

Texas Emergency GIS Response Team Update

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Come and listen to a story 'bout a man named Ted
Poor GIS'er who was sleeping in his bed
Then early one morning, the phone began to rang
The EOC was callin' ... CAN YOU COME AND MAP THIS THANG?



What is Texas EGRT



- Non-Profit State-wide deployable GIS response team
 - 1-844-Tex-EGRT
- Trained members all over the State of Texas - KNOWLEDGE
- We come with equipment, software, templates, and data
- Provide on-site desktop mapping or remote assistance web mapping
- Texas EGRT will respond to any government agency
 - Back-up response to agencies with their own GIS capabilities
 - Primary response for areas with no GIS capabilities
 - Coordinate with TDEM on all responses
- Funded through donations / T-Shirt sales



GIS Capabilities for Disasters

- Several regional cooperatives have built GIS capabilities
 - Cedar Hill / Desoto / Duncanville / Lancaster – Jerry Hicklen
 - Discussions on new regional GIS portal – NCTCOG / Little Elm
 - American Red Cross – State-wide data portal
- Texas Emergency GIS Response Team (Tx EGRT)
 - Training protocols set up
 - Available ArcGIS desktop and ArcGIS Online
 - Over 250 members state-wide
 - State-wide data and map templates set up and ready
 - Deployable trailer of equipment
- Texas Division of Emergency Management (TDEM)
 - GIS analysts on staff for the State Operations Center w/ support
 - State GIS portal
 - Plotters at the regional EOC's
 - Deployable trailer of equipment

We are integrating municipal response teams, Texas EGRT, and TDEM into a state-wide GIS resource

Texas EGRT Recent Responses



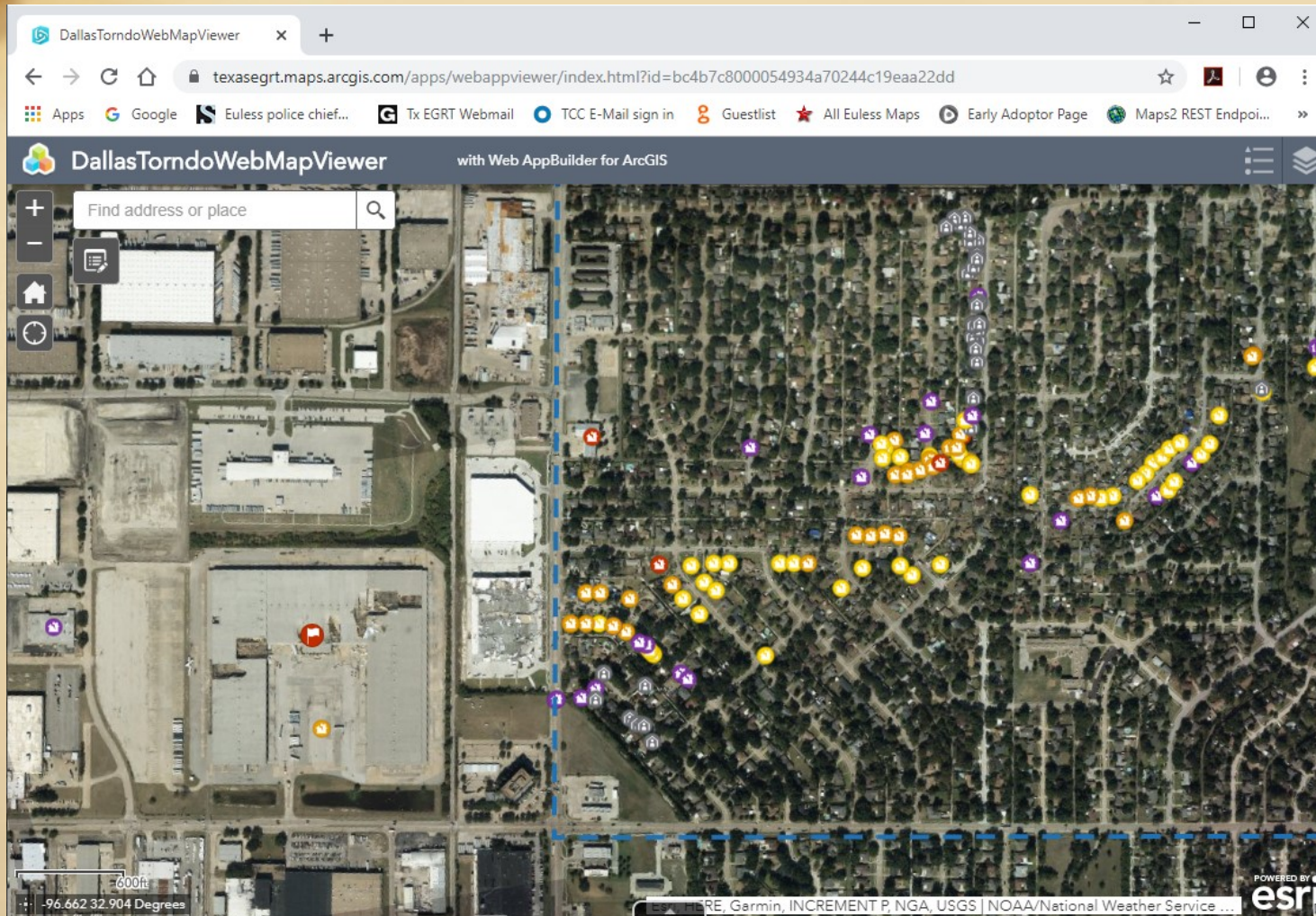
- High profile responses:
 - June 2019 flooding (many counties)
 - *Oct 2019 Dallas Tornadoes*
 - *Nov 2019 Comanche Peak Nuclear Power Plant (Drill)*

