Emergency Response Maps for the EOC

Our Team …. Esri Templates

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GIS for Situational Awareness
Texas Emergency GIS Response Team

A deployable team of GIS professionals from all over the state that band together in an emergency and provide mapping support for the emergency services.
What is Texas EGRT

GIS analysts from all disciplines are recruited and trained to do emergency response mapping

- Started as a regional team in 2006 – expanded to state-wide in 2014
- Will response to any government agency for mapping support
- Currently over 200 members all over Texas
- Members go through training approved by emergency services directors
  - Online FEMA courses
  - Online Tx EGRT course
  - In-person response map training
- Participates in drills and exercises across the state
- Responds to most of Texas – complete coverage by end of 2018

- Get more info on our response team at www.TexasEGRT.org
One key to emergency response mapping is to be able to start producing maps very quickly.

Having pre-made templates to work from is essential

- Load the templates with your data (City, County, or State)
- Have databases / symbolized layers ready for various scenarios
- Make the templates readily available to GIS responders
- Assume you will have no Internet connections for the first 4 hours of the disaster
  - Infrastructure may be damaged
  - Available connections may not support your data needs
  - Disaster may delay set-up of fast, reliable connections

If you have to spend hours compiling data and adding in the information about the disaster, they’ll have moved on without you.
Emergency Response Templates

Have yourself AND your maps ready to respond

With properly prepared templates, your response can look like this:

- Set up your laptop
- Open your templates
- Pan to the site of the disaster
- Make maps

In just a few minutes you can be up and running.
Sample maps

These maps all use the same template
Just PAN to the location and …

Search area map series
Overall status map
Tornado damage maps
Briefing books
Dashboard / Collector apps

GIS for Situational Awareness
Esri Emergency Response Templates

Use in the Emergency Operations Center

GIS for Situational Awareness
Texas EGRT has worked with Esri to build ArcGIS Pro templates. The new templates will bring many of the mapping functions into the same interface.

- The data for emergency response doesn’t change
  - Use your own data
  - Fill in the gaps with data from other sources including downloaded Esri datasets
  - Create data on-site as the disaster unfolds
  - Bring in field data using Collector or Survey 123 when available

- The ArcGIS Pro Templates take advantage of new features
  - The project can have multiple layouts for different style maps
  - The data can be managed easily between layouts
  - Pre-symbolized .lyr files can be dropped in for different scenarios
  - Layers can be served up to ArcGIS Online either in whole are in part
  - Map series or briefing maps can be made very easily
Rowlett Tornadoes

Our real response was with ArcMap, but the data is shown here in the new templates.
Populate template with your own data

Static data can be your own data, or downloaded from the Esri data site

The State of Texas has data sets available for the entire state. These are used by Texas EGRT in the new ArcGIS Pro templates for things like roads, schools, rivers, lakes, railroads, airports, etc...

It’s simply a matter of pointing the template to your local data – the symbology is already set.
Populate template with Esri Open Data

Static data can be your own data, or downloaded from the Esri data site

The Esri site:
https://opendata.arcgis.com/

has LOTS of data that is shared for everyone to use. Download the files you need and use them to populate the template.
Share the local data to the web for others to use

The entire project can be shared as a web service or just one layer.

Individual layers can be shared to the web, then the layer service can be updated as new features are drawn.

When we share data with the State Operations Center, they don’t want our entire base map dataset … they already have the base map data set up. They just want the layers we are creating on-site.
Share the project to an app

ArcGIS Pro has the ability to drop your project into an online app

The ArcGIS Solutions Deployment add-in for Pro will step you through a task and allow you to build one of a HOST of online solutions.
Share the project to the plotter

The Map Series tool in ArcGIS Pro will make map books or a series of briefing maps.

The built-in map series generator will take your grid and produce a map series.
Share a briefing book
Template workflow

These new templates make it easy to get started and a breeze to produce the outputs you want.

Use the templates to kick-start your emergency map and data preparations
Use the out-of-the-box data – or integrate your own data
Prepare your maps / titles / logos
Pre-build some of the web apps or map series

Have your GIS team ready to go!
Esri Emergency Response Templates

The templates are available on the Esri website at:

http://esriurl.com/EMgtMaps

Demos can be seen in the Esri Demo area in the main gallery

Look for the Emergency Response booth

For more information on Texas EGRT or how we’re implementing these templates, contact me at:

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