

**INTEGRATED CHEMICAL, BIOLOGICAL,  
RADIOLOGICAL, NUCLEAR AND  
EXPLOSIVE PROGRAM**

# **Integrated CBRNE Program**

**For Emergency Response**



***Hazardous Environment and First Responder  
Safety Solutions***

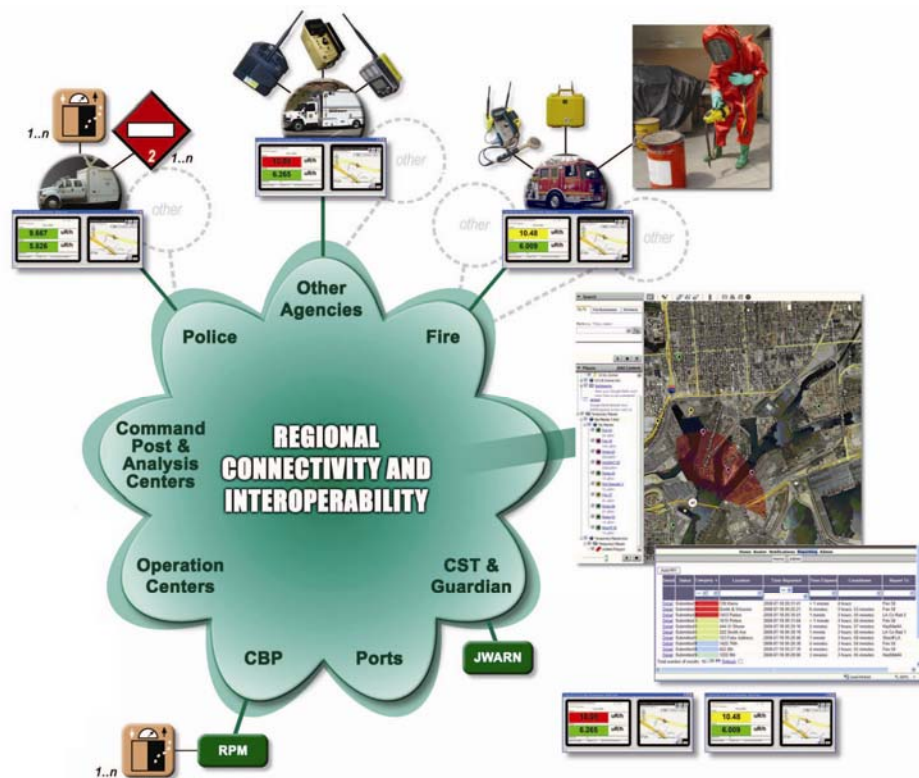
# The ICBRNE Program

Local responders and Emergency Managers worked with the Department of Homeland Security to create the Integrated Chemical, Biological, Radiological, Nuclear and Explosive (ICBRNE) program.

This program in conjunction with Los Angeles Public Safety and private industry has implemented regional interoperable sensor systems that monitor live, report, display and alert appropriate officials in the event of a detection.

These systems enhance the safety of responders by providing live detection data to subject matter experts and Emergency Managers who can monitor, report and advise during emergencies.

System data is exchanged utilizing global standards for information sharing which allows interoperability across established incident management tools providing both a common operational picture and better situational awareness.

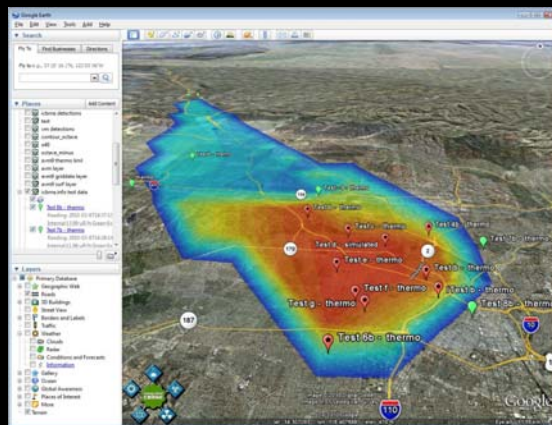


ICBRNE significantly increases data flow and reduces information gaps from stove-piped detect-to-protect sensor systems and mobile sensors used for situational awareness in incident response and emergency management.



