



Dynamic GIS during Public Health Emergencies

7th Annual GIS & Public Health Conference

May 3, 2011
University at Albany
State University of New York
Center for Public Health Continuing Education



Discussion Today

- Network Centric Health System
- HLA in a KM/IB System
- Dynamic GIS



DOD Network-Centric Warfare

NCW focuses on using computers, high speed data links, and networking software to link military personnel, platforms, and formations into highly integrated local and wide-area networks. Within these networks, personnel will share large amounts of critical information on a rapid and continuous basis. DOD believes that NCW will dramatically improve combat capability and efficiency.

Network-Centric Health Emergency Response

NCHER focuses on using computers, high speed data links, local social networks and networking software and processes to link health emergency preparedness and response personnel, resources, platforms, systems and communities into highly integrated local and wide-area electronic and social networks. Within these networks, personnel will share large amounts of critical information on a rapid and continuous basis, assess system needs, and provide, coordinate and manage the resources and intelligence necessary for a multi-faceted response to a community threat. NCHER will dramatically improve public health and healthcare delivery response capability and efficiency.



New Jersey's Network Centric Health Response System



**Cooperative Engagement
Response Organizations
(the norm)**



Regional/Specialized Programs

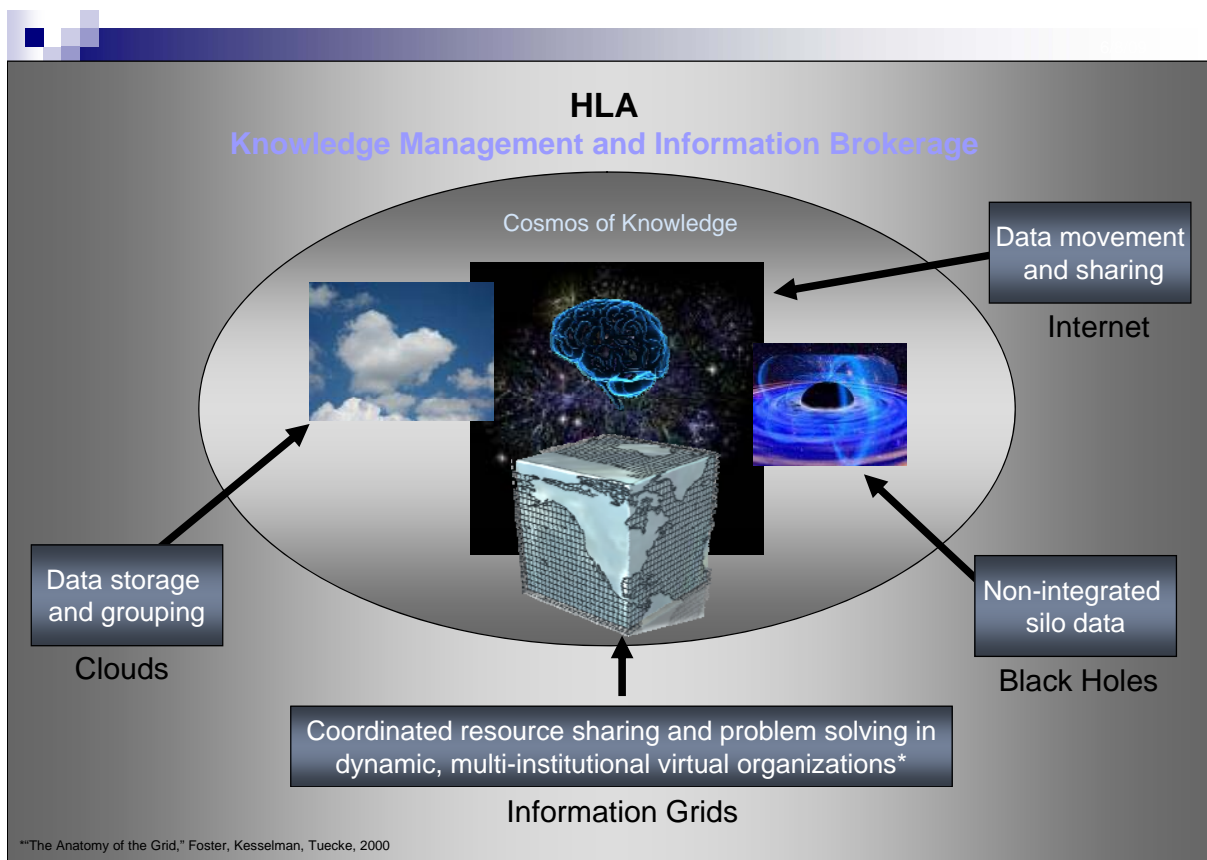
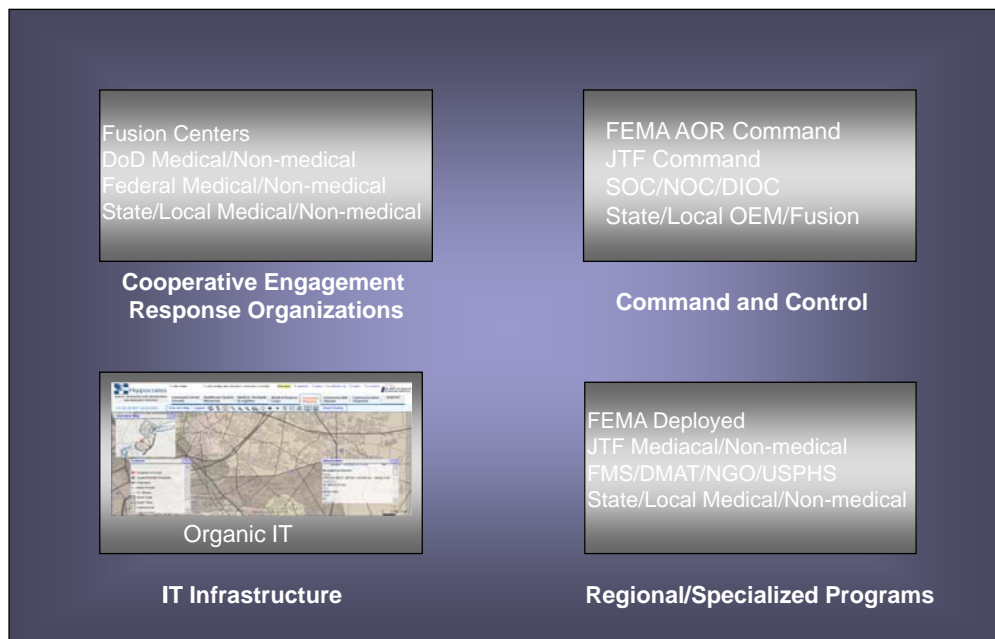


