Critical Infrastructure Protection in the National Capital Region

Risk-Based Foundations for Resilience and Sustainability

Final Report, Volume 6:
Emergency Services Sector

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Emergency Services Sector Report

Executive Summary

The National Capital Region (NCR) is recognized as a leading target for terrorist attack. The emergency services sector (ESS) is our first line of defense: local police, fire and rescue, emergency medical services, public health departments, and public works departments. This sector is critical to the region's ability to detect, prevent, respond to, and recover from disaster or terrorist attack. This capability, vital to the security of residents, is also required for maintaining the region's quality of life and continuing economic development.

During the events of 9/11, first responders amply demonstrated the importance of their role in saving lives and protecting people. Understandably, enhanced emergency response has been a first priority for homeland security investment – initially, in the form of equipment procurement and specialized training. Parallel to upgrading emergency response capability has been the recognition of vulnerability for critical infrastructure service delivery systems, including emergency services.

Presently, little attention is paid to the potential vulnerability of emergency services organizations to critical infrastructure system failures. With some exceptions, notably Montgomery County Fire and Rescue, this is a major problem. As a result of complex system interdependencies, disruptions of critical services can cause major loss of life and property.

This report discusses the infrastructure system interdependencies of the emergency services sector. Interdependencies are both upstream, in which ESS is dependent on services provided by other critical infrastructure systems such as energy, transportation and communications, and downstream, in which other critical infrastructure systems are dependent on the services of ESS. Emphasis here is placed on the upstream dependencies of ESS and on steps needed to identify and mitigate the effects of lost infrastructure services on ESS mission capability.

The inclusion of emergency services as a critical infrastructure recognizes the ESS as a service delivery system. This sector is made up of sub-sector systems including emergency management, law enforcement, fire and rescue (including hazardous materials and search and rescue) and emergency medical services. In light of the expanded range of threats and experience with large-scale disasters, the concept of emergency services in the National Capital Region includes public health, public works and social services departments at the local level.

The sub-sector systems are integrated at the local jurisdiction level, although the extent of inter-jurisdictional coordination varies. Mutual aid agreements are well developed between the fire departments of adjacent jurisdictions; however, local and state-level agencies have not developed an integrated regional system of emergency services delivery well. Hence, it is important that local, state and federal response agencies share the vision of a regional ESS infrastructure.

The complex inter-governmental relationships of the National Capital Region pose a major challenge to the development of an efficient, coordinated and effective regional emergency response capability for large-scale threats facing the region.

This study examines the structure of ESS in the NCR, the current practices related to vulnerability assessment and risk management, and the potential impact of critical infrastructure interdependencies on the mission capability of ESS.

From review and analysis of relevant documents, and interviews with key ESS leadership in the NCR, a number of recommendations were developed to assess and enhance ESS effectiveness in the NCR.

Principal among them are:

- Develop a coordinated operational management mechanism for the NCR that effectively includes local and state level and federal response agencies.
- Develop a dynamic, real-time, GIS-based, common operating picture (COP) for the National Capital Region to optimize application and deployment of emergency response.
- Organize and train private sector and citizens to augment ESS resources for large scale response.
- Establish permanent mechanisms for consultation between emergency services and the other critical infrastructure sectors to identify and resolve interdependency issues in the National Capital Region.

Acknowledgements

1.   Sector Background

1.1   Sector Profile

The emergency services sector includes fire, hazardous material (HazMat), search and rescue (SAR), emergency medical services (EMS), law enforcement (LE), public health, public works, and social services departments. This is especially pivotal in the National Capital Region (NCR) because all of the other critical infrastructures are dependent upon it to provide assistance in the event of an emergency.

1.1.1 General

Emergency services organizations are often referred to as "first responders." They are responsible for detection, assessment, alerting and dispatch of specialized life support and life safety assets. All first responders have specialized training from one or more of the five aforementioned disciplines. Specifically, police are concerned with law enforcement, traffic and criminal justice. They are geared for rapid response and have generalized capability to provide immediate life support for a wide range of emergency situations. Firefighters, in addition to fire suppression operations, work with HazMat, search and rescue operations, basic life support (BLS), and advanced life support (ALS) EMS services.

There are also private sector and non-governmental emergency services functions, including large utilities such as Potomac Electric & Power Company (PEPCO), Dominion, and Washington Gas, who have their own security, medical and first aid facilities. Trained only in basic first aid, these personnel must rely on assistance from the emergency services sector for large-scale events.

Typically, the public most often engages with emergency services, "routine" day-to-day emergencies through calls to the primary Public Safety Answering Point (PSAP) where 9-1-1 calls are received and prioritized. The actual dispatch of response units may be carried out by that primary PSAP, or "calls for service" may be routed to a secondary PSAP, depending on the jurisdiction or particular type of service required.

Traditionally, emergency services agencies do not view themselves as an infrastructure. They are not part of a fixed physical structure; they are dispatched mobile response organizations with responsibilities for particular defined territories, structures, and populations. Normal emergency services deployments can be distinguished from responses to catastrophic events. For instance, in events with lead time/warning (e.g., severe weather), it is possible to conduct pre-event deployment or to pre-position certain resources.

1.1.2 Definitions

Emergency: The time definition of incidents that threaten life, property, and health which require rapid response. Emergency response agencies are typically evaluated in terms of their average response-time to emergency incidents.

Emergency Operations Center (EOC): This is a secure location or facility used to determine situational status, coordinate actions, and make critical decisions during emergency and disaster situations. Implicit in the existence of an EOC is the statutory authority to conduct operations in the identified jurisdiction.

Emergency Services: A critical infrastructure characterized by medical, police, fire and rescue systems, and personnel that are called upon when an individual or community is responding to emergencies. These services are typically provided at the local level (county, city, or metropolitan area). In addition, state and federal response plans define emergency support functions to assist in response and recovery.[1] These functions include, without limitation, fire fighting services, police services, medical and health services, rescue engineering, air raid warning services, communications, radiological, chemical and other special weapons defense, evacuation of persons from stricken areas, emergency welfare services, emergency transportation, existing or properly assigned functions of plant protection, temporary restoration of public utility services and other functions related to civilian protection. (In some locales, "emergency services" may refer to emergency medical services only.)

> *Failure:* Inability to deliver emergency services (e.g., lack of equipment or communication procedures, insufficient or untrained staff, missing plans).

> *Fire and Rescue:* The fire and rescue departments deal with fire suppression, building collapse, as well as traffic accident extrication and response to individual medical emergencies. Equipment and trained capabilities of these agencies correspond to their primary day-to-day missions.

> *Interoperability:* The ability to talk across boundaries among emergency services organizations, agencies and jurisdictions via radio communications networks to exchange voice and/or data in real time, when needed.[2] It also refers to the ability of various emergency services agencies to interact and collaborate in emergency situations as appropriate.

> *Mitigation:* Measures taken to reduce the loss of life, livelihoods and property by reducing vulnerability.

> *Mutual Aid Agreement:* An agreement between jurisdictions for the provision of police, fire, rescue and other public safety and health or medical services during a public service event, an emergency, or planned training event.

> *Mutual Response*: As it relates to the Northern Virginia Emergency Services Mutual Response Agreement, it is the pre-arranged automatic dispatching of the most appropriate response resources available to an incident location without regard to jurisdictional boundary lines.[3]

> *Risk:* Expected loss due to a particular hazard. It is the dynamic interactions of hazard or threat, asset criticality, vulnerabilities, and consequences.

> *Risk Assessment:* A study of vulnerabilities, threats, likelihood, consequences, and theoretical effectiveness of security measures. The process of evaluating threats and vulnerabilities, known and postulated, is to determine expected loss and to establish the degree of acceptability to system operations.[4]

1.1.3 Features

The emergency services sector is primarily organized at the local level and is predominantly a public activity. State level support is provided to local emergency services organizations, and federal level support is provided to state level emergency management agencies. In the case of

the NCR, federal resources may be applied directly. Consequently, federal agencies, such as the FBI and Secret Service, may take an active role in law enforcement activities within the NCR.

1.1.4 Service Area

Several major jurisdictions have created positions of director of homeland security. In most cases, fire and rescue, and police chiefs report directly to county or city administrators or through a director of public safety. Yet health and social services departments, and departments of public works do not typically report through the public safety channel.

Therefore, the challenge of regional security necessitates new patterns of coordination and cooperation within local government. The NCR has twelve local jurisdictions and the District of Columbia. They are:

District of Columbia
Maryland
    Montgomery County (includes 19 municipalities)
    Prince George's County (includes 27 municipalities)
Virginia
    Arlington County
    Fairfax County (included 3 towns)
    Loudoun County
    Prince William County
    City of Alexandria
    City of Fairfax
    City of Falls Church
    City of Manassas
    City of Manassas Park

1.1.5 Employees

Each of the twelve jurisdictions has its own police, fire and emergency services organizations, although in the case of fire and EMS, those services may not be provided by a component of the city or county government. In addition, there are more than 80 police stations in the NCR and over 200 fire/rescue stations. The entire population of the NCR, permanent and visitors alike (approximately 4 million people), are primary "customers" of the emergency services sector.

The emergency management, law enforcement, fire/HazMat/EMS, and public health agencies that form the ESS are listed in Appendix A.

1.1.6 Capacity

Fire departments have 100% communications interoperability; all are on 800 MHz trunked systems (except for Prince George's County, Maryland). Cross system interoperability, particularly in the case of radio communications between fire and police, remains a critical challenge. Several evolving efforts, notably CapWIN, are underway to ensure compatible communications in the region.

Emergency services interface with the health sector primarily in the emergency department of hospitals. The NCR currently has 9,468 licensed hospital beds. In a major event, hospitals in the

area can increase surge-capacity up to 30%; beyond that, triage and alternate, improvised facilities would be employed.

1.2   Review of Authorities

Because the emergency services sector is primarily made up of governmental agencies, intergovernmental relationships and coordination are of primary importance. The National Capital Region is a particularly complex collection of intergovernmental relationships consisting of two states, the District of Columbia, twelve local jurisdictions and a significant concentration of federal agencies.

The majority of ESS workforce and resources are organized at the local level, but these local efforts require support and coordination from the state and federal levels. Thus, it is crucial to understand the legal basis for emergency management authorities exercised at each level. The National Capital Region does not have a designated, unified, political jurisdiction or the authority for centralized emergency management. The current authorities, outlined below, are oriented toward a local/state/federal hierarchy.

1.2.1.   Statutes

The NCR sub-sector systems are integrated at the local jurisdiction level, although the extent of inter-jurisdictional coordination varies between sub-sectors. Mutual aid agreements are well developed between the fire departments of adjacent jurisdictions; however, local and state-level agencies have not developed an integrated regional system of emergency services delivery well. Hence, it is important that local, state and federal response agencies share the vision of a regional ESS infrastructure.

The complex inter-governmental relationships of the National Capital Region pose a major challenge to the development of an efficient, coordinated and effective regional emergency response capability for large-scale threats facing the region.

HSPD-5 Management of Domestic Incidents: HSPD-5 delegates administration to the secretary of DHS for a National Incident Management System (NIMS). NIMS will include a core set of concepts, principles, terminology and technologies that cover the incident command system; multi-agency coordination systems; unified command; training; identification and management of resources; qualifications and certification; and collecting, tracking and reporting incident information and incident resources.

In addition to the administration of NIMS, the National Response Plan (NRP) integrates federal government domestic prevention, preparedness, and response and recovery plans, into one all-discipline, all-hazards plan. The combined structure of NIMS and NRP facilitates national level policy and operational planning. It provides federal support to state and local incident managers and a mechanism to exercise and direct federal authority.

