

# **EMAC & Mission Ready Packages for Post-Earthquake Building Inspectors**

*National Earthquake Program  
Managers Meeting*

Seattle, Washington | April 30, 2013

# Overview

- Background
- Mission Ready Packages
- Building Inspector MRP Development
- Mutual-Aid Support System

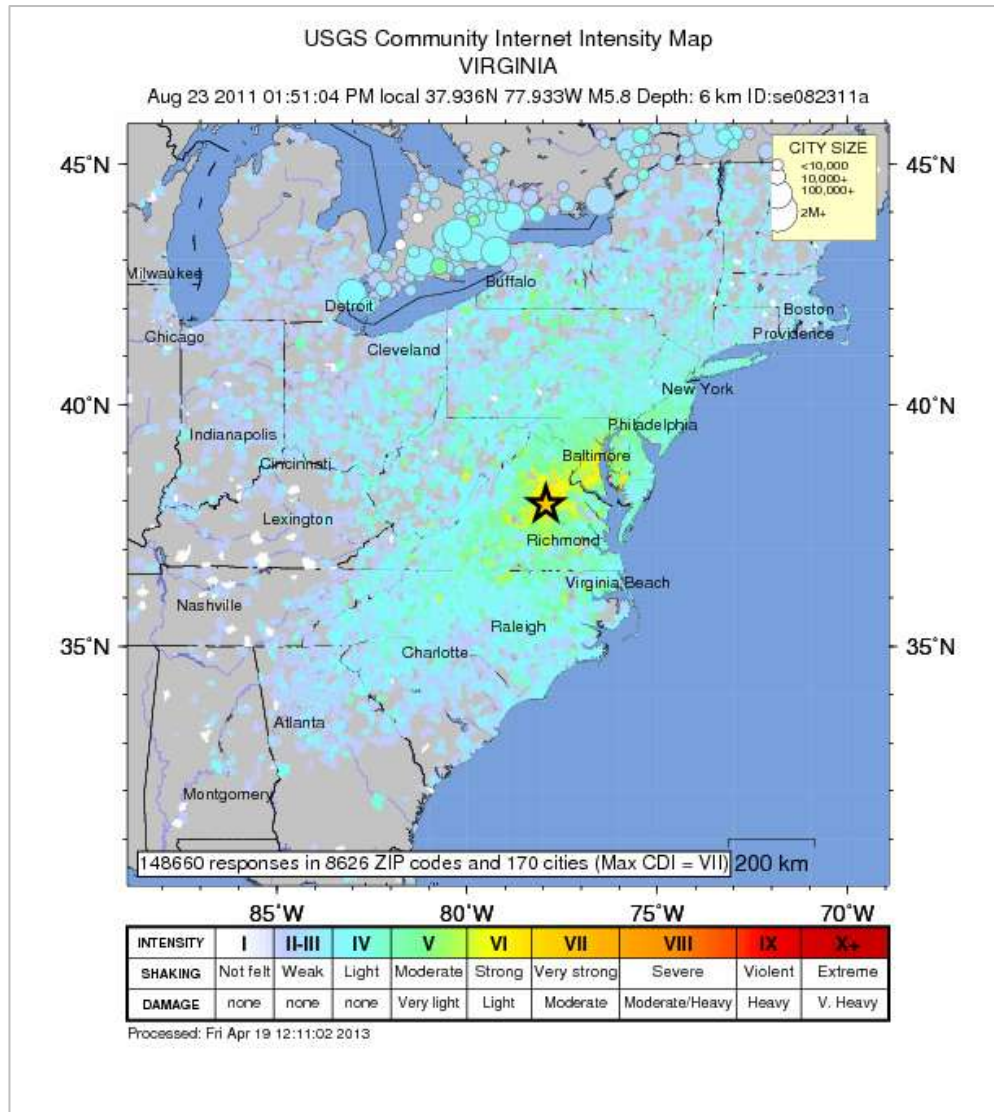
# Why are we working on Deployable Building Inspector Resources?

