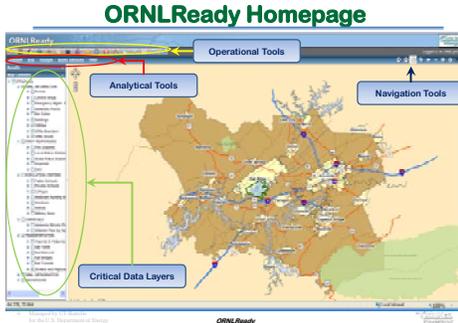# *ORNLReady*:

A Web-Based Geospatial Visualization Tool for Emergency Management and Responses

What is *ORNLReady*?

ORNLReady is a data-driven tool that prepares Oak Ridge National Laboratory (ORNL) for rapid emergency response through comprehensive state-awareness and seamless coordination.   At DOE's 2010 Emergency Management Issues - Special Interest Group Annual Conference, DOE named *ORNLReady* as the most useful training product currently available and transferable to other DOE facilities.

An example of the consequence analysis.

ORNLReady Homepage

What does *ORNLReady* do?

ORNLReady is developed by the Center for Transportation Analysis (CTA) through a collaborative effort with ORNL's Facilities & Operations Directorate and leveraging from research capabilities and results throughout ORNL. The tool prepares ORNL for scheduled and unscheduled events through careful planning and exercises. It is an active tool currently used by the Laboratory Shift Superintendent (LSS) and the Emergency Operation Center (EOC) during their day-to-day operations, exercises, and event responses. The tool enables LSS and EOC to develop scenario-based crisis management plans. The training aspects of *ORNLReady* can pose various scenarios— operations, responds, and planning.

How does *ORNLReady* work?

ORNLReady uses near real-time information and stored data to create a computerized virtual world. This enables LSS and EOC to develop scenario-based emergency plans and to quantify and visualize potential consequences (e.g., number of buildings, assets, and employees impacted) of disasters and other unplanned events. *ORNLReady* integrates hazard prediction and assessment functions by overlaying plume model results generated
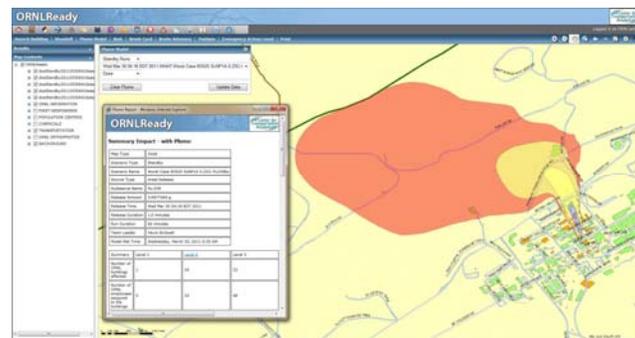
Summary impact with Plume model

Center for Transportation Analysis

from CAPARS with ORNL facilities and other physical assets and estimates potential impacts under each protection action level. Furthermore, a tool to identify impacted ORNL facilities and the levels of stand-off and evacuation distances in response to various levels of bomb threats are also provided in the *ORNLReady*.

The tool includes detailed maps of ORNL and nearby facilities, employee populations, locations of hazardous material, weather tracking and much more – everything needed to help crisis managers visualize potential consequences of events and make informed safety-based decisions. All tools are integrated into a single portal. This provides ORNL

with near real-time situational awareness within the ORNL main campus as well as the five counties surrounding ORNL.
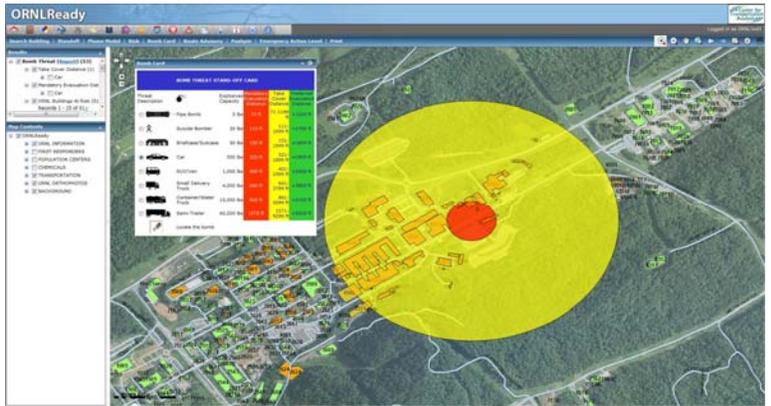
Bomb Threat Stand-Off Card