Homeland Security Presidential Directives

Figure 1: HSPD 8 in Context[5]
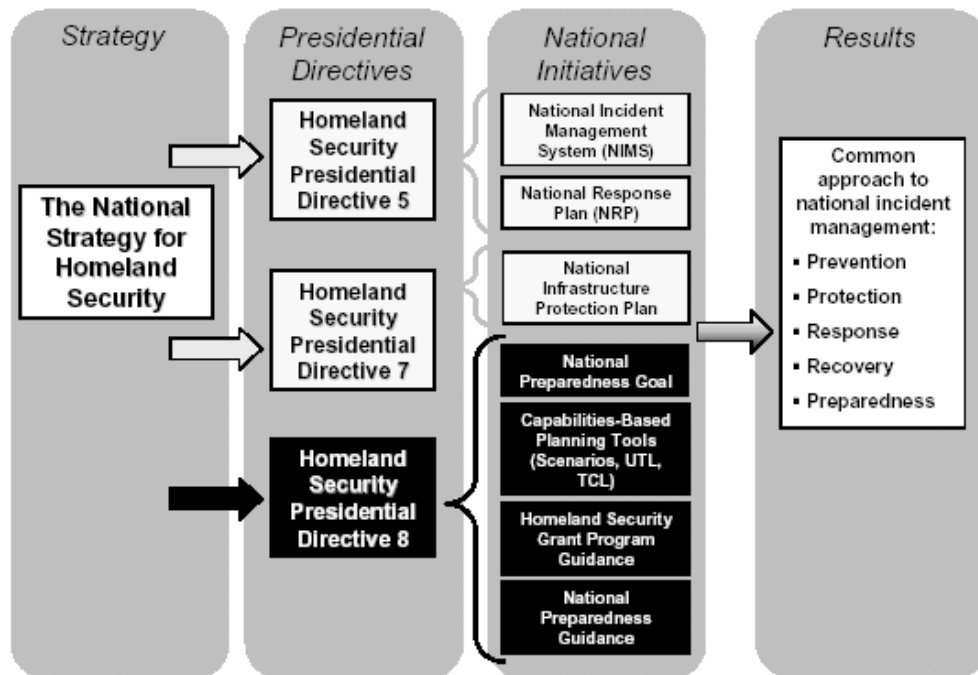
HSPD-7 Critical Infrastructure Identification, Prioritization, and Protection: This directive establishes a national policy for federal departments and agencies to identify and prioritize United States critical infrastructure and key resources, and to protect them from terrorist attacks. Nevertheless, federal departments and agencies will appropriately protect information associated with carrying out this directive, including handling voluntarily provided information and information that would facilitate terrorist targeting of critical infrastructure and key resources consistent with the Homeland Security Act of 2002 and other applicable legal authorities.

HSPD-8 National Preparedness: HSPD-8 is the companion to HSPD-5 and calls for developing a national preparedness goal. Toward that, it will establish measurable readiness priorities and targets that appropriately balance the potential all-hazards threats with the resources required to prevent, respond to, and recover from them. Moreover, it will include readiness metrics including standards for preparedness assessments and strategies to respond to major events, especially those involving acts of terrorism.

1.2.2 Roles and Responsibilities

The Metropolitan Washington Council of Governments and the Office of National Capital Regional Coordination of the DHS consider regional issues and develop regional responses in the realm of public safety.

In August 2002, the governors of Maryland and Virginia, as well as the mayor of the District of Columbia, signed a joint statement outlining eight "Commitments to Action."

1. Develop a coordinated process for decision-making for significant incidents or emergency situations in the region.
2. Enhance coordination and information sharing through their respective anti-terrorism task forces and joint terrorism task forces.
3. Identify and set protection priorities and guidelines for infrastructure assets and services in the region with the private sector.
4. Define and develop a common set of emergency protective measures to protect the health and safety of the public in the event of a major emergency in the region.
5. Facilitate mutual aid response between local governments across state boundaries, examine the development of mutual aid agreements between federal agencies or institutions and communities, and explore methodologies for enhancing private sector mutual aid support.
6. Develop a virtual joint information system for the NCR during response to a major emergency or disaster event.
7. Utilize mechanisms for regional cooperation to endorse and implement citizen corps programs within the National Capital Region.
8. Coordinate plans for terrorism and security-related training exercises across the region that is inclusive of all levels of government, as well as, schools and universities, health care institutions, and other private and non-profit partners as appropriate.

1.3   Mapping of Interdependencies

The following tables outline upstream and downstream dependencies for each of the emergency services (emergency management, emergency medical services, fire and rescue, police, public health, public works and social services) that make up the emergency services sector.

Table 1: Fire and Rescue Services

Sector	Energy	Transportation	Telecommunications	Water	Health	Banking & Finance	Postal & Shipping
Upstream Dependencies (Dependencies of ESS)	Service of fire station, maintenance of fire station services (communications, HVAC, lighting, refrigeration, vehicle maintenance), on-site (mobile generators)	Functioning bridges and viaducts, accessible roads, access to sites, communication between vehicles, access between sites and medical facilities	Communications between incident sites and call dispatch centers, communication between vehicles, communication with ESS across NCR	Firefighting, high-pressure hydrant system, decontamination and building coolant, drinking and sanitary	Personnel prophylaxis, in emergency phase first responders and dependents, reception of emergency medical transport	Limited role in emergency phase	Replenishment of critical supplies during extended incidents
Downstream Dependencies (Dependencies on ESS)	Firefighting, protection of facilities and distribution systems, response to gas and petroleum leaks, protection of utility recovery staff, HazMat protection and decontamination	Response to traffic accidents, vehicle rescue	Protection of facilities in the event of fire or structural collapse, protection of recovery personnel, HazMat protection and decontamination	Protection of key facilities and personnel, HazMat protection and decontamination	Emergency medical transportation, protection of key facilities and personnel, HazMat protection and decontamination, population management for evacuation to isolation and	Protection of facilities and personnel, building collapse, HazMat protection and decontamination	Protection of key facilities and personnel, HazMat protection and decontamination, building collapse

*All sectors are dependent upon the prevention aspect of police, particularly, pre-event intelligence and apprehension.

Sector	Energy	Transportation	Telecommunications	Water	Health	Banking & Finance	Postal & Shipping
Upstream Dependencies (Dependencies of ESS)	Communications (mobile communications recharge), functioning of central call & dispatch center, lighting, security access, vehicle maintenance	Functioning bridges and viaducts, accessible roads, access to sites	Communications between incident sites and call dispatch centers, communication between vehicles, communication with ESS across NCR	Decontamination, vehicle and building coolant, drinking and sanitary	Personnel prophylaxis, protection of first responders and dependents	Limited role in emergency phase	Replenishment of critical supplies during extended incidents
Downstream Dependencies (Dependencies on ESS)	Protection, security and surveillance of key facilities and personnel	Traffic control, evacuation and management	Protection, security and surveillance of key facilities and personnel	Protection, security and surveillance of key facilities and personnel	Protection, security and surveillance of key facilities and personnel, population management for evacuation, isolation and quarantine	Protection, security and surveillance of key facilities and personnel	Protection, security and surveillance of key facilities and personnel

Table 3: Public Health

Sector		Energy	Transportation	Telecommunications	Water	Health	Banking & Finance	Postal & Shipping
Upstream Dependencies (Dependencies of ESS)		Communications (mobile communications recharge), monitoring, reporting, decontamination facilities, warning communication, lighting, security access, vehicle maintenance	Access to affected populations, functioning bridges and viaducts, accessible roads, access to medical facilities	Communications between incident sites and call dispatch centers, epidemiological monitoring centers, communication between vehicles, communication with ESS across NCR, public information on prophylaxis and personal protection	Decontamination services, vehicle and building coolant, monitoring & analysis, medical supply management, medical personnel management, hospital facilities, drinking and sanitary, patient care, hospital laundry	Laboratory services, monitoring & critical supplies during extended incidents	Replenishment of critical supplies during extended incidents	Replenishment of critical supplies during extended incidents
Downstream Dependencies (Dependencies on ESS)		Warning and prophylaxis for CBR for critical personnel	Warning, prophylaxis and protection for critical personnel/ travelers	Protection, warning and health surveillance of key facilities and personnel, decontamination and treatment (particularly for CBR)	Monitoring, testing, protection, warning and health surveillance of key facilities and personnel	Health workers protection, warning and health surveillance of key facilities and personnel, population management for evacuation, isolation and quarantine	Protection, warning and health surveillance of key facilities and personnel	Protection, warning and health surveillance of key facilities and personnel

Table 4: Public Works

Sector	Energy	Transportation	Telecommunications	Water	Health	Banking & Finance	Postal & Shipping
Upstream Dependencies (Dependencies of ESS)	Electricity for power tools, fuel for vehicles	Access to affected populations, functioning bridges and viaducts, accessible roads	Communication: Field to call center, vehicle to vehicle and ESS components in NCR	Vehicles, drinking and sanitary, decontamination	Surveillance, warning, protection for CBR	Limited role in the emergency phase	Auxiliary equipment provision
Downstream Dependencies (Dependencies on ESS)	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites	Debris clearance and structural evaluation, access to sites

Table 5: Social Services

Sector	Energy	Transportation	Telecommunications	Water	Health	Banking & Finance	Postal & Shipping
Upstream Dependencies (Dependencies of ESS)	Building climate control and lighting for relocated, vulnerable populations, and those sheltering-in-place	Access to vulnerable populations, functioning bridges and viaducts, accessible roads, evacuation of vulnerable populations	Communications from vulnerable populations and relocation sites	Service to relocation sites and vulnerable populations	Healthcare for vulnerable populations and displaced persons	Emergency financial support to displaced persons and vulnerable populations	Distribution of financial and material support to displaced and vulnerable populations
Downstream Dependencies (Dependencies on ESS)	Support for dependents of key personnel	Support for dependents of key personnel	Support for dependents of key personnel	Support for dependents of key personnel	Support for dependents of key personnel	Support for dependents of key personnel	Support for dependents of key personnel

2.   State of Risk Management

The primary mission of the emergency services sector is to save lives and protect property and assets. Translating that mission into a sustained, regionally effective effort requires a high level of tactical planning, communication and coordination among NCR responders. Aside from the primary effects of the emergency itself, the capacity of emergency services to fulfill its mission is most centrally affected by, and so vulnerable to, its ability to remain agile, flexible and consistently coordinated in the face of a wide range of threats and hazards.

2.1.   Assessment of status and application of CIVA / RM in sector

The emergency services sector focuses on the needs of others. In an emergency, most sectors may rely upon the services provided by first responders.

While there is a great deal of experience in carrying out vulnerability assessment and response training exercises directed toward other dependant elements of society, relatively little attention is paid to the potential vulnerability of emergency services organizations themselves to loss of services due to critical infrastructure system failure.

Awareness of vulnerability to interdependent infrastructure function and failure is not well developed in the ESS sector. Autonomous response, conversely, has been a proud tenet central to its culture: the ability to do whatever may be required—calling upon mutual aid / response as necessary—but, for the most part, utilizing its standalone capacity and ingenuity to solve problems "out there." Challenging this notion is the proposition that ESS facilities need to look inward and visualize themselves as part of a networked service-delivery system with points of fragility and constraint.

2.2   Availability of appropriate tools

Specific vulnerability assessment/risk management tools for emergency services organizations are not developed, although certain generic preparedness assessments have been employed. Currently available evaluation methodologies focus primarily on organizational and administrative issues, as is the case with Commission on Accreditation for Law Enforcement Agencies and the Emergency Management Accreditation Program, the first two tools identified below. The National Incident Management System, although not an evaluation methodology *per se*, establishes a management standard to which state agencies and local governments must comply in order to be eligible for some elements of federal preparedness assistance. The fourth tool, the Target Capabilities List, is a functional grouping of critical tasks necessary for capable prevention, protection against, response to and recovery from an array of events from natural disasters to terrorism.

Commission on Accreditation for Law Enforcement Agencies (CALEA)

CALEA was established as an independent accrediting authority in 1979 by the four major law enforcement membership associations: International Association of Chiefs of Police (IACP); National Organization of Black Law Enforcement Executives (NOBLE); National Sheriffs' Association (NSA); and Police Executive Research Forum (PERF). The executive directors of the four associations appoint members to the commission annually. CALEA develops a set of law enforcement standards and establishes and administers an accreditation process through which law enforcement agencies may voluntarily demonstrate that they meet professionally-recognized criteria for excellence in management and service delivery.

The voluntary accreditation program is divided into two general parts: the standards and the process. The standards, discussed in the standards manual (Standards for Law Enforcement Agencies), are the building blocks from which everything else evolves. In addition, standards address nine major law enforcement subjects: roles, responsibilities, and relationships with other agencies; organization, management and administration; personnel structure; personnel process; operations; operational support; traffic operations; prisoner and court-related activities; and, auxiliary and technical services.