On October 20th, as many as 10 tornadoes touched down across North Texas. We made several maps and apps for this event.

- **Damage Area Viewer** that showed the overall impact areas
- **Several Dashboards** showing the damage assessment totals categorized by jurisdiction
- **Maps of shelters, affected hotels, and other disaster management sites.**

We deployed two TxEGRT members to the TDEM Regional EOC in Garland and staffed a position there for 3 days. We also had members supporting the online apps for damage assessment.

Texas EGRT Responses



We spun up a Survey 123 app and TDEM put it out across the region.

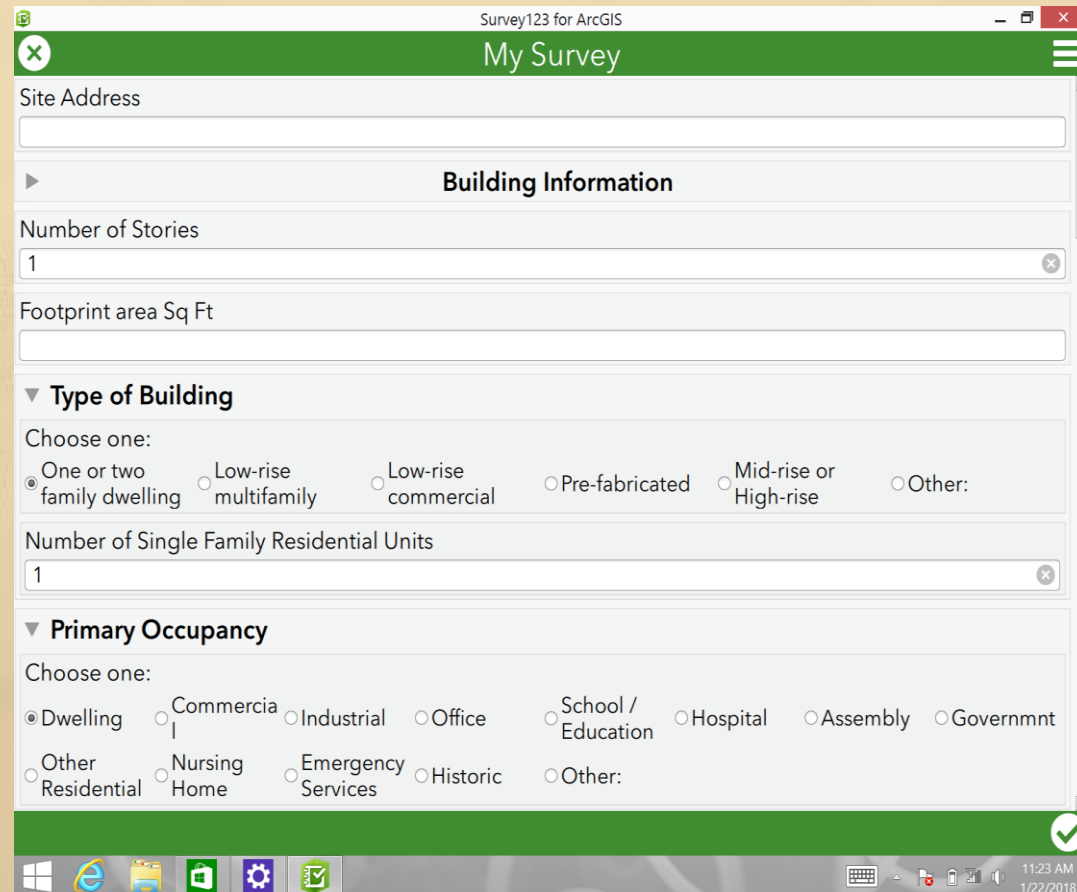
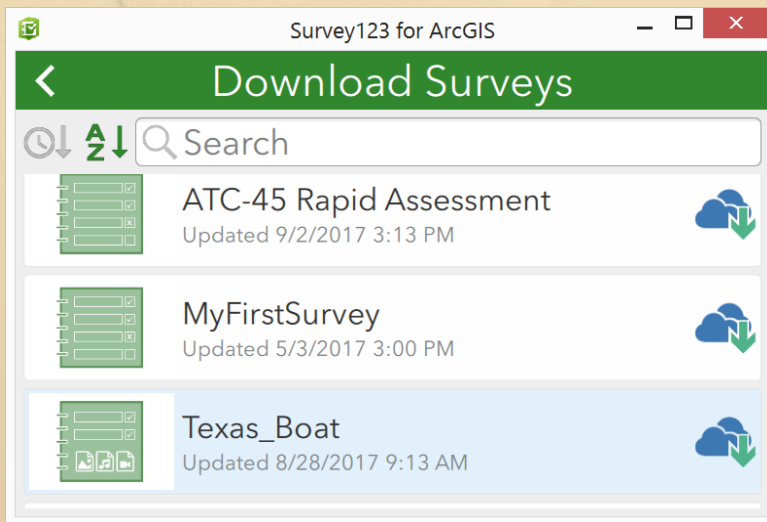
The BOAT team used it, as well as other agencies.