Command and Control



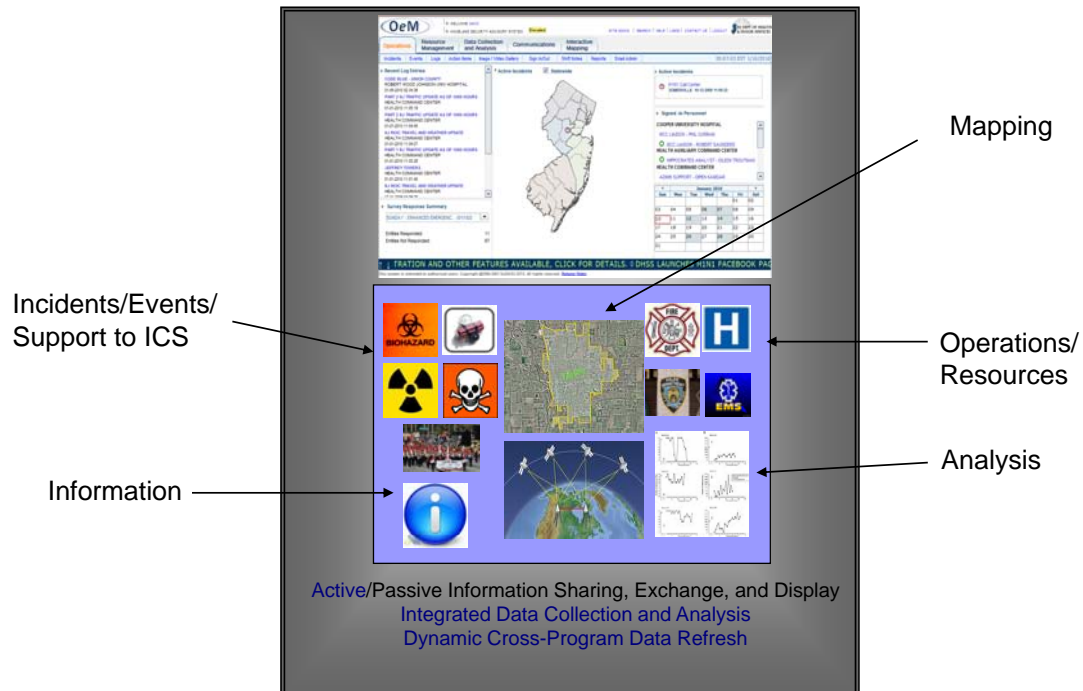
IT Infrastructure

A National Network Centric Response System

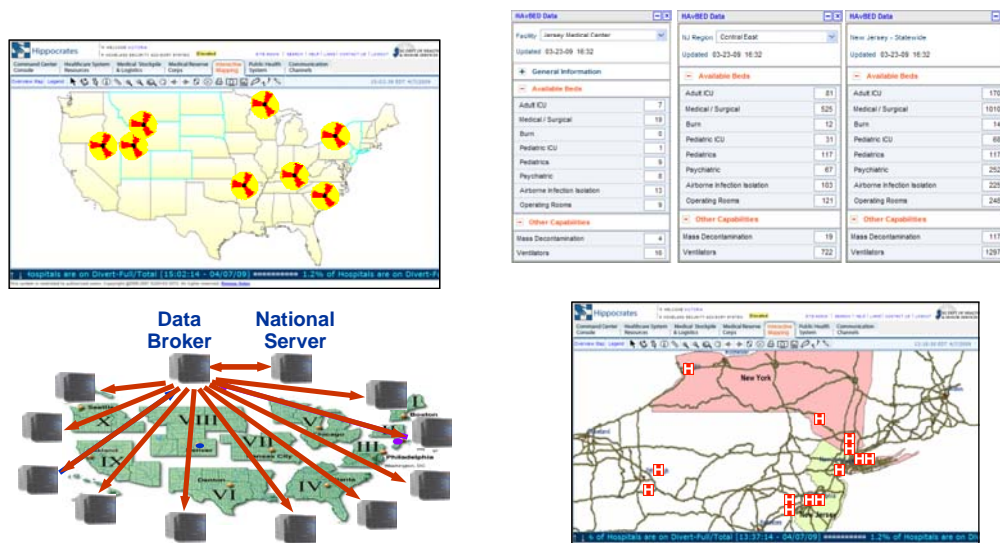




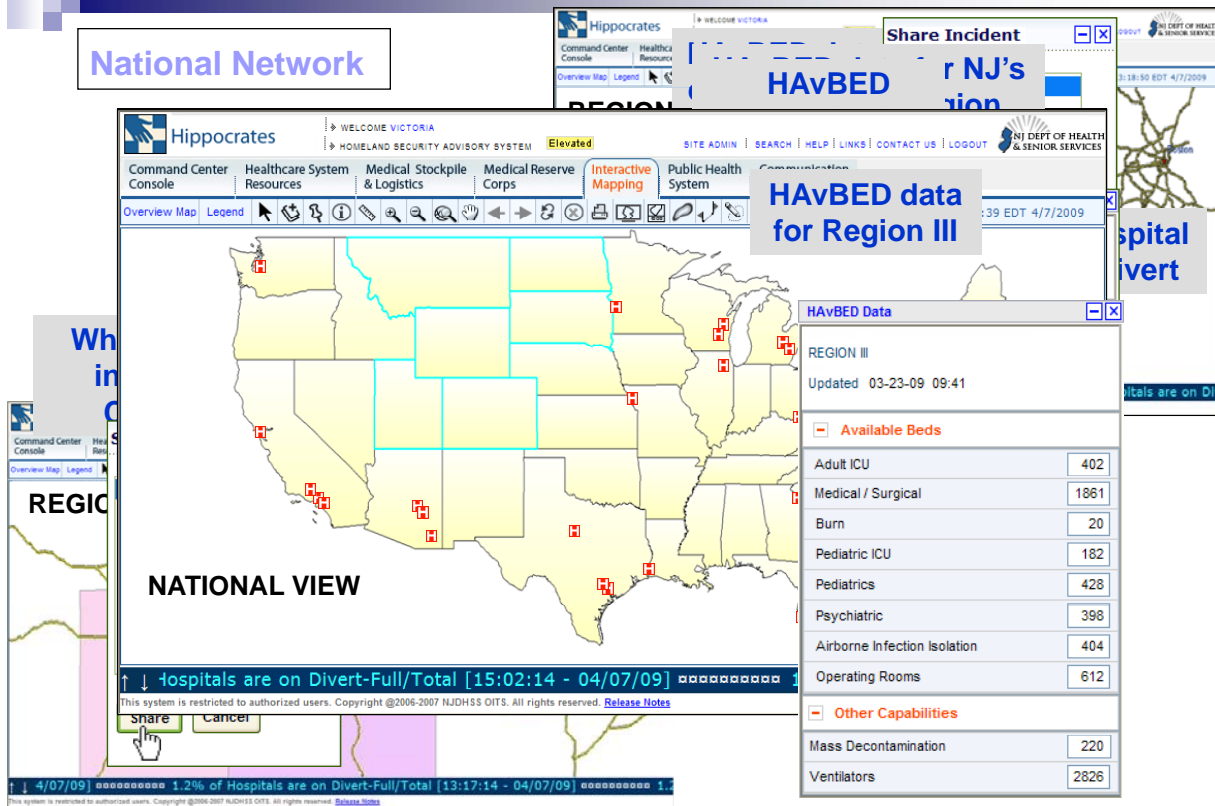
High Level Architecture



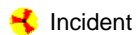
A National KM/IB System



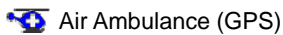
National Network



Composite View



Operational



Command & Control