These standards help law enforcement agencies: strengthen crime prevention and control capabilities; formalize essential management procedures; establish fair and nondiscriminatory personnel practices; improve service delivery; solidify interagency cooperation and coordination; and boost citizen and staff confidence in the agency.

Five phases fulfill the accreditation process:

1. Application
2. Self Assessment
3. On-site Assessment
4. Commission Review, and
5. Maintaining Compliance and Re-accreditation.

Major benefits of accreditation through CALEA include greater accountability within the agency, controlled liability insurance costs, strong defense against civil lawsuits, staunch support from government officials, and increased community advocacy.[6]

Emergency Management Accreditation Program (EMAP)

The EMAP standard is designed as a tool for continuous improvement, as part of a voluntary accreditation process, and for local and state emergency management programs.

Currently, EMAP is under federal contract to carry out evaluations across the jurisdictions of the National Capital Region over the coming year. It will establish a common set of criteria to assess, develop, implement and maintain programs to mitigate, prepare for, respond to, and recover from all-hazard disasters and emergencies. EMAP consists of 14 program areas, including:

1. Program Management
2. Laws and Authorities
3. Hazard Identification and Risk Assessment
4. Hazard Mitigation
5. Resource Management
6. Planning
7. Direction, Control and Coordination
8. Communications and Warning
9. Operations and Procedures

10. Logistics and Facilities

11. Training

12. Exercises, Evaluation and Corrective Action

13. Crisis Communication, Public Education, and Info

14. Finance and Administration[7]

While considered extremely valuable, EMAP has been criticized for not adequately specifying security standards. Indeed, the sections relevant to critical infrastructure protection and risk assessment, 5.3.1 and 5.3.2, are too general to constitute a "risk management" approach:

> 5.3.1 *The entity shall identify hazards, the likelihood of their occurrence, and the vulnerability of people, property, the environment, and the entity itself to those hazards*. The program uses a broad range of sources, including federal agencies, state/territorial agencies, local agencies, and private sector organizations to identify hazards and assess risk and vulnerability to those hazards.

> 5.3.2 *Hazards to be considered at a minimum shall include, but shall not be limited to, the following: (1) Natural hazards (geological, meteorological, and biological) and (2) Human-caused (accidental and intentional).*

The EMAP standards and processes are almost identical to, and derived from, the Commission on Accreditation for Law Enforcement Agencies (CALEA) standards.[8] In addition, EMAP is based on National Fire Protection Association (NFPA) 1600 standards: *Standard on Disaster/Emergency Management and Business Continuity Programs*.

National Incident Management System (NIMS)

Approved by the Department of Homeland Security March 1, 2004, and is an integral component of the National Response Plan (NRP), NIMS establishes standard incident management processes, protocols and procedures so that all local, state, federal and private-sector emergency responders— across all jurisdictions and functional disciplines— can coordinate their responses, share a common focus, and place full emphasis on resolving an all-hazard event. In short, it integrates incident management best practices in a standard, scalable system applicable to the NCR.

With regard to compliance, this system does not require any particular level of incident command system (ICS) training, nor does it require additional training for "already trained" personnel. Yet, guidelines suggest four increasing levels of ICS training, appropriate for first responders, command staff, general staff and incident commanders respectively. These levels, however, are decided by each state and are implemented at the local level as each jurisdiction identifies who should receive what level of training. Moreover, it is up to each jurisdiction's city manager or county administrator to determine whether he/she is comfortable certifying that the jurisdiction's training complies with NIMS's loose requirement to "institutionalize the use of ICS."

In the absence of real-time incident information, NIPP data, in theory, can be modeled to provide anticipated consequences to critical infrastructures/assets and initial emergency response resources can be activated and deployed accordingly. Hence, deployment adjustments based on operational field assessments can be made and updated as appropriate.

A more-promising analysis follows, which takes a task-based, functional approach to vulnerability assessment and risk management, consistent with National Response Plan strategic objectives.

Homeland Security Target Capabilities List, version 1.1 (TCL)

In April 2005, (from HSPD-8), the DHS Office of State and Local Government Coordination identified 36 target capabilities needed to perform critical homeland security tasks in response to the 15 National Planning Scenarios (see Appendix B).

Figure 2: Capabilities-Based Planning - Defining Readiness Targets[9]
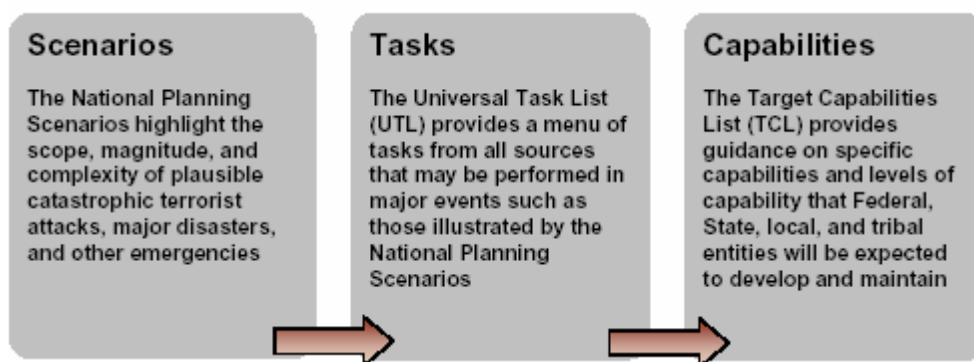
The scenarios were analyzed to generate a comprehensive list of tasks required to *prevent*, *prepare* for, *respond* to, and *recover* from various events. The tasks were then organized into a menu called the Universal Task List (UTL). The original menu contained approximately 1,800 "critical tasks," which was further reduced to 300 task, and finally grouped into 36 Target Capabilities (TCL). The target capabilities are in Appendix B.

From these defined capabilities, the UTL is rigorously reviewed and so far has been updated four times; the next update will be October 2005.

The Target Capabilities List seems to be an evolving, well-conceived planning tool for preparedness strategies, and for allocating resources while identifying priority areas for investment and redundant capacity.

2.3 *Evaluation of tools' effectiveness*

The generality of the above qualitative tools make it difficult to plan for, organize for, and deeply analyze ESS operational capabilities for large-scale events. How many SWAT teams is enough? How much redundancy in the form of cached, pre-positioned radios may be appropriate or overkill? How many command cars? How much training in what sorts of exercises? Budgeting, investment decisions and cost recovery are not informed by such preparedness checklists, nor is risk management methodology employed.

What may be an appropriate level of preparedness for an event like the 1995 bombing of the Alfred P. Murrah Building in Oklahoma City may not be adequate for nine simultaneous train

bombings, as happened in Madrid. The permutations of ever-changing levels of preparedness for response to ever-changing scenarios must be subject to budget and time realities: a line must be drawn stipulating that emergency services are prepared for "this level of response," and realistically not any more.

The determination of whether that level is too little or too much may, unfortunately, be reduced to a simplistic dichotomy of what side of a protective fence one finds oneself. Responding to calls for actionable measures, there may likely be a rush into the mechanics of filling gaps with scant analysis: that fence will be sited; it will be erected. Whether such imperative action turns out to be strategically appropriate, or yet another vaguely coordinated "stovepipe" measure, is not well served by the above-mentioned sorts of tools. The specific level of readiness posited by such tools is too vaguely-defined, resulting in an inability to do a meaningful gap analysis.

3.   Developing CIP Risk Reduction Programs and Processes

Critical infrastructure protection and emergency response are two major themes of homeland security. To date, the relationship between these two topics has not been the target of focused study. The emergency services sector is included in the list of critical infrastructures, the networks that deliver essential services to the public. The goal of critical infrastructure protection (CIP) is to assess threats and vulnerability of infrastructure systems and to develop physical and organizational means to reduce the risk of service outages. In the case of ESS, risk reduction measures protect against the interruption of emergency services when they are most needed in the aftermath of an attack.

Emergency services are primarily organized at the local jurisdiction level. Because their normal (peacetime) responsibility lies within their local jurisdiction, they have not been viewed as regional systems of service provision. The development of a *regional systems concept* on the part of emergency services agencies is essential to meeting the challenge of large-scale, long-term threats. The sub-systems within the ESS (police, fire and rescue, emergency medicine, public health, social services and public works), must be viewed as service networks superimposed over the region. The recognition of the regional systems approach is reflected in the existence of inter-jurisdictional mutual aid agreements. Continued emphasis must be placed on development of capacity for coordinated response which effectively allocates regional resources to regional threats.

Network systems are vulnerable to damage at nodes and links. In the case of ESS, nodes are represented by service centers such as fire or police stations. Links are represented by the connections between first responders and victims, such as communications and transportation. The traditional emphasis of the first responder community has been on the assessment and response to client vulnerabilities and needs. Emergency services are unique in addressing acute short-term needs which arise with rapid onset. Emergency services typically provide alternative support to bridge interruptions in normal urban service delivery systems (i.e., emergency power supply, emergency water supply, emergency communications, and emergency transport). However, in spite of this expertise in assessment of the vulnerability and potential needs of other organizations and populations, emergency services agencies have not focused their attention on their own dependence on other critical infrastructure systems. The capacity to execute emergency services missions is ultimately highly dependent on infrastructure services such as energy, communication, transportation and water. The detailed examination of these

dependencies and the development of priorities for protection or alternative sourcing of key input resources remain underdeveloped for the sector.

Critical infrastructure protection programs recognize 13 urban services systems. Each infrastructure sector is subject to specific threats and vulnerabilities that may be referred to as intra-sector characteristics. Within an infrastructure network, failure can be initiated at a point source (i.e., point of attack). By means of cascading failure, that initial damage can propagate failure and service loss throughout the network system. This quality of loss amplification makes infrastructure systems an inviting target for terrorist attack.

Beyond intra-sector damage propagation is the issue of infrastructure system interdependency. In the complex interactive fabric of urban infrastructure systems are many points of intersection and dependency. For example, the water delivery system is dependent upon the electric power system to power for pumps; the electric power system may in turn be dependent on the water delivery system for cooling of power plants.

ESS is dependent on other critical infrastructure systems. Consequently, failures of those infrastructure systems can seriously reduce ESS mission capability. As a result, ESS established means of dealing with "normal" service interruptions with developed principles of short-term self-sufficiency. In considering the new threats of terrorism, weapons of mass destruction and their potential long-term effects on the region, the ESS should reassess its capacity for continued mission effectiveness in the absence of dependable, critical infrastructure service delivery.

The emergency services sector is dedicated to the delivery of life-saving and protective services to the public. Preservation of this mission capability requires the protection of ESS physical assets (equipment and supplies) and personnel. It also requires the capacity to continue delivering emergency services even in the face of direct attack and loss of the critical infrastructure support. The following recommendations are directed to the protection of ESS assets and the preservation of ESS mission capabilities.

3.1   Risk reduction / project investment recommendations

The relevant risk in the case of emergency services is the loss of capacity to deliver emergency services. Risk or potential loss is a function of threat, vulnerability, and consequence. Relevant threats include direct impact of natural, technological or terrorist hazard. In addition, the characterization of vulnerability reflects the nature of the ESS organization, and its ability to maintain critical functions in response to incidents of threat or hazard. And consequences refer to both the reduction of emergency service delivery capability and the social and economic impact on citizens of that service loss. Hence, risk reduction for the emergency services sector can be achieved through the reduction of any of these three factors; threat reduction, in the case of terrorism, requires the interdiction and apprehension of terrorists.

On the other hand, vulnerability reduction requires the protection of critical assets or the development of alternative or redundant delivery systems; while consequence reduction requires the containment of initial damage, the interruption of system failure propagation patterns, and rapid recovery of service systems. In the case of the ESS, reduction of risk due to infrastructure dependencies requires the assessment of those dependencies (*See* tables on upstream and downstream dependencies in Section 1). The development of mitigation measures to reduce dependency to both protect infrastructure service delivery systems and to prepare for continued mission capability in their absence relies on such an assessment which has not yet occurred.