- To develop EMAC based/resource-typed building inspection teams
- To provide an “all-hazards”, national resource
- To identify earthquake mitigation priorities through building inventory and evaluation
- To provide potential building inspectors training and practical experience

*All will be tested and validated in* **CAPSTONE**



# M5.8 Mineral, VA Earthquake



- 8/23/2011
- \$150M in Damages
- 150,000 felt reports  
Maximum Intensity VII
- Building Inspectors  
“imported” from CA
- CUSEC States had/have  
trained inspectors

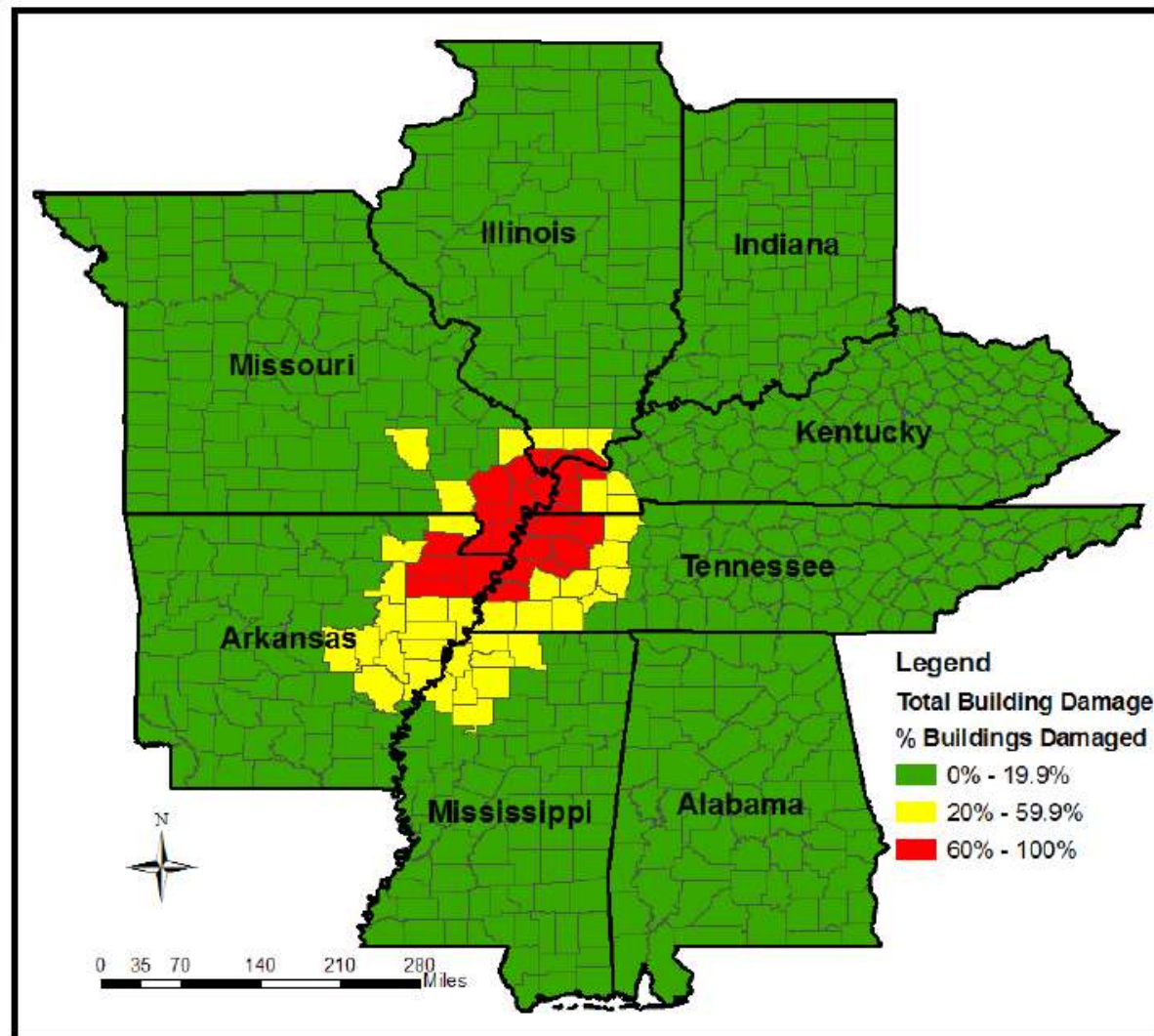
# General Buildings

|              | Total Buildings   | Buildings Damaged | URM Damage     | Wood Damage    |
|--------------|-------------------|-------------------|----------------|----------------|
| Alabama      | 1,758,300         | 15,382            | 372            | 3,009          |
| Arkansas     | 1,325,400         | 162,235           | 29,134         | 68,763         |
| Illinois     | 3,655,800         | 44,464            | 10,120         | 17,712         |
| Indiana      | 2,202,000         | 14,215            | 2,564          | 4,796          |