The damage maps were displayed in the TDEM regional EOC in Garland.

Field Data Support



- We have developed a Survey 123 app for Damage Assessment based on the FEMA ATC-45 Rapid Assessment form



Texas EGRT Responses



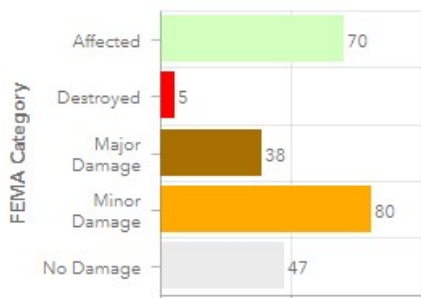
We made dashboards that could show the damage totals as they were collected.

Total Damage Value
\$38,574,085

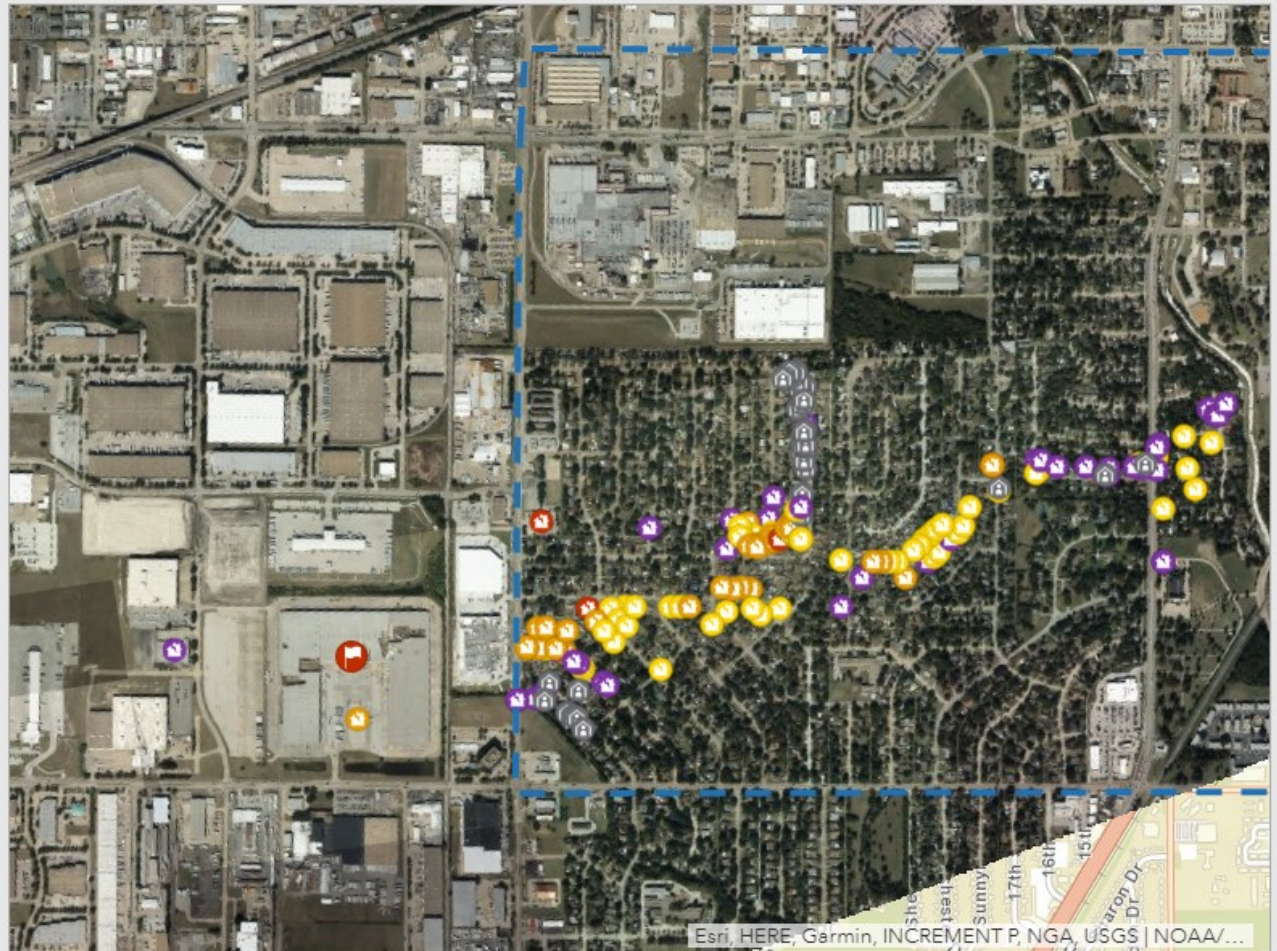
Last update: a few seconds ago

Count
240
Garland

Last update: a few seconds ago



Last update: a few seconds ago



Texas EGRT Responses

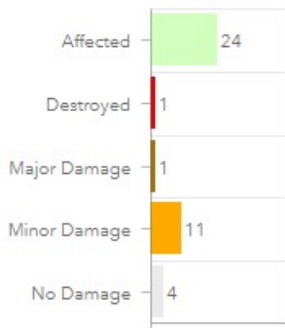


Total Damage Value
\$1,155,601
City of Ferris

