity program will no longer require the core software of DVS-VSMIS. With this in mind, DVS will rebuild the recovery process around the two users in the Annuity Unit.*

*Since DVS will work with ITD intimately to get the Web-VSMIS implemented, DVS will rely on the expertise of the ITD community to provide the foundation on which to build our new BCP.*

#### Auditor's Reply

We recognize that the process of implementing a new benefit tracking and reimbursement software package could negate the current business continuity plan. Until DVS has completely migrated its system to the Commonwealth's web portal, the Department would remain vulnerable due to not having a viable business continuity plan. The plan to have the new system implemented by the second fiscal quarter of 2010 within ITD's Virtual Gateway appears to be an improvement over the current system.

## COMMONWEALTH OF MASSACHUSETTS

By His Excellency

MICHAEL S. DUKAKIS

Governor

## EXECUTIVE ORDER NO. 144

(Revoking and superseding Executive Order No. 25)

WHEREAS, it is the responsibility of the Commonwealth of Massachusetts to preserve the health and welfare of its citizens in the event of emergencies or disasters by insuring the effective deployment of services and resources; and

WHEREAS, such emergencies or disasters may result from enemy attack or by riot or other civil disturbances, or from earthquakes, hurricanes, tornados, floods, fires, and other natural causes; and

WHEREAS, the experience of recent years suggests the inevitability of natural disasters and the increasing capability of potential enemies of the United States to attack this Commonwealth and the United States in greater and ever-growing force; and

WHEREAS, the effects of such emergencies or disasters may be mitigated by effective planning and operations:

NOW, THEREFORE, I, Michael S. Dukakis, Governor of the Commonwealth, acting under the provisions of the Acts of 1950, Chapter 639, and in particular, Sections 4, 8, 16 and 20 thereof, as amended, and all other authority conferred upon me by law, do hereby issue this Order as a necessary preparatory step in advance of actual disaster or catastrophe and as part of the comprehensive plan and program for the Civil Defense of the Commonwealth.

1. The Secretary of Public Safety, through the State Civil Defense Director, shall act as State Coordinating Officer in the event of emergencies and natural disasters and shall be responsible for the coordination for all activities undertaken by the Commonwealth and its political subdivisions in response to the threat or occurrence of emergencies or natural disasters.

2. This coordination shall be carried out through and with the assistance of the Massachusetts Civil Defense Agency and Office of Emergency Preparedness, as provided under the Acts of 1950, Chapter 639, as amended.

3. Each secretariat, independent division, board, commission and authority of the Government of the Commonwealth (hereinafter referred to as agencies) shall make appropriate plans for the protection of its personnel, equipment and supplies (including records and documents) against the effects of enemy

attack or natural disaster, and for maintaining or providing services appropriate to the agency which maybe required on an emergency basis.

Each agency shall make appropriate plans for carrying out such emergency responsibilities as may be assigned in this Order or by subsequent Order of the Governor and for rendering such additional emergency assistance as the Secretary of Public Safety and the Civil Defense Agency and Office of Emergency Preparedness may require.

4. The responsibility for such planning shall rest with the head of each agency, provided that such agency head may designate a competent person in the service of the agency to be and act as the Emergency Planning Officer of the Agency. It shall be the function of said Emergency Planning Officer to supervise and coordinate such planning by the agency, subject to the direction and control of the head of the agency, and in cooperation with the Secretary of Public Safety and the State Civil Defense Agency and Office of Emergency Preparedness.

5. Each agency designated as an Emergency Response Agency by the Director of Civil Defense shall assign a minimum of two persons to act as liaison officers between such agency and the Civil Defense Agency and Office of Emergency Preparedness for the purpose of coordinating resources, training, and operations within such agency.

To the extent that training and operational requirements dictate, the liaison officer shall be under the direction and authority of the State Civil Defense Director for such periods as may be required.

6. A Comprehensive Emergency Response Plan for the Commonwealth shall be promulgated and issued and shall constitute official guidance for operations for all agencies and political subdivisions of the Commonwealth in the event of an emergency or natural disaster.

Given at the Executive Chamber in Boston this 27th day of September in the Year of Our Lord, one thousand nine hundred and seventy-eight, and of the independence of the United States, the two hundredth and third.