| Kentucky     | 1,543,900         | 68,400            | 9,413          | 36,116         |
| Mississippi  | 1,064,000         | 57,442            | 4,995          | 19,856         |
| Missouri     | 2,101,900         | 86,838            | 26,772         | 40,185         |
| Tennessee    | 2,126,600         | 264,198           | 48,880         | 163,577        |
| <b>TOTAL</b> | <b>15,777,900</b> | <b>713,174</b>    | <b>132,250</b> | <b>354,014</b> |

• Though buildings are damaged throughout the entire 8-state region, the most severe damage occurs in western TN, northeastern AR, western KY, the Boot Heel of MO, and southern IL

• Roughly 25 counties are catastrophically damaged, meaning more than 60% of all buildings are damaged (colored red)

• Additionally, almost 40 counties incur substantial damage with 20% to 60% of all buildings damaged (colored yellow)

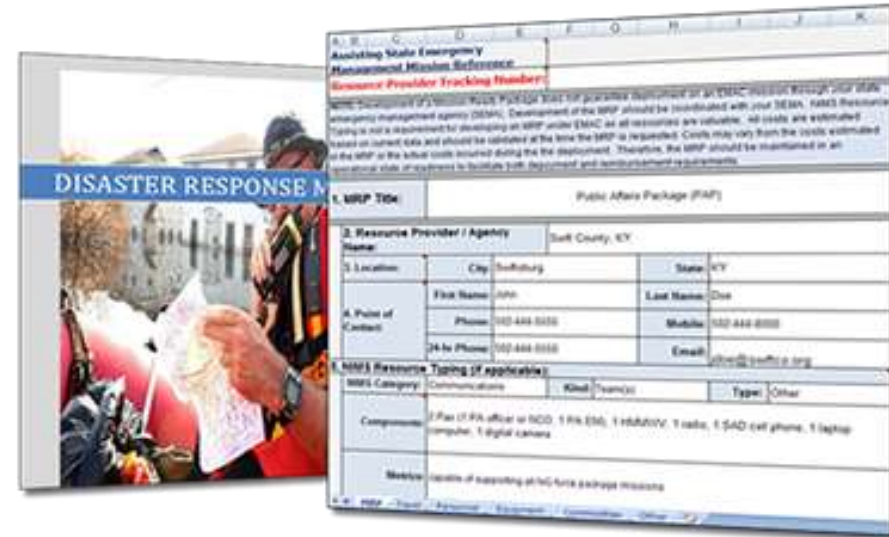


Building damage is illustrated by the percent of buildings damaged in each county. Counties with more than 60% of buildings damage are critically impacted.



