Expertise to Include in a Homeland Security Risk Management Program

The following categories of subject matter expertise are important to any state or local jurisdiction embarking on a homeland security risk management program and conducting credible risk analysis:

- Threats and hazards facing the jurisdiction
- Critical infrastructure assets and systems in the jurisdiction
- Jurisdictional characteristics
- Technical and scientific knowledge

Specific sources for this expertise will vary from jurisdiction to jurisdiction in terms of the organizations they represent or the particular issues on which they focus.

**Threats and Hazards**
- General information about different types of threats and hazards, including terrorism, natural hazards, and technological hazards
- The frequency with which these threats and hazards have historically occurred in the jurisdiction
- The probability of their occurring in the future
- The intent and capability of potential attackers
- Potential sources of information include:
  - Local, state, and federal homeland security and emergency management officials
  - Intelligence analysts in fusion centers and law enforcement agencies

**Critical Infrastructure Assets and Systems**
- The importance of particular critical infrastructure assets and systems to the jurisdiction
- The vulnerability of specific assets and systems in the jurisdiction to various threats and hazards
- The potential consequences of particular threats and hazards to assets or systems in the jurisdiction
- Any interdependencies that exist across assets and systems in the jurisdiction and surrounding areas
- How these assets fit within the existing categories of the 18 DHS critical infrastructure sectors
- Potential sources of information include:
  - State and local homeland security and emergency management officials
  - Private sector owners and operators
  - Public works engineers and staff
  - First responders, including police and fire and rescue personnel

**Jurisdictional Characteristics**
- Demographic information about your jurisdiction, such as overall population size and concentration, economic productivity and market value, location of vulnerable populations, and languages spoken there
- Existing prevention, protection, response, and recovery capabilities in your jurisdiction
- Any mutual aid agreements currently in place with neighboring jurisdictions
- Potential sources of information include:
  - First responders, including police and fire and rescue personnel
  - Emergency managers
  - Community development and social service organizations
  - State and local Chambers of Commerce

**Technical and Scientific Knowledge**
- The characteristics of various biological, chemical, and radiological agents, specifically as they relate to detection, treatment, and decontamination issues
Expertise to Include in a Homeland Security Risk Management Program (Continued)

- The blast effects of explosive devices
- Meteorology and seismology capabilities
- Modeling, simulation, and analytical capabilities to synthesize various data streams collected throughout the process
- Potential sources of information include:
  - Hazardous materials personnel from fire, environment, or transportation agencies
  - Explosive ordnance and bomb disposal personnel
  - Meteorologists, seismologists, geologists
  - National laboratories and DHS Centers of Excellence
  - Mathematicians and research analysts