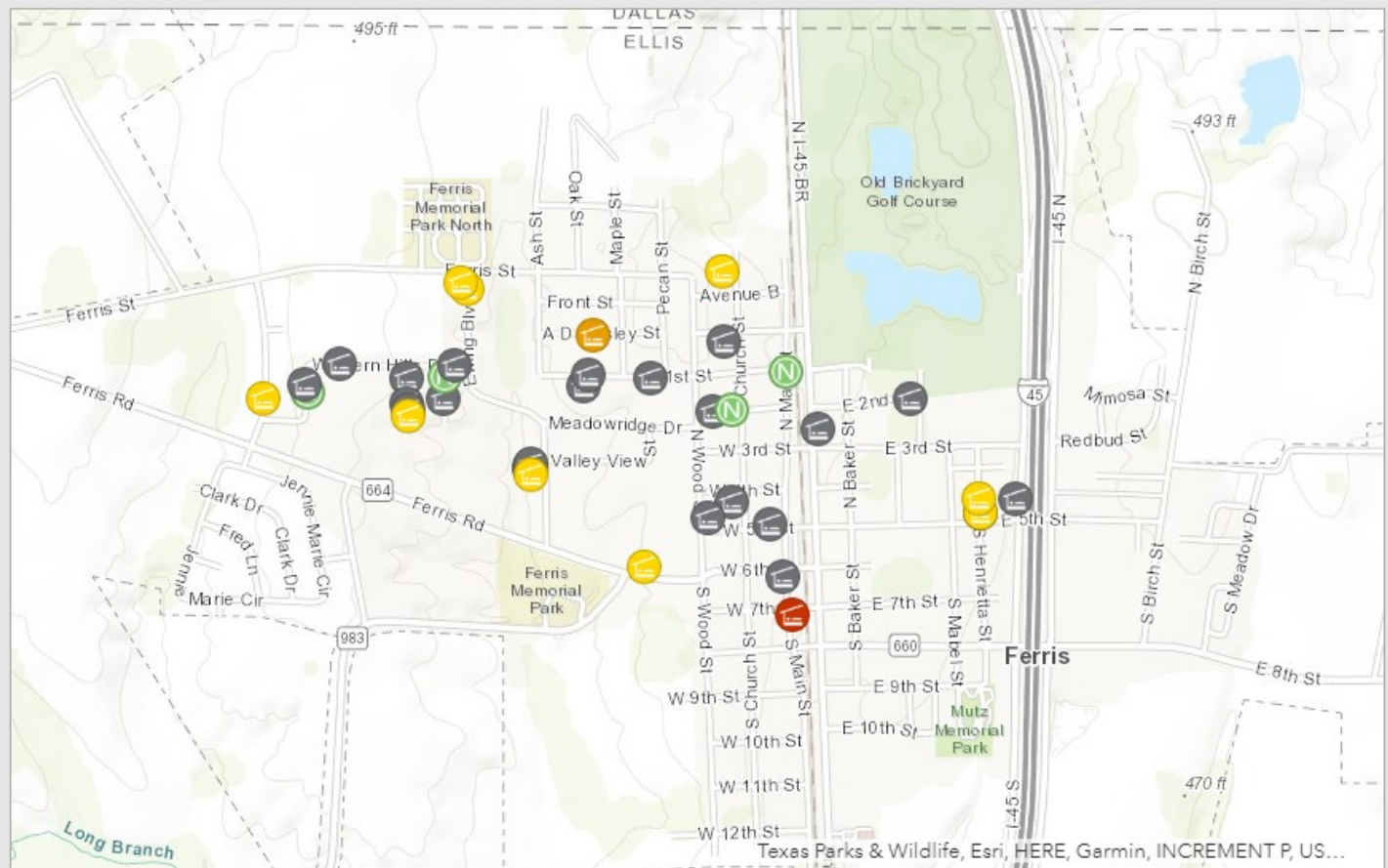
Last update: a minute ago

House Count
41
City of Ferris

Last update: a minute ago



Last update: a minute ago



Texas EGRT Responses



The costliest tornado outbreak in State history
— No fatalities

Texas EGRT Responses



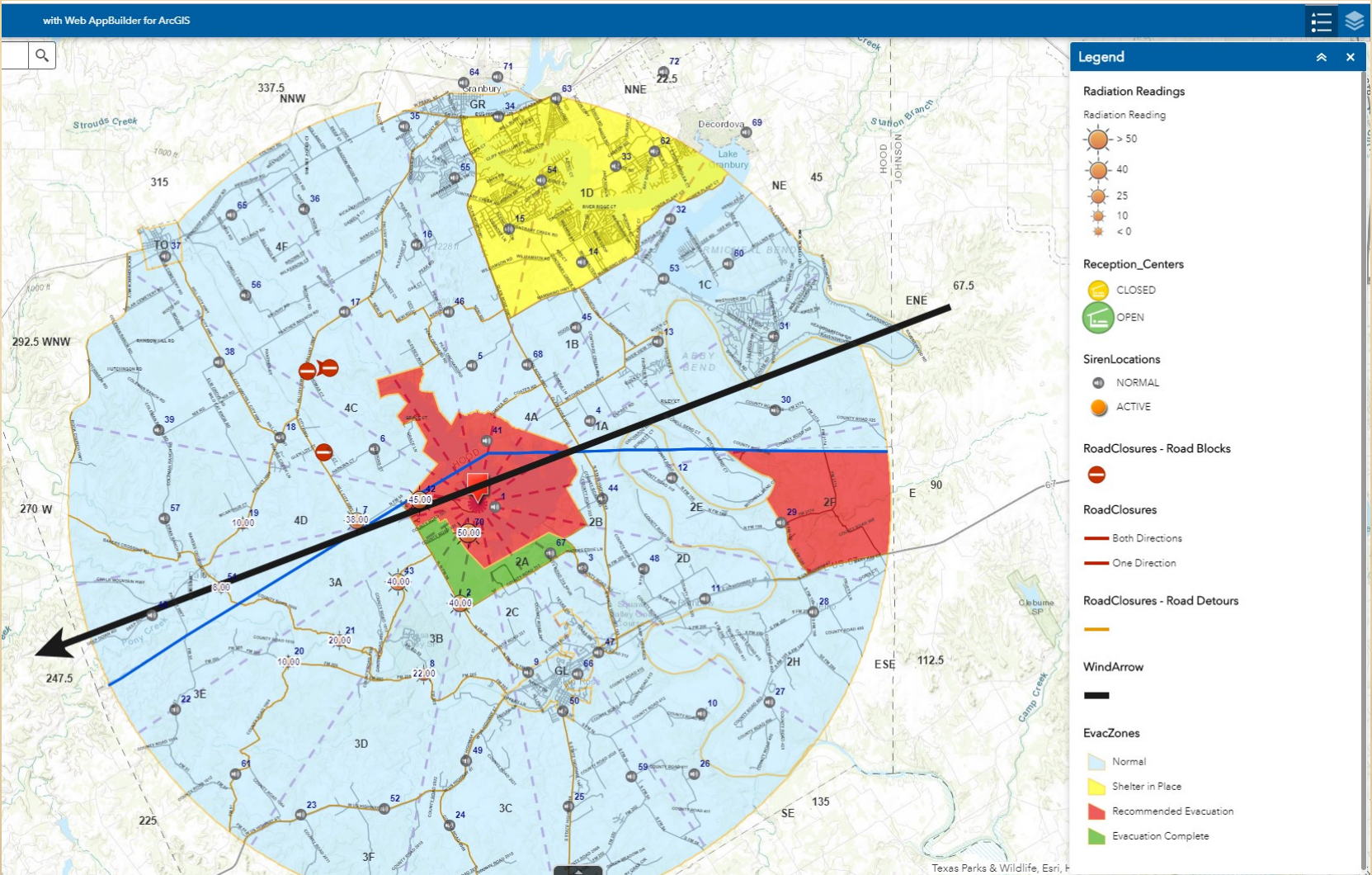
Every two years the Comanche Peak Nuclear Power Plant has to conduct a drill, and receives a score from FEMA. This time they wanted to boost their mapping capabilities, so we built a set of apps and dashboards for the drill.

- Overall view of the area with roads, evacuation zones, shelter locations, sirens, radiation sampling points, and more ...
- Dashboard showing the status of events during the drill

We deployed two TxEGRT members to the Hood County EOC where the drill was being conducted, and two TxEGRT members to the City of Ft. Worth / Tarrant County / TDEM Joint EOC.

With the apps we could share data from both locations – both EOC's could work from the same map.

Templates for Emergency Response Mapping



Texas EGRT Responses



Benbrook Shelter Status



56.7% Full

Percent of capacity currently being used. Total 3,000.

Last update: 2 minutes ago

Meridian Shelter Status



50% Full

Percent of capacity currently being used. Total 3,000.