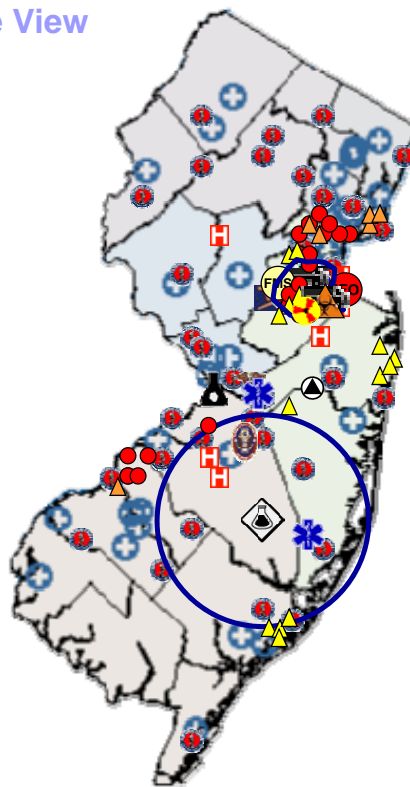


Equipment

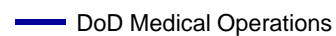


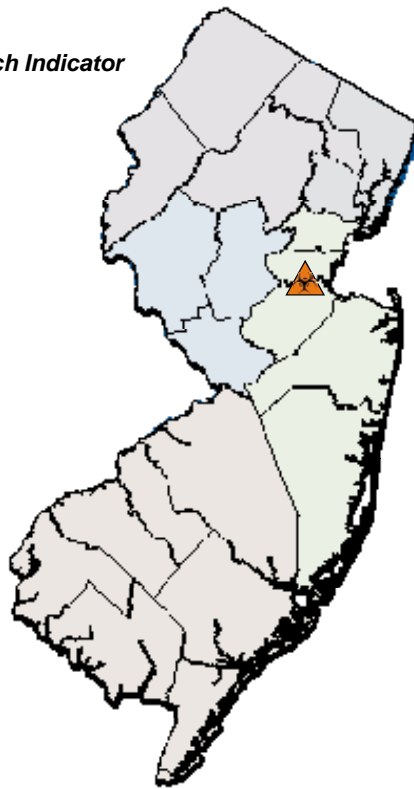
NJ HavBED Data

NJ HavBED Data	
New Jersey - Statewide	
Updated 03-23-09 16:32	
Available Beds	
Adult ICU	170
Medical / Surgical	1010
Burn	14
Pediatric ICU	68
Pediatrics	117
Psychiatric	252
Airborne Infection Isolation	225
Operating Rooms	248
Other Capabilities	
Mass Decontamination	117
Ventilators	1297