A fundamental challenge for the NCR is represented by its complicated inter-governmental relationships. A critical factor for emergency services in the NCR is communication and coordination across agencies, across jurisdictions and across levels of government to provide a coherent response to large-scale or distributed events affecting the region. The following recommendations address the functional requirements for effective regional coordination between emergency services agencies, and between public and private organizations for effective delivery of emergency services.

Common Operating Picture for the NCR

The NCR needs a dynamic, real-time, GIS-based common operating picture (COP). Currently, there are numerous EOC's located in federal agencies, state agencies, local jurisdictions and private sector critical infrastructure. Because of the jurisdictional complexity of the National Capital Region, it is difficult to assemble a coherent overview of an incident that affects the region as a whole. Differences in structure and reporting systems between Maryland, Virginia and the District of Columbia make it difficult to integrate incident information from the three state-level emergency management systems.

Development of the COP will require technical expertise and multi-jurisdictional cooperation. The project should be undertaken with the management of a major systems integrator, the support of the University Consortium for Infrastructure Protection and the oversight of the NCR Critical Infrastructure Group.

Establish a standing capability for emergency operations coordination in the NCR.

While there are numerous federal and state-level 24-hour operations and communications centers, there is currently no such facility that combines such monitoring and coordination functions for the NCR as a whole. In the event of a large-scale incident that affects multiple jurisdictions or states in the region, there must be an agreed upon coordinating facility that is capable of integrating the input of relevant federal, state, local and private sector inputs for the region. The facility must be connected to Maryland, Virginia, and District of Columbia emergency management agencies and be capable of combined monitoring and analysis of events anywhere in the NCR. Coordination protocols between the local, state and federal level response agencies must be developed to define the appropriate chain of authority.

Establish regional infrastructure sector coordinating agency to bring together public and private sector infrastructure owners and managers and the regional emergency management community to identify and manage critical infrastructure interdependency issues.

The NCR should establish permanent committees for each critical infrastructure sector to develop and review NCR incident response plans developed for various levels of the 15 national planning scenarios. The committees should be convened by NCR ESS agencies to inform critical infrastructure owners and operators on the organization of regional ESS capabilities and response plans.

This regional partnership should identify critical infrastructure dependencies and mitigation strategies should be developed. Roles and responsibilities for critical infrastructure system managers should be defined and realistic expectations for post-event ESS support should be clarified. These committees could be organized and staffed by the Metropolitan Washington Council of Governments/the Greater Washington Board of Trade, or the Office of National Capital Region Coordination.

Assess expected collateral damage associated with attack on identified target assets

The National Capital Region is home to many potential terrorist targets of operational and symbolic importance for the United States. In many cases, these target assets are surrounded by "civilian" neighborhoods whose safety is the responsibility of local ESS. Vulnerability assessments were carried out for the target assets themselves *but not for the surrounding communities that may be subject to collateral damage*.

Relevant DHS national planning scenario events should be applied to the target assets to estimate potential collateral damage and associated impacts (but such analysis should not be limited to the DHS national planning scenarios).

This specific study of collateral damage will provide the basis for realistic planning and capability demand assessment. It will also provide the basis for mitigation planning and the consideration of structural or occupancy change in areas subject to collateral damage. This activity is related to buffer zone planning for target facilities. The general methodology for collateral damage estimation should be developed by a multidisciplinary planning research center in conjunction with local ESS and planning departments

3.1.1 Tactical steps for immediate benefit

Tactical steps to strengthen ESS are those that can be undertaken without significant organizational change and will increase the effectiveness of current resources.

Protection of homeland security requires development of response capabilities, much larger scale and much longer duration. WMD is the potential for incidents of much larger scale (in terms of affected population) and much longer duration (in terms of contamination and restoration of services). Hence, the quantitative demand for emergency services may far exceed available resources. Further, the threats of WMD are unfamiliar to ESS and the general public. Chemical, biological, nuclear and radiological attacks have no precedent in the region, which means the qualitative demand for emergency services will be unprecedented. With these factors in mind, specific tactical measures should be consistently implemented throughout the region:

- Prepare for 72 hour self-sustained ESS operations.
  Emergency services organizations must equip themselves and train for operations in the absence of normal infrastructure services. Currently, no generally accepted standard for self-sustained activity is recognized in the region.
- Provide support for the families of ESS personnel.
  In order for ESS personnel to effectively perform their jobs, they must be assured that their own families are provided for in their absence.
- Expand training for ESS personnel on detection and protection related to CBR events.
- Develop back-up sources and redundancy for critical infrastructure services (alternative power generation, communications and transportation options) must be provided to maintain self-sufficient mission capability.
- Train citizen emergency response teams (CERT's) to support ESS professional response.
  Large scale disasters will require organized citizen support to expand emergency services manpower.
- Organize private ambulances and medical personnel to augment emergency medical services.
  In large scale incidents, public agency sources are likely to be overtaxed. Surge capacity will require mobilization of additional resources.

- Organize construction industry resources and train volunteers to assist in large-scale urban search and rescue, debris clearance, and building stabilization
  In the event of large scale disaster, organized emergency services and public works employees will be overtaxed and require organized private sector support.

3.1.2 Strategic steps for long-term benefit

Strategic steps for strengthening ESS are those that require long-term planning and investment. They may involve development of new capabilities and significant modification of current organizational structures.

- Assess potential collateral damage associated with identified target facilities.
  The NCR has a large number of potential targets for terrorist attack. Local emergency services should develop plans for dealing with collateral damage to surrounding populations and property.
- Consider appropriate organizational structures to meet the functional needs of regional ESS coordination in the event of major disaster or attack in the region.
  The NCR is a complex combination of numerous governmental authorities. Issues of information sharing, mutual aid, and coordinated control must be addressed to make the most effective use of regional resources in support of public safety.

3.2 Risk reduction process improvements

The risk reduction process for ESS involves the assessment of threats, vulnerabilities and consequences, as well as the development and evaluation of mitigation measures. Actual reduction of risk results from the funding and implementation of cost-effective mitigation measures.

- Encourage collaboration between ESS and critical infrastructure sectors to identify and mitigate interdependencies.
  Emergency service dependencies on other critical infrastructure systems (upstream dependencies for ESS) must be identified in conjunction with those service providers. Mitigation measures include development of redundant sources, on-site storage, or alternative practice.
- Clarify the relationship between critical infrastructure service failure and the cost associated with resulting loss of emergency service delivery.
  Mitigation investments should be balanced against loss reduction, which includes losses due to dependent system failures (in this case, ESS).

3.2.1 Recommendations for enhancement of general guidelines

Standards and guidelines for ESS deal with equipment, training and procedure. To date, the primary evaluation methodologies do not address the issue of ESS vulnerability to infrastructure interdependency issues. This is extremely problematic. A major challenge in evaluation of ESS stems from the lack of general experience with the scale and content of WMD incidents. The value of current evaluation methodologies should be enhanced by the addition of criteria related to assessment and mitigation of infrastructure interdependencies. The following recommendation aims to improve the ESS assessment process.

Develop regional ESS goals and evaluation criteria based on DHS Target Capabilities List

The question of "how much is enough?" is central to the planning and funding of the emergency services sector in the NCR. Current staffing levels and expenditures are based on historical demand and do not reflect planning for response to large-scale or long-duration incidents. Limited experience with chemical, biological, nuclear, or radiological attack has made it difficult to anticipate workforce or equipment needs.

The fundamental uncertainty about low-incidence, high-consequence terrorist attacks (frequency, intensity or pattern) limits the precision of risk assessment and the application of traditional cost-benefit analyses. Response to terrorism will require flexibility and improvisation to meet the unique requirements of any particular incident. The target capabilities list identifies the generic capabilities required for flexible response to the 15 DHS national planning scenarios. For the purposes of planning and exercising, these scenarios (and other appropriate scenarios) should be applied to the particular context of the NCR. Resource demands can be calculated by capability category. Such an approach provides the basis for evaluation of current ESS capacity in the region and meaningful guidance for investment in personnel, equipment, training, and exercises. Traditional workforce and resource requirements must be adjusted for large-scale, long-duration incidents as illustrated in the national planning scenarios.

3.2.2   Recommendations for enhancements in risk management

Risk management includes the identification of risk, the reduction of risk and the distribution of risks. Risk identification for emergency services must include the evaluation of the impact of upstream infrastructure systems. For example, loss of electric power is a frequent and significant risk for emergency services. Mitigation of electric power loss may include emergency generators, batteries, or non-electric equipment. Distribution of risk can be accomplished by developing redundant and diverse approaches to maintaining critical functions. Another prime dependency that must be evaluated is reliance on the Internet for preparedness and response--communications, databases, etc.

3.3   Specific recommendations for governance at sector level

- Establish an effective operational coordinating mechanism for the National Capital Region that is consistent with key stakeholder needs.
  Because of the complex inter-governmental relationships in the NCR, it is necessary to create an effective coordinating mechanism that can integrate the inputs of the three state-level response agencies and those of the 12 local jurisdictions and well as the resources of the federal government. This mechanism must be compatible with the existing hierarchy of inter-governmental roles and responsibilities and it must provide unified information analysis and coordinated management of response for the region as a whole.

3.3.1   Incentives

The emergency services sector is primarily made up of local government agencies. As public agencies, they are not responsive to market incentives. However, recognition of meritorious service on the part of units and individuals is a valuable incentive for maintenance of service quality. Because ESS is totally dependent on its workforce, measures that support workforce availability are of key importance.

- Provide support for the families of ESS personnel.
  Many ESS workers live far from the urban and suburban areas of the NCR. Communications and transportation are critical for access to workforce. It is also of critical importance to provide mechanisms to assist ESS workers to meet their personal and family responsibilities in order for them to focus on their crisis response mission.
- ESS accreditation contingent on infrastructure interdependency mitigation.
  Accreditation, certification standards and professional recognition provide a useful incentive to improvement of practice. Agency funding and reputation are often influenced by positive external professional recognition.

3.3.2 Organization and Management

- Organize and train private sector technical personnel and citizen corps to augment ESS response to incidents of large impact or long duration.
  In the event of large-scale, long-duration incidents, career ESS personnel are likely to be overloaded. Many live outside the NCR and may not be able to reach their job. In addition, they may be isolated by failures of the communications or transportation infrastructure. ESS manpower may become a critical problem in the response to a major incident. Extreme demand for emergency services during a major incident will require reinforcement by non-career personnel, trained technical personnel from the private infrastructure sector, and self-reliance on the part of the population. A traditional source of manpower back up in natural disasters is the National Guard. It will also be necessary to call on the support of trained and organized citizen groups to carry out non-specialist functions related to rescue, first aid and evacuation. Emergency response capability development should be encouraged and supported in all public and private critical infrastructure organizations with appropriate training provided by ESS. Citizen corps participation must be dramatically expanded so that all neighborhoods of the NCR are involved.

3.4   Specific recommendations addressing dependencies

The critical infrastructure dependencies of the ESS are the single most important topic of potential vulnerability revealed in this study. The ESS in the NCR has not addressed the risks *specific to ESS* posed by the wide-spread failure of supporting critical infrastructure systems.

- Encourage collaboration between ESS and infrastructure sectors to identify and mitigate interdependencies.
  ESS agencies must develop a collaborative and consultative relationship with upstream critical infrastructure providers to assess risks to provision of required services and to develop strategies for alternative service provision.
- Develop back-up sources for critical infrastructure services (i.e., energy, communications and transportation).
  ESS agencies must develop, in advance of a major regional incident, strategies for alternative supply of critical input services. These may include redundant sources, on-site storage, alternative processes to meet functional requirements.

3.4.1 Intra-sectoral

Intra-sectoral issues of dependency are both horizontal and vertical. Horizontal dependencies are those between the sub-sectors of police, fire and rescue, emergency medical, public health,

public works and social services. Vertical dependencies are those between local, state and federal emergency management and response agencies. At the local jurisdiction level, there is considerable experience of coordination and collaboration. There is also well-established coordination between local and state agencies. The difficulty in the NCR derives from the fact that there is presently no effective mechanism of regional coordination that adequately integrates the local resources of the three state-level entities of Virginia, Maryland and the District of Columbia.

