Virtual USA
A National Technical & Cultural Shift in Information Sharing
The National Problem

1. Inability to seamlessly share information and collaborate in real time
   - Contributed to Hurricane Katrina problems
   - Inhibits protection, prevention, response, mitigation and recovery

2. Cultural behavior among jurisdictions impedes sharing of information

3. Incompatible communication and information sharing systems at all levels of government
The National Solution – Virtual USA

1. Technology Agnostic Platforms

2. Resilient & Redundant Technological Infrastructure

3. Appropriate Governance Structure

4. Preservation of & Respect for Information Origins
Making Information Actionable To Enable Collaboration
vUSA Model #1: VIPER

• Uses ESRI

• A common incident based operations platform that integrates disparate GIS and data sets to enable seamless information sharing and collaboration among relevant stakeholders when needed

• Available to all VA government agencies and citizenry

• https://cop.vdem.virginia.gov/viper
Virginia’s Problem

• Vital sensors and systems were not part of a unified common operating picture.

• Their GIS could not keep up with the fluid demands of an operations environment.

MORE PROACTIVE - LESS REACTIVE
Virginia’s Solution: VIPER

1) Unite real-time systems with GIS

2) Present only what matters most

INTEROPERABILITY & REPORT BY EXCEPTION
COP of Virginia – Multiple Events Occurring
VIPER Data Aids Decision Making (early warning notifications)
Weather watches/warnings and real time data as reported
Near real time data w/ static GIS display
Local Situation Reports
WebEOC

GeoRSS

VIPER

MS Excel

2009-09 Virginia Daily Activity

<table>
<thead>
<tr>
<th>Event Date/Time</th>
<th>Event Type</th>
<th>Jurisdiction</th>
<th>Status</th>
<th>Details</th>
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<td>Suspicious Activity</td>
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<td>Transportation Incident - Private Aircraft</td>
<td>Chesterfield County</td>
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<td>12/21/2019 16:21:27</td>
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<td>Louisa County</td>
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<td>Storm</td>
<td>Richmond City</td>
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vUSA Model #2: Virtual Alabama

Able to pre-determine critical assets, staging areas, and routes, or determine rapidly based on mission requirements and situational awareness.
Real Time Information Feeds

Visibility of Multiple Disciplines
(Police and Fire)

Use of existing DoT WEB CAM
3D models can be enhanced with information about locations of hazardous materials as well as provide access to live video feed where available.
Virtual Alabama

And the ability to provide Before ...

Used for Recovery Mission (determine $$ Value)
Virtual Alabama

... and After Situational Awareness of Area of Operation

Data provided within 4 hours of Incident, help with rescue mission
Virtual USA
Virtual USA Core Principles

- All Data/Information is LOCAL
- Bottom Up Approach = Practitioner Driven
- Integrates existing frameworks
- Builds on existing investments
Virtual USA – Regional Pilots

Regional Operations Platform Pilot (ROPP)
• 7 States: Alabama, Louisiana, Mississippi, Florida, Texas, Virginia, Georgia
• At beginning: Only 2 states had platforms (different technology bases)
• Currently: All 7 states have platforms
• Project Charter & Governance Compact
• November 2009: Demonstration

Pacific Northwest Pilot (PNW)
• 5 States: Alaska, Idaho, Montana, Oregon, Washington
• Kickoff meeting September 2009