## Benefits

- Provides an instantaneous way to share and collaborate CBRNE information across region, State, nation or beyond.
- Provides live incident data across response organizations regardless of their location. Responders do not have to be on scene to assist.
- Enhances responder safety by allowing instruments to report live reading back to expert freeing up the responder to focus on other critical tasks
- Eliminates the radio transmission of secure or possibly inaccurate instrument readings.
- Provides situational awareness alerts and notifications across its subscribers about CBRNE events though a complex policy filter assuring that the right person receive relevant information.
- Provides a Web GIS interface accessible both through the desktop and mobile platforms that allows command staff to see the location and other relevant detection data.
- Establishes field “hotspots” though an interoperable network communications platform for data sharing using mobile and portable network devices

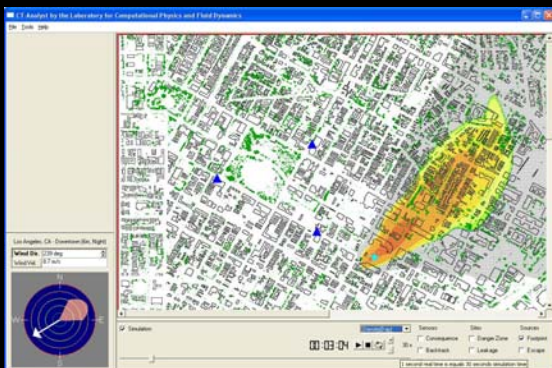


### Radiation Contour Gradient Tool

Using live data from fixed, mobile and handheld radiation detection instrumentation a Radiation Gradient Contour Tool was created. The tool normalizes the readings and scales them against a hazard legend created by the Los Angeles County Health Department. This tool is used for ground truthing and stay time determination.

## Features

- Field deployed hardware to provide high bandwidth network between regional technical responders
- Geographic and other support software providing for a common operational platform of both data and visual awareness
- Live sensor systems that allow responders and subject matter experts instant access instrument data such as video (daylight & Ir), chemical, radiological, thermal, acoustic, biological and others.
- In conjunction with RACR a vetted emergency alert and notification system notifying participants of CBRNE related incidents that were triggered manually or by an instrument exceeding a threshold
- Vetted set of fundamental policies governing information sharing.
- Systems designed to interface using global DHS standards for information sharing allowing regional data to interface with a growing list of over 16 Federal and vendor specific systems.
- Provides a radiation energy gradient map



### CT Analyst Los Angeles

CT Analyst Los Angeles is a cooperative effort between the Los Angeles City Fire Department, Department of Homeland Security and the Naval Research Laboratory to create a 3D plume propagation model that takes into account terrain and geometric structures such as buildings.

#### CBRNE Participants

- Los Angeles City Fire Department
- Los Angeles County Fire Department
- Los Angeles County Department of Coroner
- Los Angeles World Airport
- Glendale Fire Department
- Santa Monica Fire Department
- Long Beach Fire Department
- Port of Los Angeles
- Ontario Fire Department
- Riverside Fire Department
- Los Angeles City Police Department
- Los Angeles County Sheriff Department
- Los Angeles County Health Department
- Burbank Fire Department
- Santa Fe Springs Fire Department
- 9<sup>th</sup> Civil Support Team
- Port of Long Beach
- Vernon Fire Department
- San Bernardino Fire Department

#### Emergency Management Participants

- Area E Disaster Management Area Coordinator
- Los Angeles County Department of Mental Health
- Los Angeles Department of Health Services
- California Emergency Management Agency
- Los Angeles County Department of Public Works
- Area F Disaster Management Area Coordinator
- US Air Force/Los Angeles AFB
- City of Los Angeles Building and Safety
- Los Angeles County Department of Water and Power
- Pasadena Public Health Department
- LA County Office of Emergency Management
- LA County Public Library
- City of LA Department of Transportation
- Area D Disaster Management Area Coordinator
- Area C Disaster Management Area Coordinator
- Ventura County Public Health
- City of Pasadena
- LAPD - Emergency Operations Division
- Area H Disaster Management Area Coordinator
- Area G Disaster Management Area Coordinator
- InfraGard - Los Angeles
- Los Angeles Internal Services Department
- City of Long Beach
- Getty Foundation
- LA County Probation
- Joint Regional Inelegance Center
- Real-Time Analysis & Critical Response Division

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