

Command, Control and Interoperability

Virtual USA Briefing to 2010 ESRI User Conference

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Command, Control and Interoperability

Mission

The Command, Control and Interoperability (CCI) Division creates and deploys information resources to enable seamless and secure interactions among homeland security stakeholders.



Vision

Stakeholders have comprehensive, real-time, and relevant information to create and maintain a secure and safe Nation.



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National Problem

- Inability to seamlessly share information and collaborate in *real time*
 - Crisis management systems
 - Resource management
 - Computer Aided Dispatch (CAD)
- Cultural and governance barriers impede effective information sharing at all levels
 - Portals
 - Websites

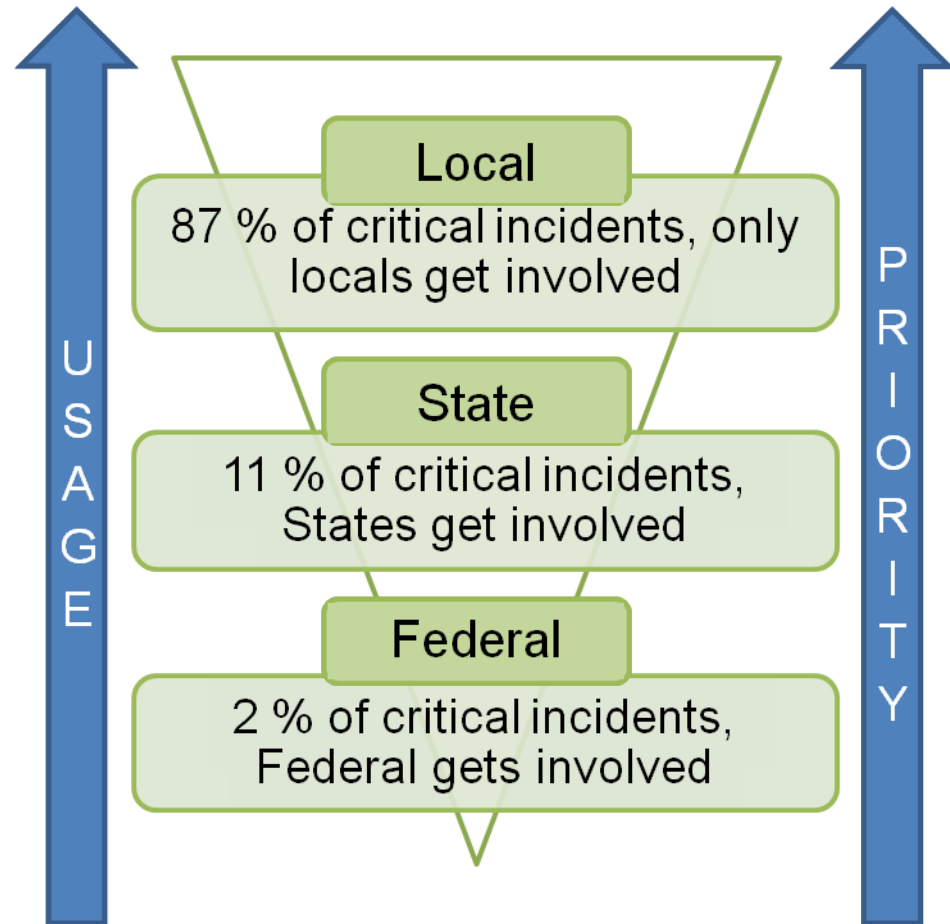
Result: Inefficient use of resources that impedes the mission of saving lives and protecting property.



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Virtual USA: Core Principles

- All Data/Information is Local
- Bottom Up Approach = Practitioner Driven
- Integrates Existing Frameworks
- Builds on Existing Investments



Figures related to incidents within Alabama, as determined by the Alabama Emergency Management Agency



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Virtual USA: National Solution

- Technology-agnostic platforms
- Resilient and redundant technological infrastructure
- Governance structure – state sovereignty
- Preservation of and respect for information origins

Virtual USA enables information sharing across jurisdictional boundaries through existing and emerging technologies.



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Virtual USA: Scope

What is Virtual USA?

What It Is

Driven by practitioners
Maintained by data owners
Leverages existing investments and resources
Integrates existing frameworks through a technology-agnostic approach
Shares information as they choose
Keeps **local and state** data and systems in **owners'** hands

What It Is Not

Not solely an information system, but a system of systems
Not a Federal Government mandate
Does not require replacement of existing systems and databases
Not a data warehouse
Not a requirement for states and locals to lose control or ownership of their data



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Purpose of Pilots

Purpose 1:

To support regional collaboration and information sharing

Purpose 2:

To refine or develop a regional governance framework that will support real-time collaboration and information sharing

Purpose 3:

To assist, as needed, in the development or refinement of state technological capabilities to share information seamlessly among all stakeholders



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Current Pilot Initiatives

- Southeast Regional Operations Platform Pilot (SE ROPP)
 - Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia
 - Only two states had platforms (different technology bases), now each participant has their own platform
- Pacific Northwest (PNW) Pilot
 - Alaska, Idaho, Montana, Oregon, and Washington
- New England (NE) Pilot (exploratory)
 - Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont



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Pilot Milestones

- Assess state and regional capabilities
- Identify state and regional information needs and requirements
- Develop and expand technical capabilities
 - If requested, DHS may provide Pilot Implementation Team support to assist individual states in developing or refining intrastate information-sharing capabilities
- Develop information-sharing agreement with Virtual USA pilot participants as well as a region-specific appendix
- Perform a regional capstone demonstration

vUSA Gen II Prototype

- Facilitates information sharing between states and platforms using four different approaches:
 1. Web-based interface
 2. Application to interface with existing systems and catalogs
 3. Virtual globe
 4. ESRI viewer
- Provides the ability to decide what to share, how to share it, how long to share it, and with whom to share it
- Maps data models for rapid format translations according to governance agreement
- Allows participants to search data catalogs for rapid discovery



Gulf of Mexico Oil Spill – April 30, 2010



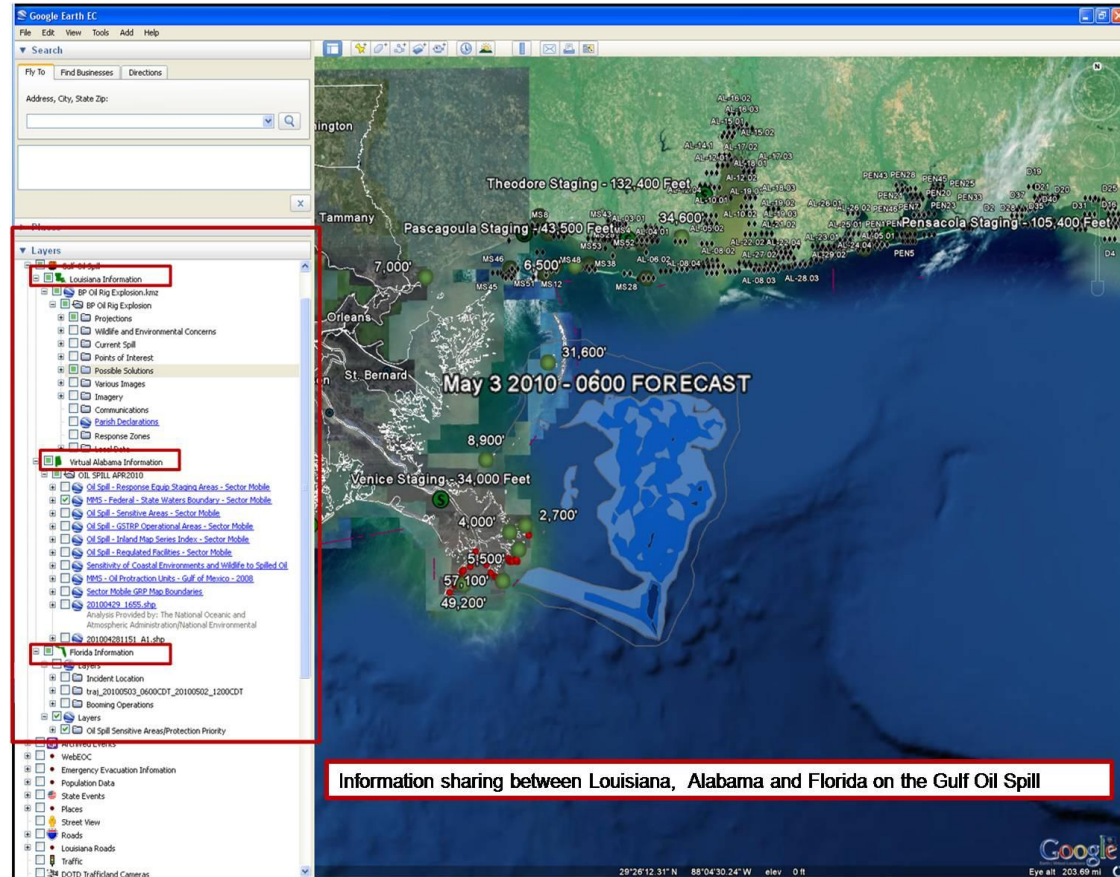
Virtual Louisiana is actively mapping the changes in projected levels and path of the oil spill zones, boom sites, projected beach contact, and economic impacts on oyster leases, seabird nesting colonies, wildlife management areas, and wildlife refuges.



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vUSA Success Highlights in Gulf Region

- Gulf states are now able to share information across borders by locating and accessing live feeds in the Gen II Prototype.
- Multiple agencies' daily incident reports are now uploaded into state WebEOCs and are now viewable in visualization platforms.
- BP has agreed to post dynamic feeds from their data catalog on the prototype for all users.
- Florida's GATOR instructs National Guard assets and Wildlife Commission officers where to fly missions.



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Industry/Vendor Participation

- Emergency Response Vendors
- Technology Providers (e.g. Google, ESRI)
- Software Companies
- Commerce (e.g. Walmart)



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For More Information

If you would like more information on Virtual USA,
please contact VirtualUSA@DHS.GOV.



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