

Project 7: GIS/IT and Computing Support (Bowman)

This effort builds software interfaces and applications and performs GIS analysis to support CREATE research projects.

Modeling Area: All

Application Areas: All

Principal Investigator: Harry Bowman

Institution: University of Southern California

Brief Description:

This effort provides support to other CREATE research projects through development of interfaces, datasets, and applications and through GIS analysis.

Objectives:

- Support the Risk Analyst Workbench (RAW) project's integration of CREATE datasets and tools.
- Develop interfaces to enhance and integrate other CREATE research software.
- Provide useful spatial data management, GIS analysis, and mapping to other research teams.



Map of emergency drug dispensing points

Major Products and Customers:

The primary products of this effort are spatial datasets, maps, components and applications. Primary customers are CREATE researchers. Other customers include DHS operational offices, DHS Science and technology clients, California's Office of Homeland Security, and the Los Angeles County Department of Health Services.

Interfaces to other CREATE Projects:

The current major interfaces are with the Dessouky/Ordonez emergency medical supply distribution project, the Risk Analysts' Workbench (RAW), the Tambe and GamePipe incident commander training projects and to the Richardson/ Gordon/Moore economics project. Interfaces with other projects and activities as needed.

Interfaces to non-CREATE Projects:

This effort provides data, maps, and software to the LA County Strategic National Stockpile project.

Technical Approach:

The ESRI ArcGIS platform is used for spatial data and analysis and interface development. The products developed for each supported project vary and can include custom report generators, maps and data sets on servers or locally distributed. Other interfaces are built with appropriate development tools. Risk Analyst Workbench integration is performed through the RAW administrative interface, with particular focus on portability and license compliance.

Major Milestones and Dates:

1. Complete inundation maps for OHS project – ASAP.
2. Complete integration of current CREATE materials into RAW – December 2006:
 - Integration of remaining Bier scripts - December 1
 - Integration of remaining LPSolve materials – December 6
 - Integration of remaining Zimmerman materials – December 8
 - Integration of SDC extension and support materials – December 13
3. Complete [new] data and interface for Emergency medical distribution planning project -- Dec 2006.
4. Create first generation interface to NIEMO input/output economic model – December 15, 2006.
5. Complete data for DEFACTO incident commander training project – January 15, 2007