GIS in an Emergency Situation

Graniteville Community
Aiken County, SC

ESRI UC 2005
Topics covered

- General info about accident
- Maps generated
- Things we did right
- Things we did wrong
- Lessons learned
- Questions
A train accident involving Chlorine tanker cars.

- January 6, 2005 2:39am Accident occurs
- Emergency units begin to respond to 911 calls
- Road blocks and Decon areas setup
- EOC activated at 5:00am
- GIS first staff member arrives at office 6:45am
- GIS first staff member arrives at EOC 7:20am
- GIS staff in EOC for 14 days
- EOC active for 16 days
- 100+ Agencies involved
GIS Responsibilities

- Create maps
- Find address locations
- Provide population numbers
- GPS points for inspections
- Answer phones
Be prepared

- 184 hours week 1
- 156 hours week 2
- Provide data to other agencies involved
- Other agency’s needing to use equipment
- Multiple simultaneous map request
- Large quantity of large maps
First Map
Map Quantity

- 85+ Different maps
- Over 600 18x24 or larger maps plotted
- Over 700 8.5x11 and 11x17 maps printed
- 7 Rolls of paper (36”x300’)
- 1 Set of ink cartridges for plotter
Maps Created

- General Road maps
- Aerial maps
- Buffer maps for “Hot”, evacuation and curfew zones
- Road block maps
- Search Zone maps
- Re-occupation zone maps
- Building corrosion areas
This model was based on worst case scenarios for planning purposes and was only one of numerous models ran.
Things we did right

- Data pre-loaded on Laptop & jump-drive
- Network access
- Create folder for maps & data
- Supplies in stock (Ink & paper)
- Created .pdf & .jpg copies of maps
Things we did wrong...

- Two versions of ArcMap 8.3 vs 9.0
- No printer/plotter in EOC
- Way to get/give large files quickly
- No preset way to handle attorney request
Lessons Learned

- Media - Send maps to TV stations daily
- Attorneys – Policy in place for their request
  ( They showed up the 1st day )
- FTP Site access
- Large Laminated map
- Surrounding counties data
- Emergency & other GIS contacts
- Consistency – Naming, templates, .lyr files
- IMS site for emergencies
- Map request form and logs
# Emergency Situation Map Request Form

<table>
<thead>
<tr>
<th>Date: __________ __</th>
<th>Time: _______________</th>
<th>Phone #: ________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested By: _______________________</td>
<td>Agency: ______________________</td>
<td></td>
</tr>
<tr>
<td>Date needed: _____________</td>
<td>Time needed: _______________</td>
<td># of Copies: _______</td>
</tr>
<tr>
<td>Map Title: ________________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Layers:
- Roads
- Parcels
- Hydro
- Orthos
- City Limits
- Building footprints
- Labels
- Buffer ring(s)-Dist: _______________

### Map Size:
- 8.5 x 11
- 11 x 17
- 17 x 22
- 22 x 34
- 34 x 44
- 36 x 60
- 42 x 60
- _______________

### Print Location:
- EOC _____
- Planning _____
- PWE _____
- RMC _____
- Other _____

### Additional comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Completed By: __________________      Date: ____________     Time: _____________
Questions?

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