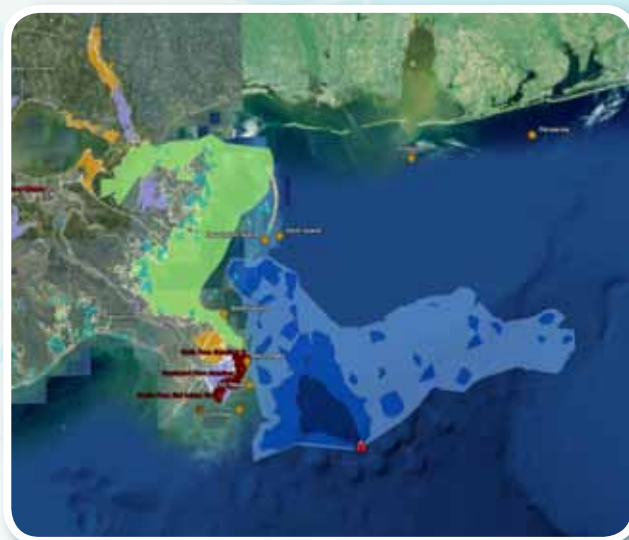




Virtual USA

In April 2010, the largest accidental marine oil spill in U.S. history struck the U.S. Gulf Coast, releasing 53,000 barrels of oil a day into the Gulf of Mexico. The oil traveled hundreds of miles into estuaries and onto beaches, impacting multiple states along the Gulf Coast – requiring a coordinated response among neighboring states, as well as Federal and private sector partners. Emergency management agencies were initially able to exchange only static information via email, but quickly realized that a more efficient response would require the ability to actively share real-time information. To meet this need, several Gulf States called upon the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) for early activation of the Virtual USA (vUSA) information-sharing prototype solution, which was under development at the time.

As a result of the vUSA Prototype's deployment, the Florida Civil Air Patrol was able to share real-time information on oil sightings with the Florida Emergency Operations Center and the Unified Command in Mobile, Alabama — enabling both states to deploy response teams to specific locations, saving time and money, and maximizing the effectiveness of the cleanup effort. Similarly, in Louisiana, information gathered during flights over the Gulf Coast and shared with partners through vUSA allowed agencies to better target operational response and cleanup teams. vUSA further improved coordination with the private sector during oil spill response efforts. BP, which had been printing PDF maps three times a day to communicate quickly-outdated oil status and conditions, was able to share live maps and real-time information with the Gulf States and other partners using the vUSA Prototype.



Through Virtual USA, Virtual Louisiana shares data with state, Federal, and private partners in other jurisdictions for use in response to the Deep Horizon oil spill.

About Virtual USA

In an emergency, responders must be able to quickly and easily access relevant, reliable, and up-to-date information from multiple partners. vUSA is a collaborative effort among DHS S&T, other DHS entities, and state and local emergency management agencies, which improves information sharing between emergency management agencies and other partners. This ability to share information strengthens their understanding of a situation allowing better decisions to be made based on more complete information. The vUSA approach is a blend of process and technology, helping agencies develop relationships and agreements among partners while providing the data pipeline that allows these agencies to easily share information. Participating agencies make their data available to others as a web link and pull others' links from the vUSA Prototype to display in their own map viewers. The success of vUSA rests not only on improving technical capabilities, but on encouraging trusted relationships among the community at all levels.

Following the earthquake in Haiti, survivors whose homes were destroyed were offered flights to the United States. Because of relationships established between Florida and South Carolina as a result of their participation in vUSA, the two states shared real-time information of their major airports' flight status to help determine when flights needed to be redirected due to volume. This partnership resulted in the safe, efficient passage of Haitians into the region.

“Participation in Virtual USA has yielded significant tangible benefits in improved situational awareness, response, and planning following the oil spill.”

— *Brant Mitchell, Governor’s Office of Homeland Security & Emergency Preparedness, State of Louisiana*

Virtual USA’s Driving Principles

vUSA has been developed in partnership with the emergency response community from the start. Through participation in pilot demonstrations and vUSA’s stakeholder group, emergency responders have been involved at every level of vUSA’s strategy, technology, and partnership development. The program is based on four driving principles:

Improving Information Sharing and Collaboration.

vUSA is focused on the goal of increasing communication and collaboration among all levels of government by reducing technological barriers to information sharing. vUSA provides a common area for participants to voluntarily share data based on trusted relationships and operational needs.

Encouraging Efficiency: Building on Existing

Investments. In the vUSA model, each partner (state, DHS component, Federal emergency response agency, or private entity) builds upon its own investments in systems and data. This not only saves money by avoiding costly new hardware, software, data development, and training, but it allows states to continue to use the existing systems and data that best suit their unique needs.

Maintaining Data Ownership. vUSA is not a centralized data warehouse. The initiative takes a more efficient approach by creating a data pipeline through which existing data flows from one partner to the next. In the vUSA model, all data remains local – agencies maintain ownership and control of their own data, allowing them to determine who can view their information, and ensuring the most up-to-date information is available and refreshed in real time.

Partnering to Ensure Resiliency. vUSA is a data pipeline connecting existing, self-sustaining systems; therefore, the environment is inherently redundant and resilient. vUSA is not at risk for “going down” should a state system face challenges. As participants in the vUSA environment continue to use and maintain their own systems, their access to the vUSA pipeline will be reliable.

The Future of Virtual USA

The vUSA initiative envisions a future in which each state, related DHS component, Federal emergency response agency, and private or non-profit entity, has access to the vUSA information-sharing capability. And it is with this access that the community can safely and efficiently share information using legacy systems. In this future, vUSA will be made available to local emergency operations centers and “boots on the ground” responders. An enhanced vUSA technical solution will allow for seamless information sharing regardless of the nature of the information by providing the security necessary to support sensitive but unclassified law enforcement data.

Building on the pilot demonstrations in the Southeast and Pacific Northwest, vUSA will conduct additional pilots to continue to develop its information-sharing capability. Declared a White House Open Government Initiative by President Obama and a flagship DHS Open Government Initiative by Secretary Napolitano, vUSA will continue to support the three open government principles of transparency, participation, and collaboration.

