



# REPORTER

## The challenge of homeland security: Making certain we are prepared

**Robert Albee**, Director of Telecommunications Engineering, VHB, Inc., Watertown, Massachusetts; Member, APWA Government Affairs Committee; APWA Past President

**Albert Samano III**, President, Fortress, Inc.

The December 2002 appointment of APWA's Past President, Judith Mueller, to the Homeland Security Advisory Council's Emergency Response Senior Advisory Committee underscores the importance of the role of public works professionals during a natural, technological or man-caused event of local, regional or national significance. We are truly "first responders."

Are we ready for this responsibility? The answer seems obvious: yes, based on our continuing role in natural disasters. But the post-9/11 world has created a new and unpredictable dimension and a new heightened awareness of our vulnerabilities. Our individual public works agencies need to be as prepared and our assets (critical infrastructure) as secure as those of police and fire responders. We need a plan. We need to live that plan and repeatedly exercise that plan if we are to be ready to meet our responsibilities as first responders.

Judith Mueller's proven leadership has put us "at-the-table" in setting guidance and policy on the national level. As we move forward into 2005, we must make certain that we have in place the types of programs that will ensure our preparedness at the local level.

### Developing strategic and streamlined programs

The best way to protect our critical assets and infrastructure is to identify the multiple threats and hazards relevant to our critical assets and infrastructure and build the systems and programs that will protect us. Each agency and organization should undertake the development of security and emergency preparedness programs that are based on an *all-hazards approach*. An all-hazards approach takes into consideration all types of threats and hazards, whether it is natural, technological or man-caused, and develops a common emergency response strategy that is applied uniformly to all incidents and emergencies. In this manner, the resulting programs integrate all hazards and responses and serve to mitigate our day-to-day concerns, as well as the large-scale events that can be the result of terrorism.

Here is an overview of the sequence of steps that can be taken to get the ball rolling so that your organization is well positioned to meet Department of Homeland Security (DHS) requirements and maximize homeland security investments.

#### 1. Perform a Threat and Vulnerability Assessment

Threat and Vulnerability Assessments (TVAs) serve as the foundation upon which all homeland security programs are built. The conduct of a TVA will first entail identifying and assessing the critical assets of the organization. This will include people, facilities, equip-

ment, processes and information. Once those critical assets have been identified, a hazard and threat profile can be developed. This profile should be all-hazards in its approach so as to include natural, technological and man-caused events such as terrorism. Once hazards and threats have been profiled, you assess their risks and consequences by estimating the probability of the events occurring and the extent of possible damage. Lastly, you compare and prioritize the risks to evaluate and rank the risks and determine your primary concerns. The Threat and Vulnerability Assessment should be revised annually to ensure that changes to the threats and hazards have been incorporated into the assessment.

#### 2. Develop a Mitigation Plan

A Mitigation Plan takes the results of your TVA and develops a Hazard/Threat Mitigation Strategy to serve as a guide for performing activities that reduce vulnerability to the impacts produced by the hazards/threats identified in the TVA. These mitigation activities include hazard studies and mapping, hazard control and protective works, building design, codes and use regulations, community preparedness activities, property protection, protection/retrofit of infrastructure and critical facilities, insurance programs, public information, public protection, emergency services measures, public health, emergency medical care, education, and recovery planning. The Mitigation Plan should be revised annually to ensure that changes to the Threat Vulnerability Assessment or Mitigation Strategy have been incorporated into the Mitigation Plan.

#### 3. Develop an Emergency Operations Plan

One of the great failings of many organizations is that they do not document or write down what they want their personnel to do during an incident or emergency. The Emergency Operations Plan is a document that serves for that particular reason. It determines lines of authority within and between organizations, assigns emergency responsibilities to divisions and individuals, and describes the overall concept of operations that the organization will follow during an incident or emergency. In addition, the Emergency Operations Plan identifies equipment, facilities, supplies and other resources available for use during response and recovery operations. The Emergency Operations Plan should be revised annually to ensure that changes to the program have been incorporated into the plan.

#### 4. Develop Standard Operating Procedures for Key Personnel

Standard Operating Procedures (SOPs), simply put, are checklists that provide very specific guidance to the responder regarding the actions identified in the Emergency Operations Plan. SOPs should



be developed to provide guidance for activities that are performed before, during and after the incident/emergency. SOPs should be created for activities such as updating notification lists, performing incident/emergency assessment and classification, incident/emergency notifications and mobilization, response operations, response coordination and, finally, recovery and restoration. The Standard Operating Procedures should be revised annually to ensure that changes to the plans have been incorporated into the procedures.

## **5. Develop and Conduct Emergency Response Training**

After creating SOPs, developing and conducting Emergency Response Training is one of the most important steps an organization can take to communicate the policies of the Emergency Operations Plan and implement the guidance of the Standard Operating Procedures. Training ensures that the elements of your newly-developed program are being transmitted into and throughout the organization. Emergency Response Training should always begin with general training courses and build in levels of specificity and complexity. Emergency Response Training should include courses such as Terrorism Awareness, Emergency Management Program Overview, Incident/Emergency Classification and Notification process, Standard Operating Procedures, Emergency Operations Center and Public Information Center operations. Training should be conducted annually and training materials should be revised periodically to ensure that changes to plans and procedures have been incorporated into the training.

## **6. Develop and Conduct Drills and Exercises**

The Drill and Exercise Program serves as the mechanism by which the entire Security and Emergency Preparedness Program is tested and validated. Drills and exercises come in three levels: Table Top

Exercises (TTX), Functional Exercises (FE), and Full Scale Exercises (FSE). Table Top Exercises are the simplest form of exercise and consist of a scenario-driven discussion held around a table. Functional Exercises are more complex as they require mobilizing field personnel to respond to a scenario centered on a particular function such as security, fire, HazMat, etc. The most complex of all exercises is the Full Scale Exercise. Full Scale Exercises fully incorporate the entire organization and involve outside agencies in an integrated effort to respond to a complex and sustained emergency response. Drills and Exercises should be conducted annually and revised periodically to ensure that changes to the plans have been incorporated into the drill scenarios.

## **Conclusion**

Moving forward in times of great change requires both leadership and focus. Judith Mueller's appointment to the Emergency Response Senior Advisory Committee to President Bush's Homeland Security Advisory Council underscores the importance of the role of public works in homeland security. By developing and integrating the strategic programs presented in this article, we can make certain we are doing everything we can at the local level to establish and maintain our level of security and preparedness.

*Robert Albee is a Past National President of APWA and has served on numerous APWA committees. He currently serves as the Director of Telecommunications Engineering for VHB, Inc. He can be reached at (617) 924-1770 or at ralbee@vhb.com.*

*Albert Samano III is the founder and president of Fortress, Inc., a management consulting firm specializing in security and emergency preparedness.*