



CIPDSS FY07 Activities

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CJPDSS Transition to NISAC

- Plan Development
 - Umbrella Plan Submitted to DHS
 - Site Specific Plans are developed (though for internal use)
- Plan Execution
 - Appropriate documentation needs to be developed
 - National Models
 - Metro Models
 - Decision Support Tools
 - General Tools (e.g. The Conductor)
 - Model Refinement
 - Economic models
 - Simplification of some models



Scenario Build-Out

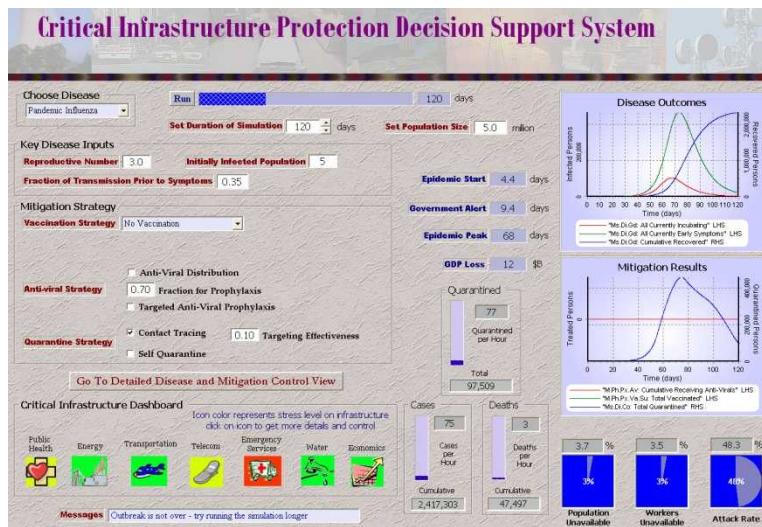
- Chemical Release—Completed February 2007
- Demonstration Simulators
 - CDC demonstration in June of the Bio-Simulator (complete)
 - Vaccination/Dispensing Model (complete)
 - Bio-Simulator as a learning tool will be tested with Boston first responders in the medical community
- Dams Analysis—Complete March 2008
- Physical Disruption: Aqueduct to a major metropolitan area—Complete March 2008



Desktop Simulators



- Vaccination/Dispensing



- Bio-Simulator



Decision Support

- Time Variant Utility Theory Decision Model
 - Traditional utility decision theory is typically time invariant
 - In early cases we addressed, mitigation measures could not be put in place at same time
 - Suggested need for a time-variant model
 - Intended to be a theoretical extension of traditional utility theory, with quantitative example



Architecture

- Enhancement of the Conductor Suite
 - Many new features added to Conductor Tool
 - Experimental Design: Orthogonal Arrays to LHS Analysis Capabilities added
 - Desire to make wider use of this in the Systems Dynamic community (either through an agreement with industry, such as Ventana Systems or even public distribution.)



Dams Analyses

- Dams Modeling and Analyses
 - Joint effort with NISAC also a part of transition effort
 - CIPDSS focusing on Methodology Development (Folsom Dam)
 - Focus on costs of a major dam failure, including emergency response costs
 - Attempting to collaborate with Bureau of Reclamation
 - Emergency response cost categories include:
 - Evacuation assistance (e.g., nursing homes, hospitals, prisons)
 - Search and Rescue costs
 - Overtime costs for emergency responders (police, fire, medical)
 - Emergency food/shelter/sanitation
 - Flood alleviation, such as sandbagging and emergency flood diversion efforts
 - The Sectors Evaluated are:
 - Electrical Supply and Distribution
 - Petroleum Supply and Distribution
 - Natural Gas Supply, distribution and storage
 - Transportation (road, railroad, and possibly air)
 - Telecommunications (landline, cellular, and emergency)
 - Postal and Shipping
 - Health Services
 - Financial Services
 - Emergency Responders (Police, Fire, Emergency Medical Services, National Guard)





Outreach Seminars

- New Jersey School of Public Health
- The Center for Disease Control and Preparedness





Analysis Reviews

- Chemical Study Review
 - Glenn Millner, CTEH

CTEH Emergency Response



- Baton Rouge Analysis
 - Laura Steinberg, SMU



SMU School
Of Civil
Engineering