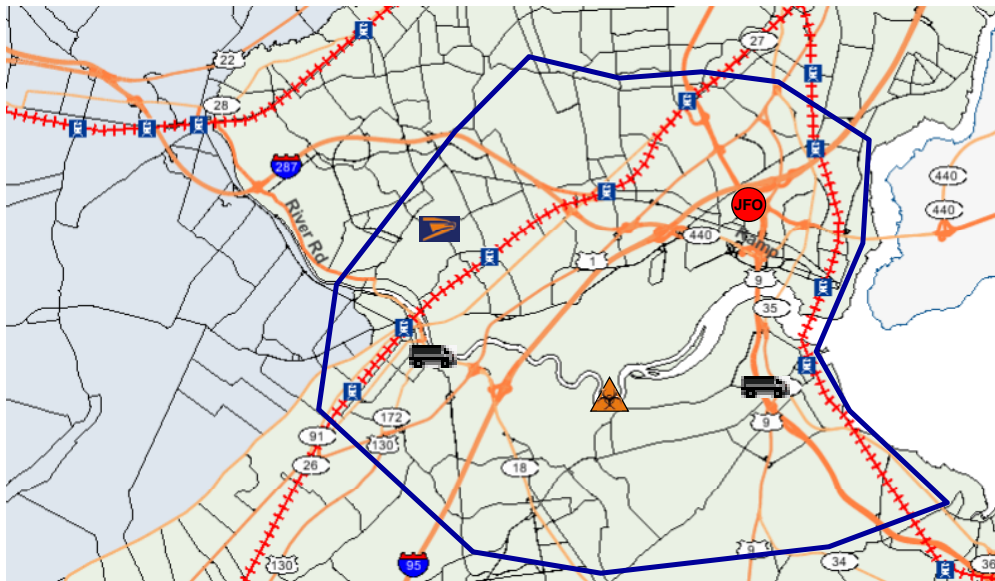
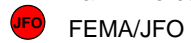
Law Enforcement Operations





Inter-Agency Coordination

- Law Enforcement Operations





HHS ASPR View



Incident

Operational



Hospital on Divert



DMAT (GPS)



Air Ambulance (GPS)

Command & Control



EMS TF Cmd (GPS)