MICHAEL S. DUKAKIS  
Governor  
Commonwealth of Massachusetts

PAUL GUZZI  
Secretary of the Commonwealth

GOD SAVE THE COMMONWEALTH OF MASSACHUSETTS



MITT ROMNEY  
GOVERNOR

KERRY HEALEY  
LIEUTENANT GOVERNOR

THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE DEPARTMENT  
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BY HIS EXCELLENCY

MITT ROMNEY  
GOVERNOR

**EXECUTIVE ORDER NO. 475**

**Mandating Continuity of Government and Continuity of Operations Exercises  
within the Executive Department**

WHEREAS, the security of the Commonwealth is dependent upon our ability to ensure continuity of government in the event of a terrorist attack, natural disaster, or other emergency;

WHEREAS, effective preparedness planning requires the identification of functions that must be performed during such an emergency, the assignment of responsibility for developing plans for performing those functions, and the assignment of responsibility for developing the capability to implement those plans;

WHEREAS, to accomplish these aims, the Governor directed each secretariat within the executive department to develop a Continuity of Government Plan identifying an official line of succession for vital positions; prioritizing essential functions which should continue under all circumstances; designating an alternate command site; and establishing procedures for safeguarding personnel and resources;

WHEREAS, the Governor also directed each secretariat and agency within the executive department to develop a Continuity of Operations Plan establishing emergency operating procedures; delegating specific emergency authority to key personnel; establishing reliable, interoperable communications; and providing for the safekeeping of critical systems, records, and databases;

WHEREAS, one hundred and two Continuity of Government and Continuity of Operations plans have been developed by the Office of the Governor and every secretariat and agency within the executive department;

WHEREAS, these Continuity of Government and Continuity of Operations plans have been submitted to and remain on file with the Massachusetts Emergency Management Agency and are ready to be put into operation in the event of a terrorist attack, natural disaster, or other emergency;

WHEREAS, to achieve a maximum state of readiness, these plans have been incorporated into the daily operations of every secretariat and agency in the executive department;

WHEREAS, each executive department agency with critical functions has exercised its Continuity of Operations plan and tested its alert and notification procedures, emergency operating procedures, and the interoperability of communications and information systems; and

WHEREAS, each secretariat has exercised its Continuity of Government plan, and tested its ability to prioritize and deliver essential functions, operate at an alternate facility, and implement succession plans and delegations of authority in an emergency; and

WHEREAS, these regular exercises will continue to ensure that vulnerabilities in the Continuity of Government and Continuity of Operations plans are identified, reviewed, and corrected, and will help to secure an effective response by each secretariat and agency in the event of a terrorist attack, natural disaster, or other emergency;

NOW, THEREFORE, I, Mitt Romney, Governor of the Commonwealth of Massachusetts, by virtue of the authority vested in me as Supreme Executive Magistrate, do hereby order as follows:

Section 1: Each secretariat and agency within the executive department shall continue to consider emergency preparedness functions in the conduct of its regular operations, particularly those functions which would be essential in a time of emergency.

Section 2: Each secretariat within the executive department shall conduct activities on a quarterly basis that support the implementation of its Continuity of Government and Continuity of Operations plans and shall submit a quarterly report to the Executive Office of Public Safety detailing the actions taken to implement these plans.

Section 3: Each agency within the executive department shall conduct activities on a quarterly basis that support the implementation of its Continuity of Operations plan and shall submit a quarterly report to the Executive Office of Public Safety detailing the actions taken to implement such plan.

Section 4: Each secretariat within the executive department shall regularly, and in no event less than once per calendar year, conduct trainings and exercises to put into practice its submitted Continuity of Government and Continuity of Operations plans.

Section 5: Each agency within the executive department shall regularly, and in no event less than once per calendar year, conduct trainings and exercises to put into practice its submitted Continuity of Operations plan.

Section 6: These trainings and exercises shall be designed to simulate emergency situations which may arise, and shall be designed to test the effectiveness of the various components of the Continuity of Government and Continuity of Operations plans. These exercises must, at a minimum, include transfer of command functions to an emergency relocation site and the use of emergency communication systems.

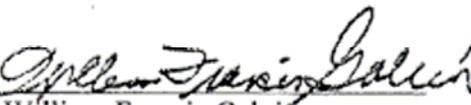
Section 7: Each secretariat within the executive department shall incorporate findings from these trainings and exercises into its Continuity of Government and Continuity of Operations plans, and based on these findings, shall regularly, and in no event less than once per calendar year, update these plans. Likewise, each agency within the executive department shall incorporate findings from these trainings and exercises into its Continuity of Operations plan, and based on these findings, shall regularly, and in no event less than once per calendar year, update its Continuity of Operations plan. These plans shall be submitted to and remain on file with the Massachusetts Emergency Management Agency. In addition, the Executive Office for Administration and Finance shall submit a quarterly report to the Executive Office of Public Safety on the status of its review of executive department communication and information systems.

Section 8: The Executive Office of Public Safety shall submit an annual report to the Office of the Governor regarding the status of the Continuity of Government plan of each secretariat within the executive department, and the status of the Continuity of Operations plan of each secretariat and agency within the executive department.



