



# Oak Ridge National Laboratory

## Shelby County Sensor Fusion Center



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Prevent, Protect, Respond, Recover

### Homeland Security Challenge:

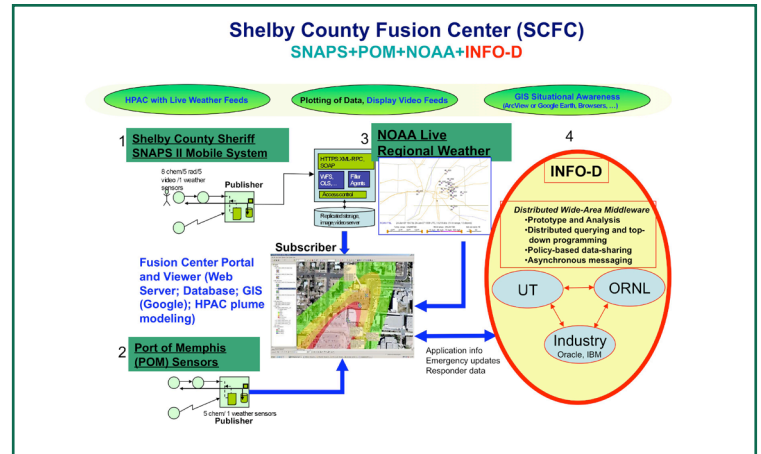
The DHS has issued a document for use in regional emergency response capabilities, called NIMS (National Incident Management System), and is a recommended methodology for sharing information using standards in communications and data exchange between response agencies. Thus far, voice communications interoperability has been the focus, leaving data interoperability for future resolution. The development of a near-real-time data gathering and sharing platform based on interoperability standards would provide the necessary foundation with better integrated response to incidents across multiple agencies within a region.

### Research Project Solution:

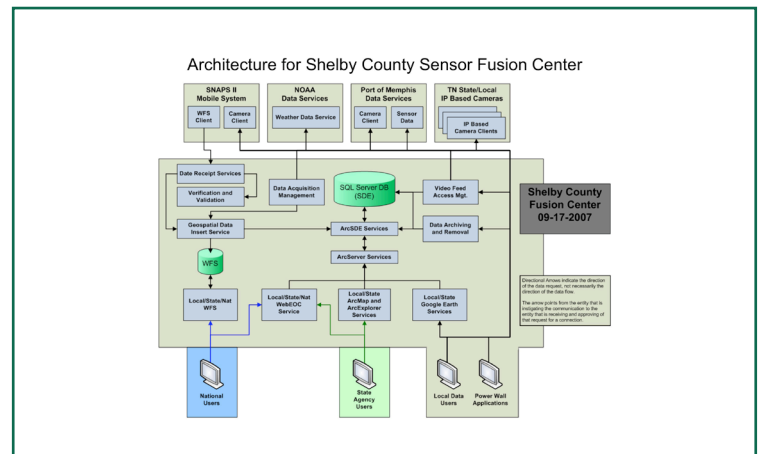
The project will develop a near-real-time system with the following innovative features: 1) a live sensor data sharing platform with integration of local area sensors, weather, and video; 2) decision support from HPAC plume modeling pre-configured and user-initiated will provide area responders with valuable advance knowledge before deployment; 3) a display platform based on area maps and topology will provide a common view of area resources, sensors, alerts, and plume computational results.

### National Implications:

Gathering and displaying near-real-time sensor and other data for decision support information across the various types of existing data platforms to and from emergency response personnel is required for rapid coordination and efficient operations. The near-real-time data will enhance understanding of public safety threat conditions, characterize response needs, and accelerate mitigation and recovery. The use of near-real time information generated by sensors and analysis will allow for incident awareness and tracking by first responder agencies. Conveyed efficiently and accurately, this information can be used to provide individual agencies a common understanding of the threat environment for purposes of coordinating interdiction, mitigation, and consequence management operations.



SCFC Basic Functional (Operational) Architecture



SCFC Basic System (and Data) Architecture

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For More Information on SERRI, contact:
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