- Complete regional inter-agency communications inter-operability initiative.
  Several programs including the Capital Wireless Integrated Network (CapWIN) have been initiated to achieve ESS communications inter-operability in the region. There are still agencies and jurisdictions that are not integrated into the regional system. Inter-operability of regional ESS communications and information distribution is essential to coordinated regional response.
- Provide a mechanism for coordination among the state-level entities responsible for emergency management.
  The most important dependency within ESS in the NCR is the command and control relationships between local and state agencies and the coordination of the three state-level agencies that share responsibility for the region.
- Develop the technical, administrative and operational framework for an NCR common operating picture (COP).
  As described above, the common operating pictures for ESS in the NCR is a fundamental requirement for coordinated regional emergency response. Unified information on regional incidents and regional resources is needed for the rational allocation of response resources to large-scale incidents affecting the region.

3.4.2   Inter-sectoral

Dependencies between ESS and other critical infrastructure sectors are usefully divided between upstream and downstream dependencies (see table No. X, Section I)

- Encourage collaboration between ESS and other critical infrastructure sectors to identify and mitigate interdependencies.
  Consultative mechanisms must be established between each ESS agency and the relevant upstream infrastructure service provider to identify and mitigate the impact of dependencies on ESS mission capability.
- Develop back-up sources for critical infrastructure services (i.e., energy, communications and transportation).
  Inter-sectoral consultation should provide the basis for development of alternative supply strategies for critical upstream inputs for ESS. Redundant supply strategies should be developed for all critical services.

3.4.3   Regional

- Establish regional emergency response coordinated mechanism in the NCR.
  Coordinated regional response must integrate 12 twelve local governments, three state-level entities and the federal government. Collaboration with the private sector must also be coordinated with the regional intergovernmental.

- Hold regional table top and field exercises involving a range of key public and private stakeholders, including representatives of business community, nonprofits and community institutions.
- Create common operating picture for the region.
  The common operating picture for the region requires the integration of information inputs from all the participating local, state and federal agencies to provide a comprehensive overview of regional impact, resources and response actions. This shared information facility will provide the basis for coordinated response.

3.5 Measuring Effectiveness

The ultimate measure of effectiveness will be seen in the response to an actual terrorist incident. However, in anticipation of such an event, general response capabilities can be defined and tested against hypothetical challenges and scenario events. Because the nature of future terrorist attack is unknown, it is necessary to base planning on limited experience and conjecture of potential patterns of attack.

- Apply DHS national planning scenarios to the specific context of the NCR to assess potential scenario demand for emergency services and potential impact on upstream infrastructure services.
  The national planning scenarios provide a starting point for the projection of potential demand for ESS in the region and an initial basis for projecting impacts on other critical infrastructures system under various modes of attack.
- Adopt the Target Capabilities List methodology to set goals for ESS.
  As recommended in the national preparedness goal, the Target Capabilities List, which is derived from the national planning scenarios, is currently the most relevant guidance for planning, development, and evaluating ESS.
- Develop exercises based on regional scenarios to evaluate regional ESS capabilities. These exercises should include the impact of critical infrastructure interdependencies and potential service failures.
  Exercises to test general response capabilities and flexibility in applying those capabilities under unanticipated adverse conditions will be valuable in developing capacity for coordinated, innovative response.

3.6 Managing Continuous Improvement

The terrorist threat is particularly challenging because it is continuously changing in response to protective measures. The dynamic intelligent nature of the threat requires constant evolution on the part of ESS.

- Periodic updating of training and procedures based on the target capabilities methodology.
  The evolution of the terrorist threat as evidenced in events around the globe and as revealed through intelligence sources requires periodic updating of response capabilities. The pace of training and the resources allotted to training will have to change to keep abreast of changing threats.
- Accreditation and certification processes must take into account ESS vulnerability assessment and mitigation of infrastructure dependencies. Accreditation standards must also change to reflect changes in threat and relevant ESS capability.

A dynamic standards process will have to emphasize training and technical assistance as well as evaluation.

4.   Conclusion

4.1.   Challenges

The emergency services sector is the first line of defense in protecting life and property. The National Capital Region is well served by a highly developed police, fire and rescue, public health, public works, and social services infrastructure. While these services are geared to normal demand at the local level, the challenge of WMD requires development of fundamentally new capabilities.

Large-scale catastrophic events affecting multiple jurisdictions in the region will require more trained personnel, enhanced command and control and coordinated information support. Chemical, biological and radiological attacks are unknown to most of the residents of the region. These unprecedented threats will require a new scale of response from ESS augmented by trained civilian volunteers.

4.2. Areas for future investigation

The capacity of the emergency services sector to fulfill its mission may be compromised by loss of critical infrastructure services. ESS self-sufficiency must therefore be reassessed if we are to meet the challenge of WMD.

Potential collateral damage resulting from attacks on identified targets must be analyzed. To date, this has not occurred.

Measures taken to improve ESS response to WMD attack will have significant value in enhancing response for a wide range of catastrophic events. They will enhance the safety and security of the residents of the National Capital Region.

Appendix A: Emergency Services Sector Agencies

District Columbia

Emergency Management Agency

Maryland

Maryland Emergency Management Agency
Prince George's County

Virginia

Virginia Dept. of Emergency Management
Alexandria Office of Emergency Management
Arlington County Office of Emergency Management
Fairfax County Office of Emergency Management
Loudon County Dept. of Fire, Rescue & Emergency Management
Prince William County Office of Emergency Management

<u>**Law Enforcement**</u>

District of Columbia

Metropolitan Police Dept.

Maryland

Maryland State Police
Maryland National Capital Park Police
Berwyn Heights Police Dept.
Bladensburg Police Dept.
Capitol Heights Police Dept.
Cheverly Police Dept.
Chevy Chase Village Police Dept.
Cottage City Police Dept.
District Heights Police Dept.
Edmonston Police Dept.
Fairmont Heights Police Dept.
Forest Heights Police Dept.
Frederick County Sheriff's Dept.
Gaithersburg Police Dept.
Glenarden Police Dept.
Greenbelt Police Dept.
Hyattsville Police Dept.

Landover Hills Police Dept.
Laurel Police Dept.
Montgomery County Dept. of Police
Montgomery County Sheriff's Office
Morningside Police Dept.
Mt. Rainer Police Dept.
Prince George's County Police Dept.
Prince George's County Office of the Sheriff
Riverdale Park Police Dept.
Rockville Police Dept.
Seat Pleasant Police Dept.
Takoma Park Police Dept.
University Park Police Dept.
Upper Marlboro Police Dept.

Virginia

Virginia State Police
Alexandria Police Dept.
Alexandria Office of Sheriff
Arlington County Police Dept.
Arlington County Sheriff's Office
City of Fairfax Police Dept.
Fairfax County Police Dept.
Fairfax County Sheriff's Office
Falls Church Police Dept.
Falls Church Sheriff's Office
Leesburg Police Dept.
Loudoun County Sheriff's Office
Manassas City Police Dept.
Manassas Park Police Dept.
Prince William County Police Dept.
Prince William County Sheriff's Office
Vienna Police Dept.

Regional

Washington Metropolitan Area Transit Authority (WMATA) Police
Metropolitan Washington Airports Authority (MWAA) Police

Fire/HazMat/EMS

District of Columbia

District of Columbia Fire/EMS Dept. (33 stations)

Maryland

Montgomery County Fire and Rescue Service (19 departments & squads at 33 stations)

Prince George's County Fire/EMS Dept. (46 companies)

Virginia

Alexandria Fire Dept. (8 stations)

Arlington County Fire Dept. (10 stations, 1 shared with Falls Church)

Fairfax County Fire and Rescue Dept. (37 stations, including 13 volunteer departments)

Fairfax City Fire Dept. (2 stations)

Falls Church Volunteer Fire Dept. (shares station with Arlington)

Manassas Volunteer Fire Company

Loudon County Dept. of Fire, Rescue & Emergency Management (17 fire and rescue companies at 20 stations)

Prince William County Fire & Rescue Dept. (including 12 volunteer companies)

Regional

Metropolitan Washington Airports Authority (MWAA) Fire & Rescue Dept. (automatically responds to aircraft crashes within 5 miles of DCA or IAD)

Public Health

District of Columbia

District of Columbia Dept. of Health

Maryland

Maryland Dept. of Health and Mental Hygiene

Montgomery County Dept. of

Health and Human Services

Prince George's County Health Dept.

Virginia

Virginia Dept. of Health

Alexandria Health Dept.

Arlington County Dept. of Health Services

Fairfax County Health Dept.

Loudoun County Health Dept.

Prince William County Health Dept.

Planning, Training, Oversight Agencies

District of Columbia

Emergency Health and Medical Services Administration

Maryland

Maryland State Fire Marshal's Office (includes investigation of cause)

Virginia

Northern Virginia Emergency Medical Services Council

Virginia State Fire Marshal's Office

Regional

Federal Agencies Operating in the NCR

Military District of Washington

Federal Bureau of Investigation (FBI)

Park Police of the National Parklife, Livelihoods and Planning Commission

Diplomatic Security Service

Federal Protective Services

Amtrak Police

U.S. Park Police

Bureau of Alcohol, Tobacco and Firearms

CIA Security Protective Service

National Institutes of Health Police

U.S. Capitol Police (now includes

Library of Congress Police)
U.S. Marshal's Service
U.S. Secret Service Uniformed
  Division
U.S. Secret Service
Smithsonian Institution Office of
  Protection Services (Includes
  National Zoological Park Police)
National Gallery of Art Police
U.S. Supreme Court Police

Appendix B: Homeland Security Target Capabilities List, version 1.1 (TCL)

In April, 2005, DHS's Office of State and Local Government Coordination, pursuant to the March, 2005 *Interim National Preparedness Goal*, Homeland Security Presidential Directive 8: National Preparedness (HSPD-8), identified 36 target capabilities needed to perform critical homeland security tasks to address the suite of 15 National Planning Scenarios.

The planning scenarios upon which the TCL is based are:

1. Improvised Nuclear Device
2. Aerosol Anthrax
3. Pandemic Influenza
4. Plague
5. Blister Agent
6. Toxic Industrial Chemical
7. Nerve Agent
8. Chlorine Tank Explosion
9. Major Earthquake
10. Major Hurricane
11. Radiological Dispersal Device
12. Improvised Explosive Device
13. Food Contamination
14. Foreign Animal Disease
15. Cyber

These scenarios were analyzed to generate a comprehensive list of tasks required to *prevent*, *prepare* for, *respond* to, and *recover* from the various events. The tasks were then organized into a menu called the Universal Task List (UTL) numbering approximately 1,800, further reduced to 300 "critical tasks," and finally grouped into 36 Target Capabilities (TCL).

The TCL defines the capabilities needed to perform the critical tasks identified in the UTL. The UTL has been rigorously reviewed and updated four times from July 2004 through March 2005; the TCL will be reiterated in October 2005.

Following are the 36 Target Capabilities, grouped by Mission Area:

Common Tasks-Target Capabilities

- Planning

- Interoperable Communications

Prevent Mission Area-Target Capabilities

- Information Collection and Threat Recognition

- Intelligence Fusion and Analysis

- Information Sharing and Collaboration

- Terrorism Investigation and Apprehension

- CBRNE Detection

Protect Mission Area-Target Capabilities

- Risk Analysis

- Critical Infrastructure Protection

- Food and Agriculture Safety and Defense

- Public Health Epidemiological Investigation and Laboratory Testing Citizen Preparedness and Participation

Respond Mission Area-Target Capabilities

- On-Site Incident Management

- Emergency Operations Center Management

- Critical Resource Logistics and Distribution

- Volunteer Management and Donations

- Worker Health and Safety

- Public Safety and Security Response

- Firefighting Operations/Support

- WMD Hazardous Incident Response and Decontamination

- Explosive Device Response Operations

- Animal Health Emergency Support

- Environmental Health and Vector Control

- Citizen Protection: Evacuation and/or In-Place Protection

- Isolation and Quarantine

- Search and Rescue

- Emergency Public Information and Warning

- Triage and Pre-Hospital Treatment

- Medical Surge

- Medical Supplies Management and Distribution

- Mass Prophylaxis

- Mass Care (Sheltering, Feeding, and Related Services)

- Fatality Management

Recover Mission Area-Target Capabilities

- Structural Damage Assessment and Mitigation

- Restoration of Lifelines

- Economic and Community Recovery

No single jurisdiction or agency is expected to perform every task. Rather, subsets of tasks, based on specific roles, missions, and functions, would be assumed on a scenario-dependant basis. Requirements that exceed a jurisdiction or agency's capabilities would be secured through mutual aid, state resources, assistance compacts, or federal support.