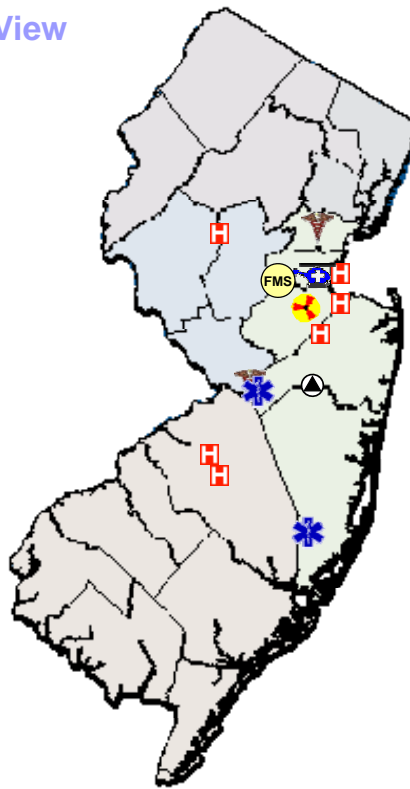


HHS ERT

Equipment



Field Medical Stations



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CDC View

Disease Outbreak



Possible



Probable



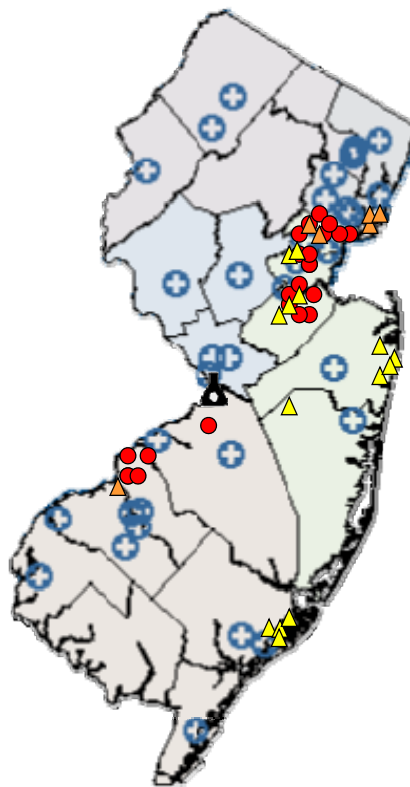
Confirmed



LRN Location



SNS Sites



DoD View



Incident – **Chemical agent**

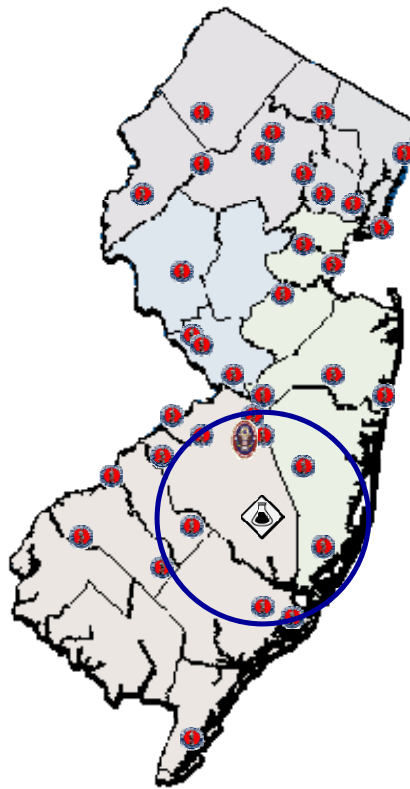