# Mission Ready Packages (MRP)

- Specific response and recovery capabilities
- Organized, developed, trained & exercised prior to an emergency
- Based on NIMS Resource Typing
- Developed in cooperation with Resource Providers



The image shows a person in a red jacket and helmet, likely a first responder, looking at a document. Overlaid on the right is a screenshot of a Mission Ready Package (MRP) form. The form is titled "DISASTER RESPONSE MRP" and contains the following information:

| A. Mission Ready Package (MRP) Tracking Number   |  |                             |                            |
|--|--|-----------------------------|----------------------------|
| 1. MRP Title: Public Affairs Package (PAP)   |  |                             |                            |
| 2. Resource Provider / Agency: Suffolk County, NY  |  |                             |                            |
| 3. Location:   |  | City: Suffolk               | State: NY                  |
| 4. Point of Contact:   |  | First Name: John            | Last Name: Doe             |
|  |  | Phone: (508) 444-0100       | Mobile: (508) 444-0100     |
|  |  | 24-hr Phone: (508) 444-0100 | Email: john.doe@county.org |
| 5. NIMS Resource Typing (if applicable)  |  |                             |                            |
| NIMS Category: Communications  |  | Kind: Team(s)               | Type: Other                |
| Components: 1 Fax (1 PR officer or NCO, 1 PR EM), 1 HRA/IV, 1 radio, 1 SAD cell phone, 1 laptop computer, 1 digital camera |  |                             |                            |
| Notes: Details of supporting at NO force package missing   |  |                             |                            |

1. Speed – Faster Response
2. Reimbursement - Reduce Issues

## Equipment

- Dump truck
- Articulating rubber-tired loader
- GPA Units
- Chain saws
- Cameras
- Costs

## Personnel

- Positions or names with contact information
- Salaries/fringe benefits

## Commodities

- Fuel
- Spare chains, bars, oils, files
- Costs
- Personal protective gear

### Example: Debris Removal Support Package

## Food

- Per diem rates
- Receipt estimates

## Travel/Lodging

- Per diem rates
- Receipt estimates
- Airfare
- Mileage
- Costs

## Other Costs

- Decontamination
- Maps of disaster area
- Equipment rehabilitation
- Costs

# **Building Safety Evaluation MRP Templates**



# CUSEC Post-Disaster Building Safety Evaluation Strike Teams

| Mission  |   |   |
|--|---|---|
| TYPE I   | TYPE II   | TYPE III  |
| <p>Conduct <b>RAPID AND DETAILED SAFETY EVALUATIONS OF COMPLEX BUILDING STRUCTURES</b></p> <p>(&gt; Three stories, irregular building design, soft story construction, critical facilities, etc.)</p> <p><i>May also conduct Safety Evaluations normally done by Type II and III Teams</i></p> | <p>Conduct <b>RAPID AND DETAILED SAFETY EVALUATIONS</b> and assist Type I teams</p> <p>(Non-critical low rise structures up to three stories)</p> <p><i>May also conduct Safety Evaluations normally done by Type III Teams</i></p> | <p>Conduct <b>RAPID SAFETY EVALUATIONS</b> and assist Type I and II teams</p> <p>(Residential single-family wood framed structures; single story buildings of less than 10,000 square feet)</p> |

# CUSEC Post-Disaster Building Safety Evaluation Strike Teams

| Personnel  |   |  |
|--|---|--|
| TYPE I   | TYPE II   | TYPE III   |
| <p style="text-align: center;">2 PERSONS</p> <p style="text-align: center;"><b>1 LICENSED STRUCTURAL ENGINEER or ARCHITECT</b><br/>with 5 yr. experience in design and/or construction and<br/><b>1 LICENSED ENGINEER or ARCHITECT</b></p> | <p style="text-align: center;">2 PERSONS</p> <p style="text-align: center;"><b>1 LICENSED ENGINEER or ARCHITECT</b><br/>and<br/><b>1 NON-LICENSED ENGINEER or ARCHITECT</b><br/>or<br/><b>1 CERTIFIED BUILDING INSPECTOR or CODE OFFICIAL</b></p> | <p style="text-align: center;">2 PERSONS</p> <p style="text-align: center;"><u>NOTE</u>: AT LEAST ONE<br/><b>LICENSED ENGINEER</b><br/>or<br/><b>ARCHITECT,</b><br/><b>INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED BUILDING OFFICIAL/INSPECTOR,</b><br/>or<br/><b>NON-LICENSED ENGINEER or ARCHITECT</b><br/>is preferred for this team</p> |