Under TCL, the "critical tasks" for Critical Infrastructure Protection are:

- Secure critical infrastructure sites

- Adopt and enforce model building codes/standards that address safety, structural integrity, and physical security

- Maintain plans and records of critical infrastructure, high profile buildings in secure environment

- Develop and implement damage assessment program for both public and privately owned buildings

- Identify and train personnel to assess damage and develop and implement uniform procedures for evaluating the safety of damaged buildings, including the risk of both the structure and the utility systems inside and outside the building

- Develop procedures for making damaged buildings safe for temporary emergency use

- Implement buffer zone protection plan

- Provide support for continuity of government planning at regional, State, tribal, local government, and agency level

- Provide for the protection of national infrastructure

- Identify sector-specific critical infrastructure and interdependencies

- Assess sector-specific infrastructure related vulnerabilities

- Develop national plan(s) for securing key resources and critical infrastructure and include alternate sites

- Promote the development of government/industry sector organizations within critical infrastructure sectors

- Develop standardized guidelines for physical security programs for government and private sector office buildings, laboratories, and other facilities

- Implement preventive measures such as inspections (including building inspections), surveillance, security, counterintelligence, and infrastructure protection

- Provide engineering and structural measure guidelines (HVAC, plumbing, electrical, mechanical, and structural measures) to reduce or eliminate hazards

- Identify and provide protection support for critical economic infrastructure and key assets

General usefulness

As the tools and processes of TCL are implemented, requests for preparedness assistance will ultimately be expressed as capability needs with clearly defined requirements, namely: why a capability is needed; how the capability will be used; what function the capability will perform; who will need the capability; when the capability will be available; what key performance and other attributes comprise the capability; how the capability will be supported; what skills will be required; how we train responders; and finally, how much the capability will cost.

This process brings a more rigorous operational definition to preparedness, reduces a voluminous number of common tasks to a "critical" grouping that can be strategically prioritized by function, and weighs against redundant capacity planning where it may not be needed.

The next iteration of TCL proposes to incorporate a "tiered" structure based on risk factors such as total population, population density, and critical infrastructure with appropriately applied target capabilities. Additionally, DHS will develop a comprehensive and searchable database to host the UTL and TCL. This will enable users to identify tasks and capabilities by function, discipline, and level of government, scenario, or other queries.

Appendix C: National Capital Region Authorities

District of Columbia:

The Office of Emergency Preparedness is authorized and directed, subject to the direction and control of the Mayor of the District:

(1) To prepare a comprehensive plan and program for civil defense, such plan and program to be integrated into and coordinated with the civil defense plans of the federal government, and of nearby states and appropriate political subdivisions thereof;

(2) To institute training programs and public information programs; to organize, equip, and train civil defense units, and to utilize regularly employed personnel of the government of the District of Columbia for service in and within such civil defense units and to train such personnel for such service; to expand existing agencies of the District government concerned with civil defense; and to take all other preparatory steps including the partial or full mobilization of civil defense organizations in advance of actual disaster;

(3) To make such studies and surveys of the resources and capabilities of the District for civil defense, and to plan for the most efficient emergency use thereof;

(4) To develop and enter into mutual aid agreements with states or political subdivisions thereof for reciprocal civil defense aid and mutual assistance in case of disaster too great to be dealt with unassisted. Such agreements may include the exchange of food, clothing, medicines, and other supplies; emergency housing; engineering services; police services; medical and nursing services; firefighting, rescue, transportation, and construction services and equipment; personnel necessary to provide or conduct these services; and such other supplies, equipment, facilities, personnel, and services as may be needed. Such agreements shall be consistent with the national civil defense plan and program. In time of emergency it shall be the duty of each agency and organization to render assistance in accordance with the provisions of such mutual aid agreements;

(5) To employ such technical, clerical, stenographic, and other personnel and make such expenditures within appropriations thereof or from other funds made available for purposes of civil defense, as may be necessary to carry out the purposes of this chapter;

(6) To cooperate with governmental and nongovernmental agencies, organizations, associations, and other entities, and coordinate the activities of all organizations for civil defense within the District;

(7) To accept from the United States or from any officer or agency thereof all facilities, supplies, and funds that may from time to time be offered to the District of Columbia, and to agree to such terms, conditions, rules, and regulations as may be imposed in connection with such offer;

(8) To utilize the services, equipment, supplies, and facilities of existing departments, offices, and agencies of the District to the maximum extent practicable, and the officers and personnel of all such departments, offices, and agencies are directed to cooperate with and extend such services and supply such equipment, supplies, and facilities to the said Director upon request,

and, when authorized by the Mayor, appropriations available to the District of Columbia may be used to match financial contributions made by any department or agency of the United States to the government of the District for the purchase of civil defense equipment and supplies;

(9) To perform such other functions as may be assigned by the Mayor of the District of Columbia.

CREDIT(S)

(Aug. 11, 1950, 64 Stat. 439, ch. 686, § 3; Apr. 5, 1952, 66 Stat. 44, ch. 159, § 1; Oct. 26, 1973, Pub. L. 93-140, § 17, 87 Stat. 507; June 28, 1977, D.C. Law 2-12, § 6(c), 24 DCR 1442; Mar. 3, 1979, D.C. Law 2-139, § 3205(tt), 25 DCR 5740.)

HISTORICAL AND STATUTORY NOTES

Prior Codifications

1981 Ed., § 6-1405.

1973 Ed., § 6-1203.

Legislative History of Laws

Law 2-12, the "Volunteers Services Act of 1977," was introduced in Council and assigned Bill No. 2-87, which was referred to the Committee on Government Operations. The Bill was adopted on first and second readings on March 22, 1977 and April 5, 1977, respectively. Signed by the Mayor on April 26, 1977, it was assigned Act No. 2-33 and transmitted to both Houses of Congress for its review.

Law 2-139, the "District of Columbia Government Comprehensive Merit Personnel Act of 1978," was introduced in Council and assigned Bill No. 2-10, which was referred to the Committee on Government Operations. The Bill was adopted on first and second readings on October 17, 1978 and October 31, 1978, respectively. Signed by the Mayor on November 22, 1978, it was assigned Act No. 2-300 and transmitted to both Houses of Congress for its review.

References in Text

Pursuant to Mayor's Order 98-198 (46 DCR 240) pub. January 8, 1999, the name of the Office of Emergency Preparedness has been changed to the D.C. Emergency Management Agency.

Change in Government

This section originated at a time when local government powers were delegated to a Board of Commissioners of the District of Columbia (see Acts Relating to the Establishment of the District of Columbia and its Various Forms of Governmental Organization in Volume 1). Section

401 of Reorganization Plan No. 3 of 1967 (see Reorganization Plans in Volume 1) transferred all of the functions of the Board of Commissioners under this section to a single Commissioner. The District of Columbia Self-Government and Governmental Reorganization Act, 87 Stat. 818, § 711 (D.C. Code, § 1-207.11), abolished the District of Columbia Council and the Office of Commissioner of the District of Columbia. These branches of government were replaced by the Council of the District of Columbia and the Office of Mayor of the District of Columbia, respectively. Accordingly, and also pursuant to § 714(a) of such Act (D.C. Code, § 1-207.14(a)), appropriate changes in terminology were made in this section.

Miscellaneous Notes

Office of Civil Defense abolished: See Historical and Statutory Notes following § 7-2202.

Maryland:

§ 14-702. Emergency Management Assistance Compact.

Emergency Management Assistance Compact

(1) *Article I. Purpose and Authorities.* This compact is made and entered into by and between the participating member states which enact this compact, hereinafter called party states. For the purposes of this compact, the term "states" is taken to mean the several states, the Commonwealth of Puerto Rico, the District of Columbia, and all U.S. territorial possessions.

The purpose of this compact is to provide for mutual assistance between the states entering into this compact in managing any emergency or disaster that is duly declared by the Governor of the affected state(s), whether arising from natural disaster, technological hazard, man-made disaster, civil emergency aspects of resources shortages, community disorders, insurgency, or enemy attack.

This compact shall also provide for mutual cooperation in emergency-related exercises, testing, or other training activities using equipment and personnel simulating performance of any aspect of the giving and receiving of aid by party states or subdivisions of party states during emergencies, such actions occurring outside actual declared emergency periods. Mutual assistance in this compact may include the use of the states' National Guard forces, either in accordance with the National Guard Mutual Assistance Compact or by mutual agreement between states.

(2) *Article II. General Implementation.* Each party state entering into this compact recognizes that many emergencies transcend political jurisdictional boundaries and that intergovernmental coordination is essential in managing these and other emergencies under this compact. Each state further recognizes that there will be emergencies which require immediate access and present procedures to apply outside resources to make a prompt and effective response to such an emergency. This is because few, if any, individual states have all the resources they may need in all types of emergencies or the capability of delivering resources to areas where emergencies exist.

The prompt, full, and effective utilization of resources of the participating states, including any resources on hand or available from the federal government or any other source, that are essential to the safety, care, and welfare of the people in the event of any emergency or disaster declared by a party state, shall be the underlying principle on which all articles of this compact shall be understood.

On behalf of the Governor of each state participating in the compact, the legally designated state official who is assigned responsibility for emergency management will be responsible for formulation of the appropriate interstate mutual aid plans and procedures necessary to implement this compact.

(3) *Article III. Party State Responsibilities.*

(a) It shall be the responsibility of each party state to formulate procedural plans and programs for interstate cooperation in the performance of the responsibilities listed in this article. In formulating such plans, and in carrying them out, the party states, insofar as practical, shall:

(1) Review individual state hazards analyses and, to the extent reasonably possible, determine all those potential emergencies the party states might jointly suffer, whether due to natural disaster, technological hazard, man-made disaster, emergency aspects of resources shortages, civil disorders, insurgency, or enemy attack.

(2) Review party states' individual emergency plans and develop a plan which will determine the mechanism for the interstate management and provision of assistance concerning any potential emergency.

(3) Develop interstate procedures to fill any identified gaps and to resolve any identified inconsistencies or overlaps in existing or developed plans.

(4) Assist in warning communities adjacent to or crossing the state boundaries.

(5) Protect and assure uninterrupted delivery of services, medicines, water, food, energy and fuel, search and rescue, and critical lifeline equipment, services, and resources, both human and material.

(6) Inventory and set procedures for the interstate loan and delivery of human and material resources, together with procedures for reimbursement or forgiveness.

(7) Provide, to the extent authorized by law, for temporary suspension of any statutes or ordinances that restrict the implementation of the above responsibilities.

(b) The authorized representative of a party state may request assistance of another party state by contacting the authorized representative of that state. The provisions of this compact shall apply only to requests for assistance made by and to authorized representatives. Requests may be

verbal or in writing. If verbal, the request shall be confirmed in writing within 30 days of the verbal request. Requests shall provide the following information:

(1) A description of the emergency service function for which assistance is needed, including, but not limited to, fire services, law enforcement, emergency medical, transportation, communications, public works and engineering, building inspection, planning and information assistance, mass care, resource support, health and medical services, and search and rescue

(2) The amount and type of personnel, equipment, materials and supplies needed, and a reasonable estimate of the length of time they will be needed.

(3) The specific place and time for staging of the assisting party's response and a point of contact at that location.

(c) There shall be frequent consultation between state officials who have assigned emergency management responsibilities and other appropriate representatives of the party states with affected jurisdictions and the United States Government, with free exchange of information, plans, and resource records relating to emergency capabilities.

(4) *Article IV. Limitations.* Any party state requested to render mutual aid or conduct exercises and training for mutual aid shall take such action as is necessary to provide and make available the resources covered by this compact in accordance with the terms hereof; provided that it is understood that the state rendering aid may withhold resources to the extent necessary to provide reasonable protection for such state.