National Guard Armories

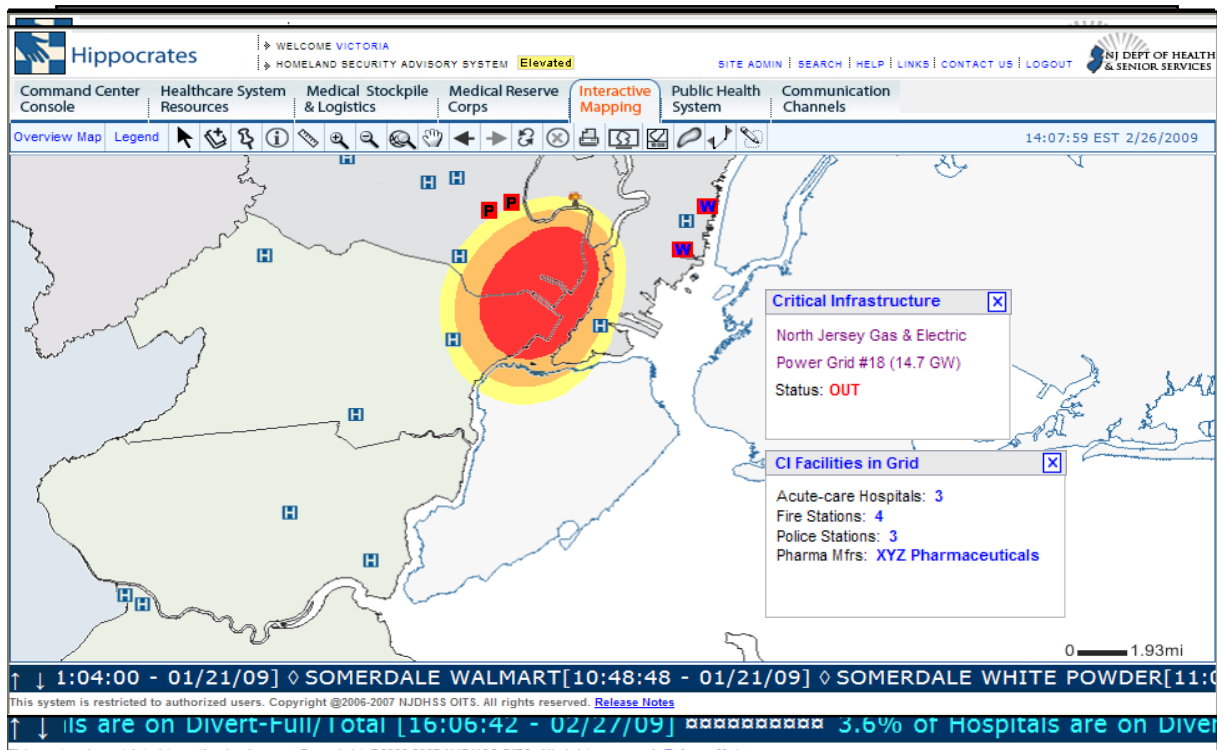


WMD CST

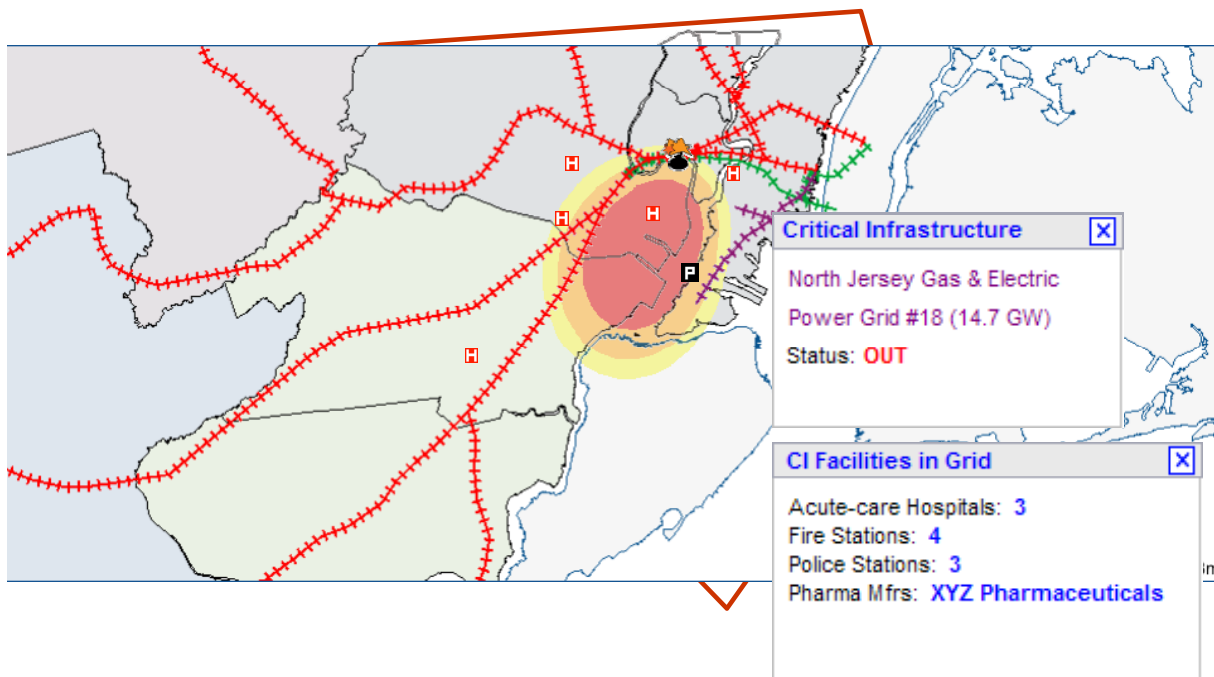
— DoD Medical Operations



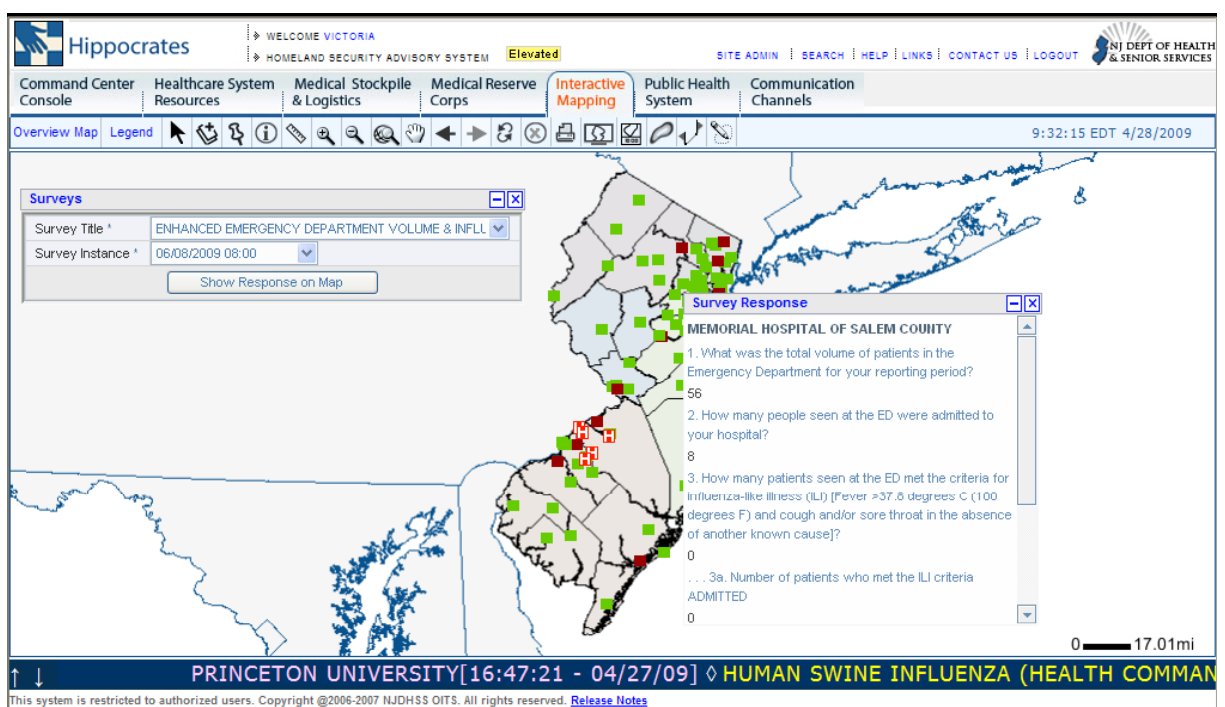
Critical Infrastructure Module



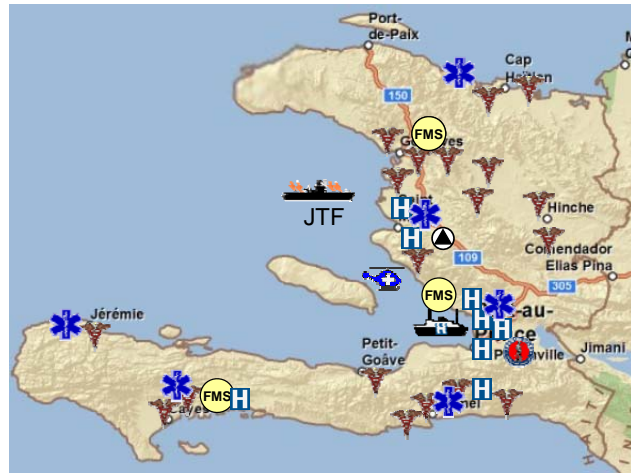
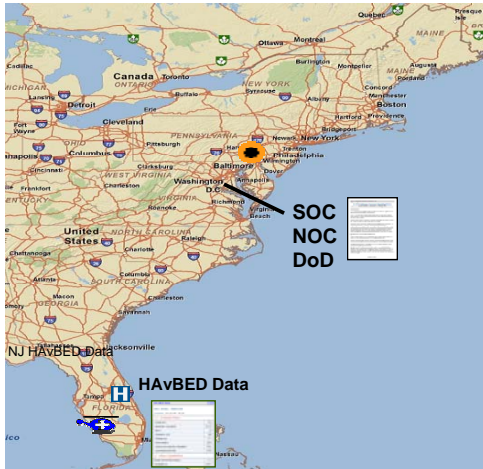
Incident/Critical Infrastructure Correlations



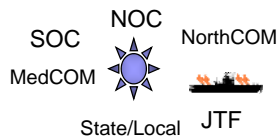
Hippocrates During H1N1



Haiti HLA Integration

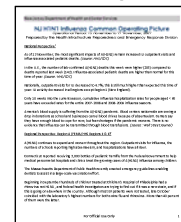


Incident Management



Hospital	Air Medical
HHS ERT	DMAT (GPS)
EMS	DoD
Field Medical Stations	

COP Report



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Dynamic and Static Data Integration & Brokerage