# CUSEC Post-Disaster Building Safety Evaluation Strike Teams

## Training

### TYPE I

### TYPE II

### TYPE III

#### **Required FEMA Emergency Management Institute (EMI) Courses:**

- IS-100 Incident Command System (ICS)
- IS-700 National Incident Management System (NIMS)
- IS-800 National Response Framework (NRF)

*and*

#### **Choice of building inspector training:**

ATC-20 Post Earthquake Safety Evaluation of Buildings *and*  
ATC-45 Safety Evaluation of Buildings After Wind Storms and Floods

*or one of the following:*

- Missouri SAVE Coalition training
- California EMA Safety Assessment Program (CalSAP)
- International Code Council (ICC) disaster response training for code enforcement officials

# **Common Building Inspector EMAC Considerations**

- Liability / Workers Compensation
- Deployment Limitations
  - Scope of deployment
  - Level of training
  - Functions described by mission order
- Home State rule for licensure

# Mutual Aid Support System (MASS)

- GIS software that focuses on Mission Ready Packaging for mutual aid (Intrastate & EMAC)
- MASS integrates with current EM resource management software (flexible)
- Providers control who can see resource inventory

*Finding deployable resources on a map...*

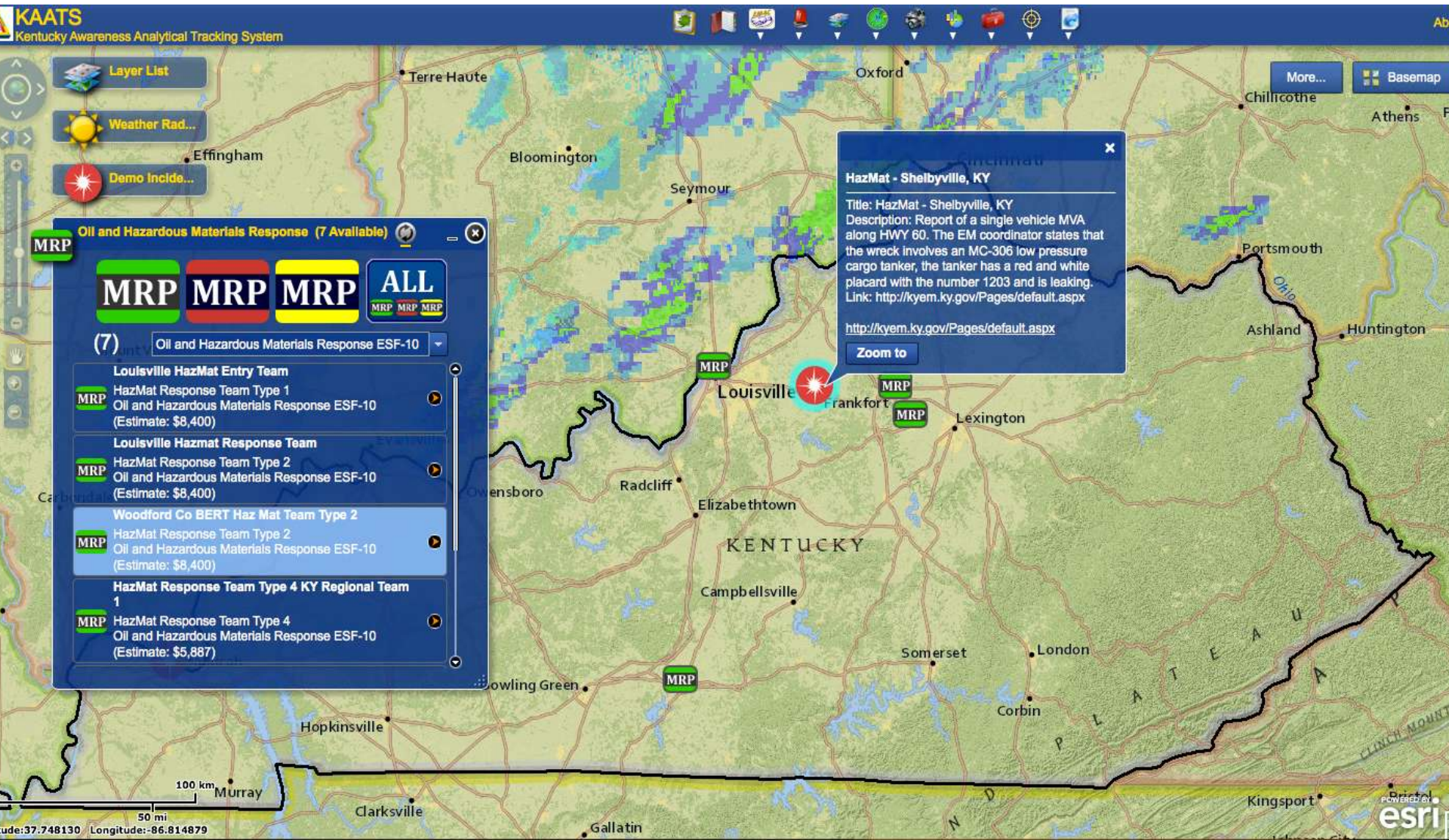


# Easily See MRP Status



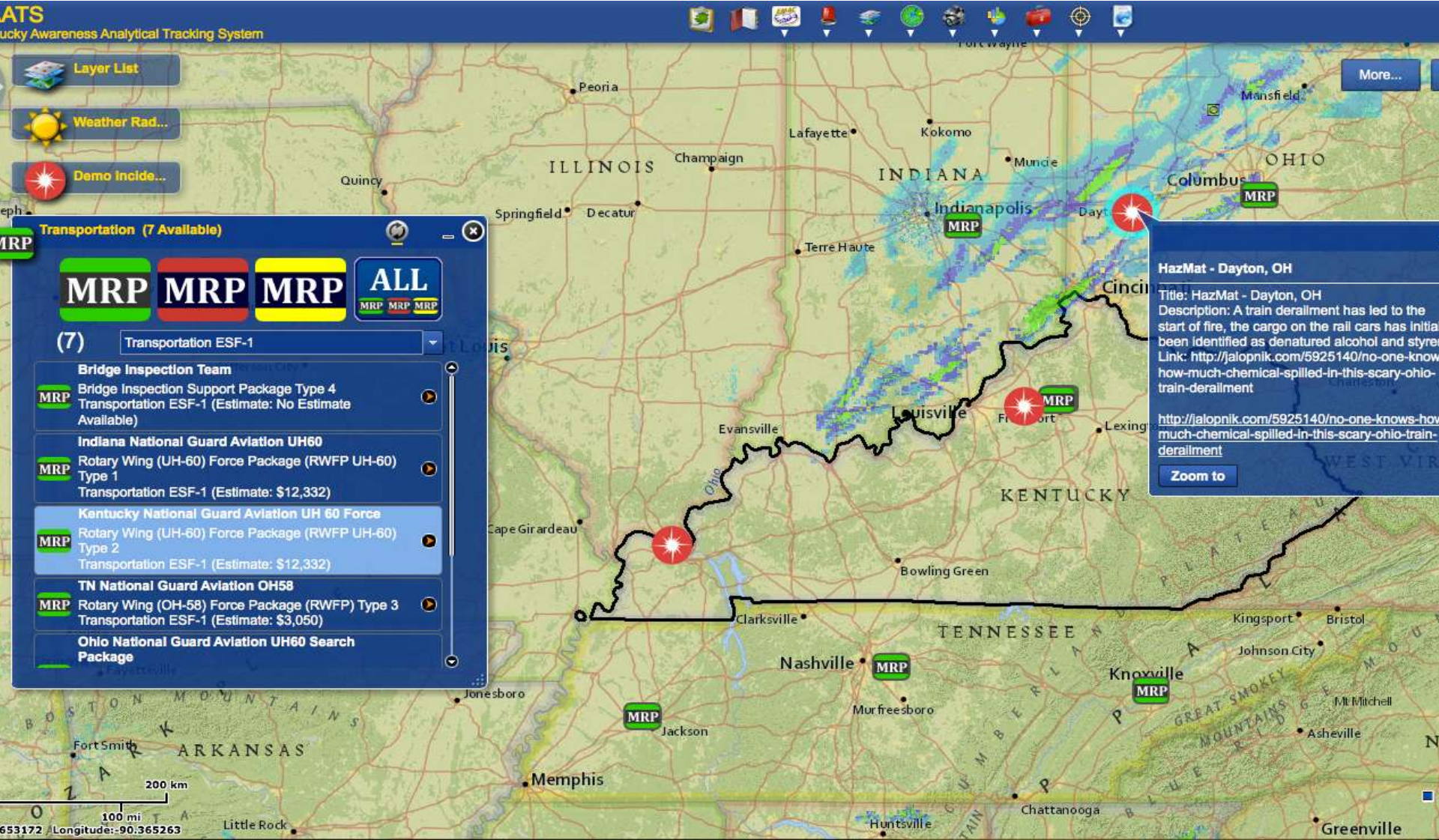


# Sample Incident: Intrastate HazMat in N. Kentucky





# Sample Incident: EMAC HazMat in Southern, OH



## Mission Offer

- [Information](#)
- [Cost Summary](#)
- [Personnel](#)
- [Equipment](#)
- [Commodities](#)
- [Other Costs](#)
- [Notes](#)

[Export to EMAC](#)

## Information ▼

|                        |  |                       |  |
|------------------------|--|-----------------------|--|
| Organization           | Woodford Co BERT HazMat Response Team Type 1                                       |                       |  |
| EMAC Request ID        |  | Mission Type          |  |
| Mission Description    | Investigate and mitigate loss resulting from a Hazmat incident. Assist in cleanup. |                       |  |
| Resource Description   | Complete and capable Hazmat Team, Type 1. Self Supporting for the first 24 hours   |                       |  |
| Number Requested       | 1  | Number Type           |  |
| Deployment Date        | 10/2/2012  | Demobilization Date   | 10/8/2012                                      |