Each party state shall afford to the emergency forces of any party state, while operating within its state limits under the terms and conditions of this compact, the same powers, except that of arrest unless specifically authorized by the receiving state, duties, rights, and privileges as are afforded forces of the state in which they are performing emergency services. Emergency forces will continue under the command and control of their regular leaders, but the organizational units will come under the operational control of the emergency services authorities of the state receiving assistance. These conditions may be activated, as needed, only subsequent to a declaration of a state of emergency or disaster by the governor of the party state that is to receive assistance or upon commencement of exercises or training for mutual aid and shall continue so long as the exercises or training for mutual aid are in progress, the state of emergency or disaster remains in effect, or loaned resources remain in the receiving state(s), whichever is longer.

(5) *Article V. Licenses and Permits.* Whenever any person holds a license, certificate, or other permit issued by any state party to the compact evidencing the meeting of qualifications for professional, mechanical, or other skills, and when such assistance is requested by the receiving party state, such person shall be deemed licensed, certified, or permitted by the state requesting assistance to render aid involving such skill to meet a declared emergency or disaster, subject to such limitations and conditions as the Governor of the requesting state may prescribe by executive order or otherwise.

(6) *Article VI. Liability.* Officers or employees of a party state rendering aid in another state pursuant to this compact shall be considered agents of the requesting state for tort liability and immunity purposes. No party state or its officers or employees rendering aid in another state pursuant to this compact shall be liable on account of any act or omission in good faith on the part of such forces while so engaged or on account of the maintenance or use of any equipment or supplies in connection therewith. Good faith in this article shall not include willful misconduct, gross negligence, or recklessness.

(7) *Article VII. Supplementary Agreements.* Inasmuch as it is probable that the pattern and detail of the machinery for mutual aid among two or more states may differ from that among the states that are party hereto, this compact contains elements of a broad base common to all states, and nothing herein contained shall preclude any state from entering into supplementary agreements with another state or affect any other agreements already in force between states. Supplementary agreements may comprehend, but shall not be limited to, provisions for evacuation and reception of injured and other persons and the exchange of medical, fire, police, public utility, reconnaissance, welfare, transportation and communications personnel, and equipment and supplies.

(8) *Article VIII. Compensation.* Each party state shall provide for the payment of compensation and death benefits to injured members of the emergency forces of that state and representatives of deceased members of such forces in case such members sustain injuries or are killed while rendering aid pursuant to this compact, in the same manner and on the same terms as if the injury or death were sustained within their own state.

(9) *Article IX. Reimbursement.* Any party state rendering aid in another state pursuant to this compact shall be reimbursed by the party state receiving such aid for any loss or damage to or expense incurred in the operation of any equipment and the provision of any service in answering a request for aid and for the costs incurred in connection with such requests; provided, that any aiding party state may assume in whole or in part such loss, damage, expense, or other cost, or may loan such equipment or donate such services to the receiving party state without charge or cost; and provided further, that any two or more party states may enter into supplementary agreements establishing a different allocation of costs among those states. Article VIII expenses shall not be reimbursable under this article.

(10) *Article X. Evacuation.* Plans for the orderly evacuation and interstate reception of portions of the civilian population as the result of any emergency or disaster of sufficient proportions to so warrant, shall be worked out and maintained between the party states and the emergency management/services directors of the various jurisdictions where any type of incident requiring evacuations might occur. Such plans shall be put into effect by request of the state from which evacuees come and shall include the manner of transporting such evacuees, the number of evacuees to be received in different areas, the manner in which food, clothing, housing, and medical care will be provided, the registration of evacuees, the providing of facilities for the notification of relatives or friends, and the forwarding of such evacuees to other areas or the bringing in of additional materials, supplies, and all other relevant factors. Such plans shall provide that the party state receiving evacuees and the party state from which the evacuees come shall mutually agree as to reimbursement of out-of-pocket expenses incurred in receiving and

caring for such evacuees, for expenditures for transportation, food, clothing, medicines and medical care, and like items. Such expenditures shall be reimbursed as agreed by the party state from which the evacuees come. After the termination of the emergency or disaster, the party state from which the evacuees come shall assume the responsibility for the ultimate support of repatriation of such evacuees.

(11) *Article XI. Implementation.*

(a) This compact shall become effective immediately upon its enactment into law by any two states. Thereafter, this compact shall become effective as to any other state upon its enactment by such state.

(b) Any party state may withdraw from this compact by enacting a statute repealing the same, but no such withdrawal shall take effect until 30 days after the Governor of the withdrawing state has given notice in writing of such withdrawal to the Governors of all other party states. Such action shall not relieve the withdrawing state from obligations assumed hereunder prior to the effective date of withdrawal.

(c) Duly authenticated copies of this compact and of such supplementary agreements as may be entered into shall, at the time of their approval, be deposited with each of the party states and with the Federal Emergency Management Agency and other appropriate agencies of the United States Government.

(12) *Article XII. Validity.* This compact shall be construed to effectuate the purposes stated in Article I hereof. If any provision of this compact is declared unconstitutional, or the applicability thereof to any person or circumstances is held invalid, the constitutionality of the remainder of this compact and the applicability thereof to other persons and circumstances shall not be affected thereby.

(13) *Article XIII. Additional Provisions.* Nothing in this compact shall authorize or permit the use of military force by the National Guard of a state at any place outside that state in any emergency for which the President is authorized by law to call into federal service the militia, or for any purpose for which the use of the Army or the Air Force would in the absence of express statutory authorization be prohibited under Section 1385 of Title 18 of the United States Code.

[An. Code 1957, art. 41, § 19-102; 2003, ch. 5, § 2.]

Federal Authority:

TITLE V—EMERGENCY 9

PREPAREDNESS AND RESPONSE 10

SEC. 501. UNDER SECRETARY FOR EMERGENCY PREPARED- 11

NESS AND RESPONSE. 12

There shall be in the Department a Directorate of 13

Emergency Preparedness and Response headed by an Under 14

Secretary for Emergency Preparedness and Response. 15

SEC. 502. RESPONSIBILITIES. 16

The Secretary, acting through the Under Secretary for 17

Emergency Preparedness and Response, shall include— 18

(1) helping to ensure the effectiveness of emer- 19

gency response providers to terrorist attacks, major 20

disasters, and other emergencies; 21

(2) with respect to the Nuclear Incident Response 22

Team (regardless of whether it is operating as an or- 23

ganizational unit of the Department pursuant to this 24

title)— 25

(A) establishing standards and certifying 1

when those standards have been met; 2

(B) conducting joint and other exercises and 3

training and evaluating performance; and 4

(C) providing funds to the Department of 5

Energy and the Environmental Protection Agen- 6

cy, as appropriate, for homeland security plan- 7

ning, exercises and training, and equipment; 8

(3) providing the Federal Government's response 9

to terrorist attacks and major disasters, including— 10

(A) managing such response; 11

(B) directing the Domestic Emergency Sup- 12

port Team, the Strategic National Stockpile, the 13

National Disaster Medical System, and (when 14

operating as an organizational unit of the De- 15

partment pursuant to this title) the Nuclear In- 16

cident Response Team; 17

(C) overseeing the Metropolitan Medical Re- 18

sponse System; and 19

(D) coordinating other Federal response re- 20

sources in the event of a terrorist attack or major 21

disaster; 22

(4) aiding the recovery from terrorist attacks 23

and major disasters; 24

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(5) building a comprehensive national incident 1

management system with Federal, State, and local 2

government personnel, agencies, and authorities, to 3

respond to such attacks and disasters; 4

(6) consolidating existing Federal Government 5

emergency response plans into a single, coordinated 6

national response plan; and 7

(7) developing comprehensive programs for devel- 8

oping interoperative communications technology, and 9

helping to ensure that emergency response providers 10

acquire such technology. 11

SEC. 503. FUNCTIONS TRANSFERRED. 12

In accordance with title XV, there shall be transferred 13

to the Secretary the functions, personnel, assets, and liabil- 14

ities of the following entities: 15

(1) The Federal Emergency Management Agency, 16

including the functions of the Director of the Federal 17

Emergency Management Agency relating thereto. 18

(2) The Integrated Hazard Information System 19

of the National Oceanic and Atmospheric Administra- 20

tion, which shall be renamed ''FIRESAT''. 21

(3) The National Domestic Preparedness Office 22

of the Federal Bureau of Investigation, including the 23

functions of the Attorney General relating thereto. 24

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(4) The Domestic Emergency Support Teams of 1

the Department of Justice, including the functions of 2

the Attorney General relating thereto. 3

(5) The Office of Emergency Preparedness, the 4

National Disaster Medical System, and the Metropoli- 5

tan Medical Response System of the Department of 6

Health and Human Services, including the functions 7

of the Secretary of Health and Human Services and 8

the Assistant Secretary for Public Health Emergency 9

Preparedness relating thereto. 10

(6) The Strategic National Stockpile of the De- 11

partment of Health and Human Services, including 12

the functions of the Secretary of Health and Human 13

Services relating thereto. 14

SEC. 504. NUCLEAR INCIDENT RESPONSE. 15

(a) IN GENERAL.—At the direction of the Secretary 16

(in connection with an actual or threatened terrorist attack, 17

major disaster, or other emergency in the United States), 18

the Nuclear Incident Response Team shall operate as an 19

organizational unit of the Department. While so operating, 20

the Nuclear Incident Response Team shall be subject to the 21

direction, authority, and control of the Secretary. 22

(b) RULE OF CONSTRUCTION.—Nothing in this title 23

shall be construed to limit the ordinary responsibility of 24

the Secretary of Energy and the Administrator of the Envi- 25

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ronmental Protection Agency for organizing, training, 1

equipping, and utilizing their respective entities in the Nu- 2

clear Incident Response Team, or (subject to the provisions 3

of this title) from exercising direction, authority, and con- 4

trol over them when they are not operating as a unit of 5

the Department. 6

SEC. 505. CONDUCT OF CERTAIN PUBLIC HEALTH-RELATED 7

ACTIVITIES. 8

(a) IN GENERAL.—With respect to all public health- 9

related activities to improve State, local, and hospital pre- 10

paredness and response to chemical, biological, radiological, 11

and nuclear and other emerging terrorist threats carried out 12

by the Department of Health and Human Services (includ- 13

ing the Public Health Service), the Secretary of Health and 14

Human Services shall set priorities and preparedness goals 15

and further develop a coordinated strategy for such activi- 16

ties in collaboration with the Secretary. 17

(b) EVALUATION OF PROGRESS.—In carrying out sub- 18

section (a), the Secretary of Health and Human Services 19

shall collaborate with the Secretary in developing specific 20

benchmarks and outcome measurements for evaluating 21

progress toward achieving the priorities and goals described 22

in such subsection. 23

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SEC. 506. DEFINITION. 1

In this title, the term ''Nuclear Incident Response 2

Team'' means a resource that includes— 3

(1) those entities of the Department of Energy 4

that perform nuclear or radiological emergency sup- 5

port functions (including accident response, search re- 6

sponse, advisory, and technical operations functions), 7

radiation exposure functions at the medical assistance 8

facility known as the Radiation Emergency Assist- 9

ance Center/Training Site (REAC/TS), radiological 10

assistance functions, and related functions; and 11

(2) those entities of the Environmental Protec- 12

tion Agency that perform such support functions (in- 13

cluding radiological emergency response functions) 14

and related functions. 15

SEC. 507. ROLE OF FEDERAL EMERGENCY MANAGEMENT 16

AGENCY. 17

(a) IN GENERAL.—The functions of the Federal Emer- 18

gency Management Agency include the following: 19

(1) All functions and authorities prescribed by 20

the Robert T. Stafford Disaster Relief and Emergency 21

Assistance Act (42 U.S.C. 5121 et seq.). 22

(2) Carrying out its mission to reduce the loss 23

of life and property and protect the Nation from all 24

hazards by leading and supporting the Nation in a 25

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comprehensive, risk-based emergency management 1

program— 2

(A) of mitigation, by taking sustained ac- 3

tions to reduce or eliminate long-term risk to 4

people and property from hazards and their ef- 5

fects; 6

(B) of planning for building the emergency 7
management profession to prepare effectively for, 8
mitigate against, respond to, and recover from 9
any hazard; 10
(C) of response, by conducting emergency 11
operations to save lives and property through po- 12
sitioning emergency equipment and supplies, 13
through evacuating potential victims, through 14
providing food, water, shelter, and medical care 15
to those in need, and through restoring critical 16
public services; 17
(D) of recovery, by rebuilding communities 18
so individuals, businesses, and governments can 19
function on their own, return to normal life, and 20
protect against future hazards; and 21
(E) of increased efficiencies, by coordinating 22
efforts relating to mitigation, planning, response, 23
and recovery. 24
(b) FEDERAL RESPONSE PLAN.— 25