Given at the Executive Chamber in Boston this 3<sup>rd</sup> day of January in the year of our Lord two thousand and seven and of the Independence of the United States, two hundred and thirty.

  
Mitt Romney, Governor  
Commonwealth of Massachusetts

  
William Francis Galvin  
Secretary of the Commonwealth

GOD SAVE THE COMMONWEALTH OF MASSACHUSETTS



THE COMMONWEALTH OF MASSACHUSETTS  
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DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

By His Excellency

DEVAL L. PATRICK  
GOVERNOR

EXECUTIVE ORDER NO. 490

**Mandating Preparation, Review, Updating, and  
Electronic Management of Continuity of Government and  
Continuity of Operations Plans**

**Revoking and Superseding Executive Order No. 475**

WHEREAS, the security and well-being of the people of the Commonwealth depend on our ability to ensure continuity of government;

WHEREAS, effective preparedness planning requires the identification of functions that must be performed during an emergency and the assignment of responsibility for developing and implementing plans for performing those functions;

WHEREAS, to accomplish these aims each secretariat within the executive department was directed to develop a Continuity of Government plan identifying an official line of succession for vital positions, prioritizing essential functions, designating alternate command sites, and establishing procedures for safeguarding personnel and resources; and each secretariat and agency within the executive department was directed to develop a Continuity of Operations Plan establishing emergency operating procedures, delegating specific emergency authority to key personnel, establishing reliable, interoperable communications, and providing for the safekeeping of critical systems, records, and databases;

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OFFICE OF THE ATTORNEY GENERAL

WHEREAS, Continuity of Government and Continuity of Operations plans have been developed by the Office of the Governor and every secretariat and agency within the executive department and all one hundred and two of these plans are currently stored in paper form at the Massachusetts Emergency Management Agency;

WHEREAS, to achieve a maximum state of readiness, these plans should be incorporated into the daily operations of every secretariat and agency in the executive department, and should be reviewed on a regular basis and, with respect to agencies supplying services critical in times of emergency, exercised regularly;

WHEREAS, to allow greater access to these plans, ensure their security and sustainability, and encourage more active participation and review by the secretariats and agencies, they should be maintained on a secure online database; and

WHEREAS, the Executive Office of Public Safety and Security and Massachusetts Emergency Management Agency are collaborating with the Information Technology Department to develop an online tool and database to maintain these Continuity of Government and Continuity of Operations plans;

NOW, THEREFORE, I, Deval L. Patrick, Governor of the Commonwealth of Massachusetts, by virtue of the authority vested in me by the Constitution, Part 2, c. 2, § 1, Art. 1, do hereby revoke Executive Order 475 and order as follows:

Section 1. Each secretariat and agency within the executive department shall continue to consider emergency preparedness functions in the conduct of its regular operations, particularly those functions which would be critical in a time of emergency.

Section 2. The Secretary of Public Safety and Security (hereinafter, "the Secretary"), in his discretion, shall designate secretariats and agencies as either critical or non-critical for the purpose of determining the detail, frequency of submission, and testing of Continuity of Government and Continuity of Operations plans.

Section 3. The Secretary shall notify all secretariats and agencies of the completion of the online Continuity of Operation / Continuity of Government tool and database (hereinafter, "the online tool"). Within 120 days of notification of completion of the online tool, each secretariat and agency shall submit, via the online tool, the appropriate Continuity of Government plan and/or Continuity of Operations plan based upon its critical or non-critical designation.

Section 4. If the Secretary designates a secretariat or agency as critical, then that secretariat or agency shall regularly, and in no event less than once per calendar year, conduct trainings and exercises to put into practice its submitted Continuity of Government and Continuity of Operations plans.

Section 5. These trainings and exercises shall be designed to simulate emergency situations which may arise, and shall be designed to test the effectiveness of the various components of the Continuity of Government and Continuity of Operations plans. These exercises must, at a minimum, include transfer of command functions to an emergency relocation site and the use of emergency communication systems.

Section 6. Each designated critical secretariat within the executive department shall incorporate findings from these trainings and exercises into its Continuity of Government and Continuity of Operations plans, and based on these findings, shall regularly, and in no event less than once per calendar year, update these plans using the online tool. Likewise, each designated critical agency within the executive department shall incorporate findings from these trainings and exercises into its Continuity of Operations plan, and based on these findings, shall regularly, and in no event less than once per calendar year, update its Continuity of Operations plan using the online tool. In addition, each critical secretariat and agency shall submit an annual report to the Executive Office of Public Safety and Security detailing the trainings and exercises conducted and the actions taken to incorporate the findings of such trainings and exercises into updated Continuity of Government and Continuity of Operations plans.