| Total Days for Mission | 6  |                       |  |
| Status                 | Available  | National Guard Status |  |
| Assisting State        | Indiana  |                       |  |
| Discipline             |  |                       |  |
| Created                | 9/27/2012 3:44:23 PM grant.t.gillion   |                       | Modified 9/28/2012 10:07:46 AM grant.t.gillion |

## Cost Summary ►

## Personnel ►

## Equipment ►



### Tracking Information

EMAC TN:

Assisting State TN:

State EM Software TN:

Assisting Agency:

### Assisting State REQ-A Contact

First Name:

Last Name:

Phone 1:

Phone 2:

E-mail 1:

E-mail 2:

### Mission Details

Mission  
Type/Source:

State

If State:

Fire - HazMat

If NG:

Select Status:

Mission  
Description:

Provide HazMat Support

Resource  
Description:

NIMs Type:

Select NIMS Resource Type

# Requested:

2

# Type:

Personnel

### In-State Resource Point of Contact

First Name:

Last Name:

Phone 1:

Phone 2:

E-mail 1:

E-mail 2:



# Next Steps

- Finishing touches on Building Inspector MRPs
- MRP Templates --> States --> EMAC/MASS
- Work to train, recruit volunteer inspectors
- Exercise, Validate, and Update MRPs in CAPSTONE-14