Last update: 2 minutes ago

Closed Roadways
12.116 miles

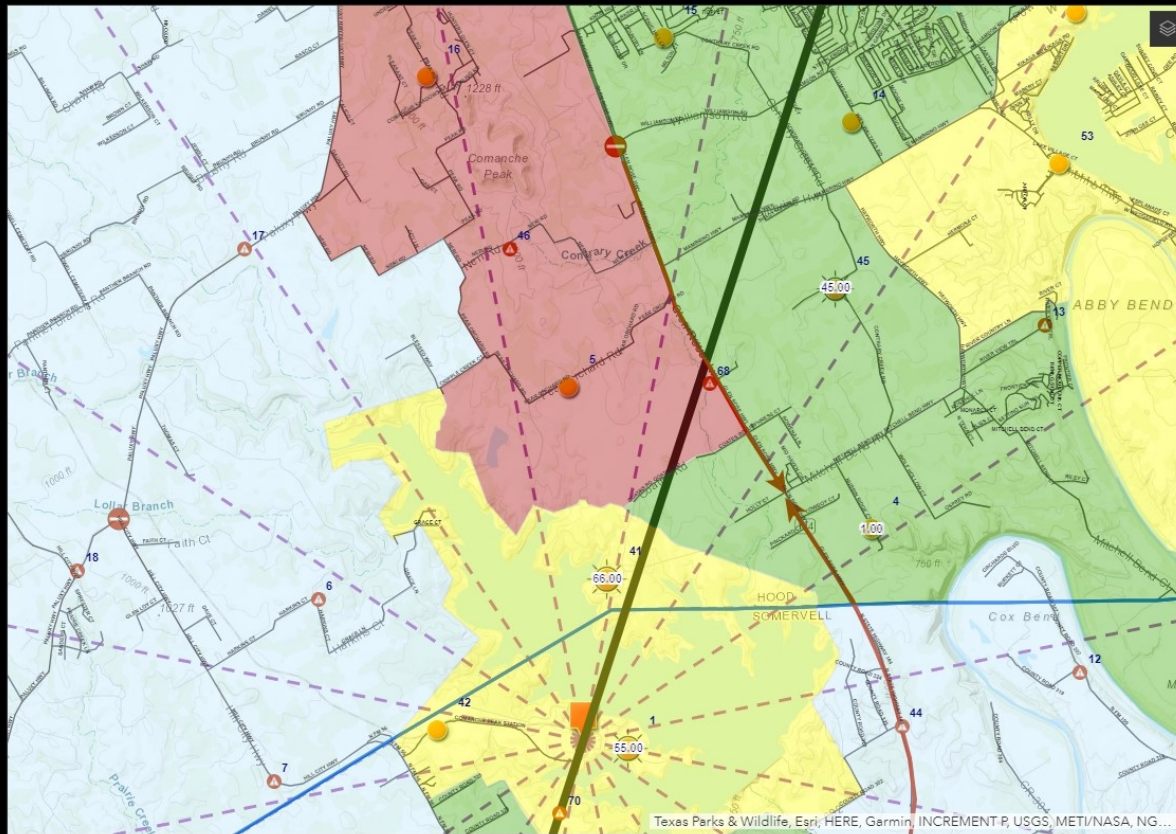
Last update: 2 minutes ago

Barricades

4

Number of active barricades

Last update: 2 minutes ago



Radiation Readings

- Siren #41
Radiation Reading: 66
- Siren #1
Radiation Reading: 55
- Siren #45
Radiation Reading: 45
- Siren #4
Radiation Reading: 1

Last update: a few seconds ago

4,025 Locations Shelter-In-Place

Last update: 2 minutes ago

1,205 Locations Recommended Evacuation

Last update: 2 minutes ago

7,073 Locations Evacuated

Last update: 2 minutes ago

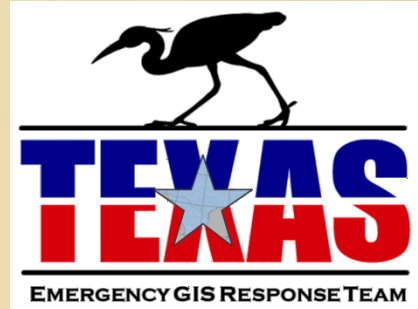


Square Miles

Last update: 2 minutes ago

Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NG...