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(1) ROLE OF FEMA.—Notwithstanding any other 1
provision of this Act, the Federal Emergency Manage- 2
ment Agency shall remain the lead agency for the 3
Federal Response Plan established under Executive 4
Order 12148 (44 Fed. Reg. 43239) and Executive 5
Order 12656 (53 Fed. Reg. 47491). 6
(2) REVISION OF RESPONSE PLAN.—Not later 7
than 60 days after the date of enactment of this Act, 8
the Director of the Federal Emergency Management 9
Agency shall revise the Federal Response Plan to re- 10
flect the establishment of and incorporate the Depart- 11

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ment. 12

SEC. 508. USE OF NATIONAL PRIVATE SECTOR NETWORKS 13
IN EMERGENCY RESPONSE. 14

To the maximum extent practicable, the Secretary 15

shall use national private sector networks and infrastruc- 16

ture for emergency response to chemical, biological, radio- 17

logical, nuclear, or explosive disasters, and other major dis- 18

asters. 19

SEC. 509. USE OF COMMERCIALLY AVAILABLE TECH- 20
NOLOGY, GOODS, AND SERVICES. 21

It is the sense of Congress that— 22

(1) the Secretary should, to the maximum extent 23

possible, use off-the-shelf commercially developed tech- 24

nologies to ensure that the Department's information 25

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technology systems allow the Department to collect, 1

manage, share, analyze, and disseminate information 2

securely over multiple channels of communication; 3

and 4

(2) in order to further the policy of the United 5

States to avoid competing commercially with the pri- 6

vate sector, the Secretary should rely on commercial 7

sources to supply the goods and services needed by the 8

Department. 9

Statutes

District of Columbia Authorities

The mayor of the District of Columbia is authorized, by Sec. 6-1401 of the Code of the District of Columbia, to establish in the municipal government an Office of Emergency Preparedness [since 1998 renamed the District of Columbia Emergency Management Agency (DCEMA)]. This agency consists of a director, who acts as the executive head of the DCEMA, and other personnel as needed. The purpose of the DCEMA is to minimize and ameliorate the effects on the people, government, institutions and structures of the District of Columbia of local emergencies, natural disasters or enemy attack. In addition, this office is directed to perform its mission by means of plans and development of systematic methods, with the assistance of other District government agencies and officials as necessary.

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Functions of the DCEMA within the NCR include:

1. Coordinate development and preparation, for approval by the mayor, of overall emergency plans as necessary to minimize the effects of emergency situations on the citizens of the city. Affected government agencies prepare, and furnish to the DCEMA, copies of specific emergency operating plans in order to carry out assigned responsibilities under provisions of the overall emergency plans (approved by the mayor).

2. Develop and operate executive communications, information, and warning systems, as necessary, to assist the mayor and other key officials.

3. Provide and operate an executive command center, to be staffed twenty-four hours every day, by DCEMA staff. Center staff is augmented by the director, as necessary, to assist the mayor during emergency situations.

4. Plan and administer a disaster preparedness program in a way that meets the requirements of the Disaster Relief Act of 1970 (as amended by the Federal Disaster Relief Act of 1974). This program is under the DCEMA director, designated coordinating officer for the District of Columbia.

5. Perform other functions relating to emergencies as the mayor may assign.

See Appendix C for more details on District of Columbia Authorities.

State of Maryland Authorities

The governor of Maryland has control of and is responsible for the Maryland Emergency Management Agency (MEMA) [Title 14. Emergency Management: Subtitle 1. Maryland Emergency Management Agency Act: 14-106]. In the event of a threat or occurrence of an emergency, the governor may assume direct operational control over all or part of an emergency management function created or authorized. In addition to emergency prevention measures included in state, local, and inter-jurisdictional emergency plans, the governor considers, on a continuing basis, steps that could prevent or reduce harmful consequences of potential emergencies.

See Appendix C for more details on Maryland Authorities.

Commonwealth of Virginia Authorities

Section 44-146.17 of the Virginia Emergency Services and Disaster Laws specifies that the governor is the director of emergency management. Hence, the governor may occasionally initiate steps to promote adequate coordination emergency services activities for the safety and welfare of the Commonwealth in times of natural or man-made disasters. In addition, the governor appoints the coordinator of emergency management and authorizes acquisition of other personnel necessary to carry out the provisions of the emergency services and disaster laws chapter.

See Appendix C for more details on Virginia Authorities.

Regional Authorities and Agreements

1.2.1.1 *Metropolitan Washington Council of Governments (MWCOG) Regional Emergency Coordination Plan (RECP)*

The purpose of the RECP is to provide a vehicle for collaboration in planning, communication, information sharing, and coordination activities before, during, or after a regional emergency for the seventeen COG member governments, Maryland, Virginia, the Federal government, public agencies, the private sector and volunteer organizations, and local schools and universities.[10] It applies to the National Capital Region. The RECP includes a Baseline Plan, fifteen Regional Emergency Support Function (R-ESFs) and Supporting Annexes, and Appendices.

1.2.1.2.   Northern Virginia Regional Operational Procedures

As an example of a local (city/county) jurisdiction, the Office of Emergency Services of the City of Alexandria is established by Sec. 4-3-3 of the Emergency Services Code.

Sec. 4-3-4 Director of office.

a)   The city manager shall be the director of the office of emergency services. Duties and responsibilities of the director are as follows:

(1)   The director shall organize emergency service and direct emergency operations through the regularly constituted government structure, and shall use equipment, supplies and facilities of existing departments, offices and agencies of the city to the maximum extent practical. The officers and personnel of all the departments, offices and agencies are directed to cooperate with and extend any services and facilities to the director upon request.
(2)   The director shall prepare or cause to be prepared and kept current a city emergency operations plan.
(3)   The director may, in collaboration with other public and private agencies within the state, develop or cause to be developed mutual aid agreements or reciprocal assistance in the case of an emergency or disaster too great to be dealt with unassisted.

(b)   The director shall have authority to appoint a coordinator of emergency services with the consent of the city council. The coordinator shall be responsible to the director and shall carry out any tasks as designated by the director. (Code 1963, Sec. 10B-4)
The emergency preparedness coordinator is an employee assigned to the fire chief.

The Emergency Services Code states in Sec. 4-3-5 (Declaration of local emergency) that whenever a local emergency has been declared, the director of emergency services may be authorized by the council to enter into contracts and incur obligations on behalf of the city necessary to combat the threatened or actual disaster, protect the health and safety of persons and property, and provide emergency assistance to the victims of the disaster. In exercising the powers vested under this section, under the supervision and control of council, the director may proceed without regard to time-consuming procedures and formalities prescribed by law (except mandatory constitutional requirements) pertaining to the performance of public work, entering into contracts, incurring of obligations, employment of temporary workers, rental of equipment, purchase of supplies and materials, and

other expenditures of public funds, providing any funds in excess of allocations authorized by city council are available.

Whenever a local emergency has been declared, the director, or member of the council acting in the absence of the director, shall notify the state office of emergency services when all local resources have been committed and assistance is needed from the state.

Sec. 4-3-7 Emergency operations plan.

(a)   The director shall prepare or cause to be prepared and shall keep current a comprehensive emergency operations plan.
(b)   The plan shall include but not be limited to the responsibilities of all local departments, agencies, commissions, etc.
(c)   The director shall in the plan establish a chain of command within the emergency organization. The responsible person for each agency shall designate and keep on file with the director a current list of three persons as successors to his position. The list shall be in order of succession. (Code 1963, Sec. 10B-7)

Federal Authorities, Directives, and Guidance.

1.2.1.3.   *Robert T. Stafford Disaster Relief and Emergency Assistance Act*

Section 5131 of the Stafford Act authorizes the president to establish a program of disaster preparedness that utilizes services of all appropriate agencies and includes:

1. preparation of disaster preparedness plans for mitigation, warning, emergency operations, rehabilitation, and recovery;

2. training and exercises;

3. post disaster critiques and evaluations;

4. annual review of programs;

5. coordination of federal, state, and local preparedness programs;

6. application of science and technology;

7. research.

Technical assistance for the development of plans and programs

The President shall provide technical assistance to the States in developing comprehensive plans and practicable programs for preparation against disasters, including hazard reduction, avoidance, and mitigation; for assistance to individuals, businesses, and State and local governments following such disasters; and for recovery of damages or destroyed public and private facilities.

Grants to States for development of plans and programs

Upon application by a State, the President is authorized to make grants, not to exceed in the

aggregate to such State $250,000, for the development of plans, programs, and capabilities for disaster preparedness and prevention. Such grants shall be applied for within one year from the date of enactment of this Act [enacted May 22, 1974]. Any State desiring financial assistance under this section shall designate or create an agency to plan and administer such a disaster preparedness program, and shall, through such agency, submit a State plan to the President, which shall –

    a. set forth a comprehensive and detailed State program for preparation against and assistance following, emergencies and major disasters, including provisions for assistance to individuals, businesses, and local governments; and

    b. include provisions for appointment and training of appropriate staffs, formulation of necessary regulations and procedures and conduct of required exercises.

Grants for improvement, maintenance, and updating of State plans

The President is authorized to make grants not to exceed 50 per centum of the cost of improving, maintaining and updating State disaster assistance plans, including evaluations of natural hazards and development of the programs and actions required to mitigate such hazards; except that no such grant shall exceed $50,000 per annum to any State.

1.2.1.4. Homeland Security Act of 2002

Title V, Emergency Preparedness and Response section of The Homeland Security Act of 2002: This act details the responsibilities of DHS for emergency preparedness and response. In particular, Section 501 specifies primary responsibilities of the Under Secretary for Emergency Preparedness and Response, which includes:

1. helping to ensure the preparedness of emergency response providers for terrorist attacks, major disasters, and other emergencies,

2. establishing standards, conducting exercises and training, evaluating performance, and providing funds in relation to the Nuclear Incident Response Team,

3. providing the federal government's response to terrorist attacks and major disasters,

4. aiding in recovery from terrorist attacks and major disasters,

5. working with other federal and non-federal agencies to build a comprehensive national incident management system

6. consolidating existing federal government emergency response plans into a single, coordinated national response plan, and

7. developing comprehensive programs for developing interoperative communications technology and ensuring that emergency response providers acquire such technology.

Emergency Support Functions (ESFs):

ESF #1 – Transportation

ESF #2 – Communication

ESF #3 – Public Works and Engineering

ESF #4 – Firefighting

ESF #5 – Emergency Management

ESF #6 – Mass Care, Housing, and Human Services

ESF #7 – Resource Support

ESF #8 – Public Health and Medical Services

ESF #9 – Urban Search and Rescue

ESF # 10 – Oil and Hazardous Materials Response

ESF #11 – Agriculture and Natural Resources

ESF #12 – Energy

ESF #13 – Public Safety and Security

ESF #14 – Long-term Community Recovery and Mitigation

ESF #15 – External Affairs

ESF #5 – Emergency management supports overall activities of the federal government for domestic incident management. In addition, it provides the core management and administrative functions in support of the National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) operations.

Appendix D: NCR Emergency Services Sector Principal Interviewees

1. Dr. Frederick Corder, Chief Medical Officer, Prince George's County, Maryland; Chairman of COG Hospital Surge Committee.

2. Chief Richard J. Rappoport, Chief of Police, Fairfax Police Department, Virginia.

3. Christopher Voss, Planning, Training, Exercise and Mitigation Director, District of Columbia Emergency Management Agency.

4. Chief Thomas Carr, Fire Chief, Montgomery County, Maryland

5. Mark Penn, Emergency Manager, City of Alexandria, Virginia.

6. Reggie Parks, Director, Prince George's County Office of Emergency Preparedness, Maryland.

7. Mel Blizzard, Manager, Domestic Preparedness Branch, Maryland Emergency Management Agency.

Appendix E: Endnotes

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