Leveraging GIS Information: An Experiment in the OREN Innovation Lab

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OREN Overview
Proof-Of-Concept Testing With GIS Data
  • An Overview of Oren’s role in Seismic Slam 2008
Role of GIS Data in Emergency Management
  • How to get it all, and fast
The Future
  • What the evolution of Emergency Management looks like
Next Steps
  • The importance of solid base data
  • The ability to share-information between organizations
  • The need for laser-focused reporting for quick and accurate decision-making
Oren is an innovation lab, a test environment...
• Washington County Seismic Slam Exercise, 2008
• Oren goals for the exercise were to:
  – Integrate data between public and private organizations.
  – Increase awareness of critical infrastructure needs/challenges.
  – Reduce communications timelines.
  – Initiate a base level of information consistency.
Seismic Slam was an opportunity to test capabilities...

Capabilities included:

- Ability to display local and regional live map data in one common operating picture
- Ability to share the data real-time and update as the situation develops
- Ability to share private business data
- Live services
  - NOAA weather
  - USGS tsunami
…and create collaborative operating pictures…

- Ability to share analysis (models)
  - Traffic/route routing with live incidents
  - Plume modeling
  - Fire models
  - Tsunami and flood plains inundation
  - Winter storms
  - Etc.
layering provisioned, base with real-time incident data.

- Ability to display live incidents and collaborate during discovery, decision-making, and response.
Reporting provided key information for decision-making,

- Ability to accommodate resource sharing.
- Ability to report on resource use, capacity use, population statistics, private business locations.
As did using software to interpret GIS analysis and findings.

- **Interagency Collaboration** using Microsoft Office Groove 2007
  - Activity and Unit Logging
  - Chat and Instant Messaging
  - Map, Picture, and Document Sharing
  - Resource Inventorying, Ordering, and Statusing
  - Shelter and Evacuation Management

- **Collaborative Situational Awareness**
  - Geographic Information System based tools (ESRI and others)
  - Integration with Collaboration - GeoCollaboration
Interagency collaboration and data sharing was possible...
…Which allowed for a greater, holistic situational awareness.
EM must expand its community and change the model.

...which will require more, integrated information for decision-making.
And allow all of us to play a part in the decision-making process.

Note: “The New Middlers,” as referenced in The World Is Flat by Thomas J. Friedman.
Which will require us all to work closer than ever before.

Current state
- Information-sharing is a manual process.
- Decision-making is slowed during all phases of emergency management because of delayed information.

Future State
- Automated information-sharing, firewall filtering, etc. will allow a real-time push information to all involved entities.
- Two way sync of data capabilities will enable more mature information sharing.
So were can we go from here – what can we do today?