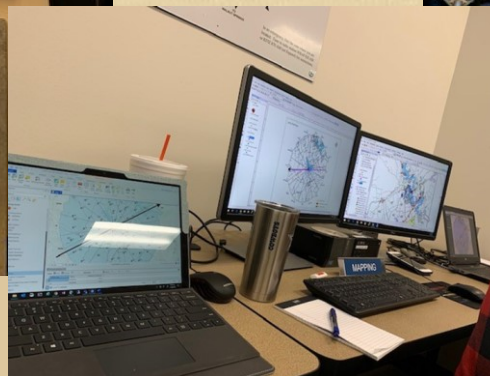
Texas EGRT Responses



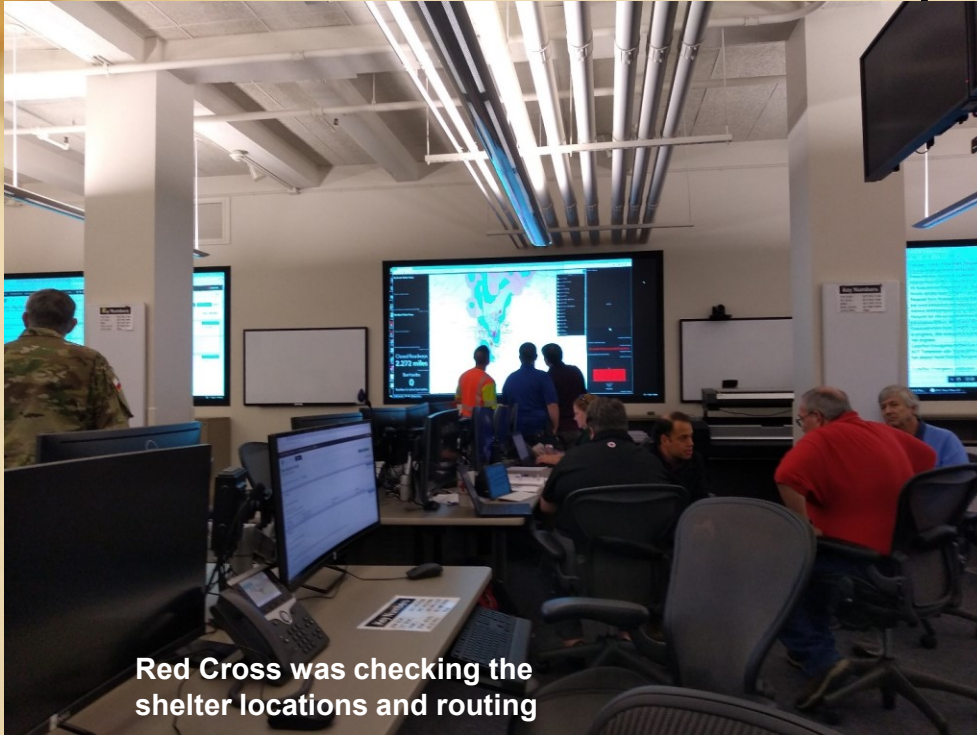
Note the old maps on the floor



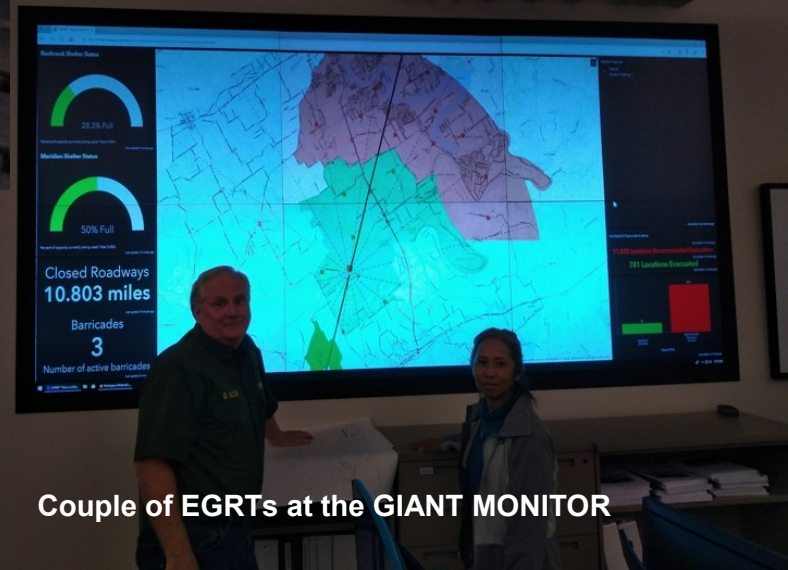
The map displays become a focal point



Texas EGRT Responses

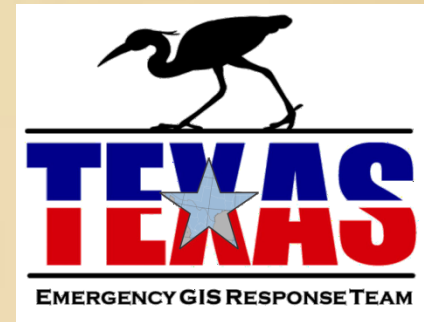


Red Cross was checking the shelter locations and routing



Couple of EGRTs at the GIANT MONITOR

Texas EGRT



We are wanting to get more people involved and are looking for a host for training in Jan / Feb.

The training class includes working with map templates both on the desktop and in ArcGIS Online.

Looking forward to a quiet 2020!



Questions & Comments

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