

# Weapons of Mass Destruction/Hazardous Materials Response

## Target Capability Calculator Overview

### Purpose of the Tool

This tool was developed to assist emergency planners in determining the appropriate number of WMD/HAZMAT teams to maintain in their jurisdiction. The suggested number of teams is based on risk factors specified in the Target Capability List 3.0. In addition, the tool presents initial and life-cycle costs for acquiring and maintaining these teams. Planners can customize the costs and quantities of personnel and equipment to reflect the realities and needs of their jurisdiction. In this way, the tool can provide jurisdiction-specific costs to assist with budgeting and the preparation of investment justification proposals.

### How to Use the Tool

Jurisdictions can input their basic risk factor information on the “Your Info” page. This creates the suggested team types and numbers, which is then populated throughout the tool. Default quantities and costs are already populated in the tool, but planners can change these to reflect the costs and needs of their jurisdiction. This customization is then copied so that the output cost pages are jurisdiction-specific. Costs are presented in terms of the initial investment costs as well as annualized life-cycle costs for maintenance.

### Cost Drivers

In almost all cases, equipment costs and quantities will make up the majority of initial investment costs, but will have significantly less impact on annualized costs. Personnel costs, however, will consistently overwhelm equipment costs when considering annualized maintenance of the teams.

Of the total equipment costs, the costs of Field Testing Equipment and Vehicles make up the majority of the total. Specifically, the price associated with Chemical/Biological Mass Spectrometers for hazardous material identification in the field is very high. This equipment, however, is only required for Type I teams.

### Tool limitations

This tool looks at the team-based resource requirements of capabilities. It does not take into account other parts of preparedness, such as building strong plans to implement the WMD/HAZMAT capability, or exercising the capability to keep it operational and effective.

It is also important to note that running this tool at the city/county level does not produce the full picture of regional preparedness. WMD/HAZMAT teams are often shared across geographical areas that supersede city or county limits. Users can calculate requirements for larger jurisdictional footprints (such as a UASI) by combining populations and risk

factors. However, the requirements produced will be only the number and types of teams needed, and not where (geographically) they should be placed to ensure maximum capability coverage.

## **References**

U.S. Department of Homeland Security. FEMA. “Resource Typing Definitions - I, First 60 Resources”. Available online:  
[http://www.fema.gov/pdf/emergency/nims/NIMS\\_AppendixA.pdf](http://www.fema.gov/pdf/emergency/nims/NIMS_AppendixA.pdf)

U.S. Department of Homeland Security. FEMA. “Target Capabilities List 3.0: WMD/HAZMAT Response”. Pre-decisional draft.