Section 7. Each non-critical agency within the executive department shall conduct activities on an annual basis that support the implementation of its Continuity of Operations plan, including but not limited to ensuring that the plan is current and viable, and shall regularly, and in no event less than once per calendar year, update these plans using the online tool. In addition, each non-critical agency shall submit an annual report to the Executive Office of Public Safety and Security detailing the actions taken to implement such plan.

Section 8. The Executive Office of Public Safety and Security shall submit an annual report to the Office of the Governor regarding the status of the Continuity of Government plan of each secretariat within the executive department, and the status of the Continuity of Operations plan of each secretariat and agency within the executive department.

Section 9. This Executive Order shall continue in effect until amended, superseded, or revoked by subsequent Executive Order.



Given at the Executive Chamber in Boston this 26<sup>th</sup> day of September in the year of our Lord two thousand and seven, and of the Independence of the United States of America two hundred and thirty-one.

DEVAL L. PATRICK  
GOVERNOR  
Commonwealth of Massachusetts

WILLIAM FRANCIS GALVIN  
Secretary of the Commonwealth

**GOD SAVE THE COMMONWEALTH OF MASSACHUSETTS**

### Continuity Planning Criteria

The goal of this document is to provide a guideline for planning and establishing a business continuity process to ensure necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and plans, and ensure continuity of products/services through exercises, rehearsals, tests, training, and maintenance.

Continuity planning efforts will determine an organization's business readiness to recover from an emergency or interruption to normal business processing. These efforts require the creation and maintenance of a documented Business Continuity Plan (BCP) to ensure effective and efficient recovery and restoration of business functions or services – including paper documents, electronic data, technology components, and telecommunications recovery. The BCP must detail all processes, procedures, activities and responsibilities executed during a disaster, or emergency, or an interruption to the organization's products or services.

Our evaluation criteria is a compilation of the above Standards, Guidelines and Objectives developed by the following recognized organizations:

- Contingency Planning & Management (CP&M - National Organization)  
<http://www.contingencyplanning.com/>
- DRII Disaster Recovery Institute International (DRII - International Organization)  
<http://www.drii.org/DRII>
- IT Governance Institutes' Control Objectives for Information [related] Technology (COBIT); Control Objectives Document, Delivery & Support Section. (DS4)
- Department of Homeland Security - Continuity Of Operations Project Guidance Documents ([COOP](#)).
- [Presidential Decision Directive-67](#) (requires all Federal agencies to have viable COOP capabilities) and Comm. Of Mass. Executive Order No. [144](#) from Governor Michael S. Dukakis in 1978 (requires all state agencies to prepare for emergencies/disasters, and to Provide liaisons to Massachusetts Emergency Management Agency for coordinating Resources, training, testing and operations), and
- Comm. Of Mass. Executive Order No [475](#) from Governor Mitt Romney in 2007, and
- Comm. Of Mass. Executive Order No [490](#) from Governor Deval L. Patrick in 2007.

Our criteria is summarized in the following items:

1. Creation of a Business Continuity Plan and Business Continuity Team, comprised of a Business Continuity Manager (BCM), and alternate, for managing the Continuity Program (creation, modifications, updates, test exercises, etc.); Team Leaders, and alternates (from each business unit) to coordinate all continuity aspects for their particular areas of business.
2. Awareness Continuity Training should be given to all employees (minimum of twice annually).

3. Identification and prioritization of all critical/essential business functions (called Risk Analysis, and Business Impact Analysis). A Risk Analysis assigns a criticality level. A Business Impact Analysis identifies the Recovery Time Objective (RTO) - when the applications/systems restoration is needed - most important for critical/essential functions. Analyses should be documented within the BCP. Executive Management must review and sign-off on: analyses, BCP, and test exercise results.
4. Offsite Storage Program - protection of critical data, materials, or media. Document location address and contact name (during business and off hours). Identify authorized individual(s) to retrieve offsite data. Offsite access procedures.
5. Identify all resources to support critical business functions, alternate site, technology, software, applications, data, personnel, access, transportation, and vendors needed. Workload swaps, split operations, work at home, employee family (need) services.
6. Name(s) authorize to declare a disaster and execution of BCP, and establish. Command Center, Assembly/Holding Areas, Fire/Police/Rescue notification, Site Emergency Personnel (Fire Marshals, security, building evacuations, EMT).
7. Notification Lists and Procedures (employees, legal, Pub. Relations, support groups, vendors, clients).
8. Establish a strategy for communicating with all affected parties (release of approved and timely information, Senior manager, Officer-in-charge, Media, and company representative).
9. Document a plan for coordinating with interdependent departments (SLA).
10. Implement a plan to recover and restore agency's functions (for RTO, RPO) – at least, yearly test exercises.
11. Document a plan for reestablishing normal business operations (back to original site).