



## Terrebonne Office of Homeland Security and Emergency Preparedness

Terrebonne Parish, located in southern Louisiana along the Gulf of Mexico, possesses some of America's largest, most productive wetlands and natural resources with numerous bayous, lakes and waterways, including the Intracoastal Waterway, as well as access to the Gulf. It is also one of the areas hardest hit by hurricanes and other natural disasters in recent years. Terrebonne's Office of Homeland Security and Emergency Preparedness (TOHSEP) works vigilantly to prepare for any disaster or crisis that might threaten its citizens.

## Quick Summary

### Challenge:

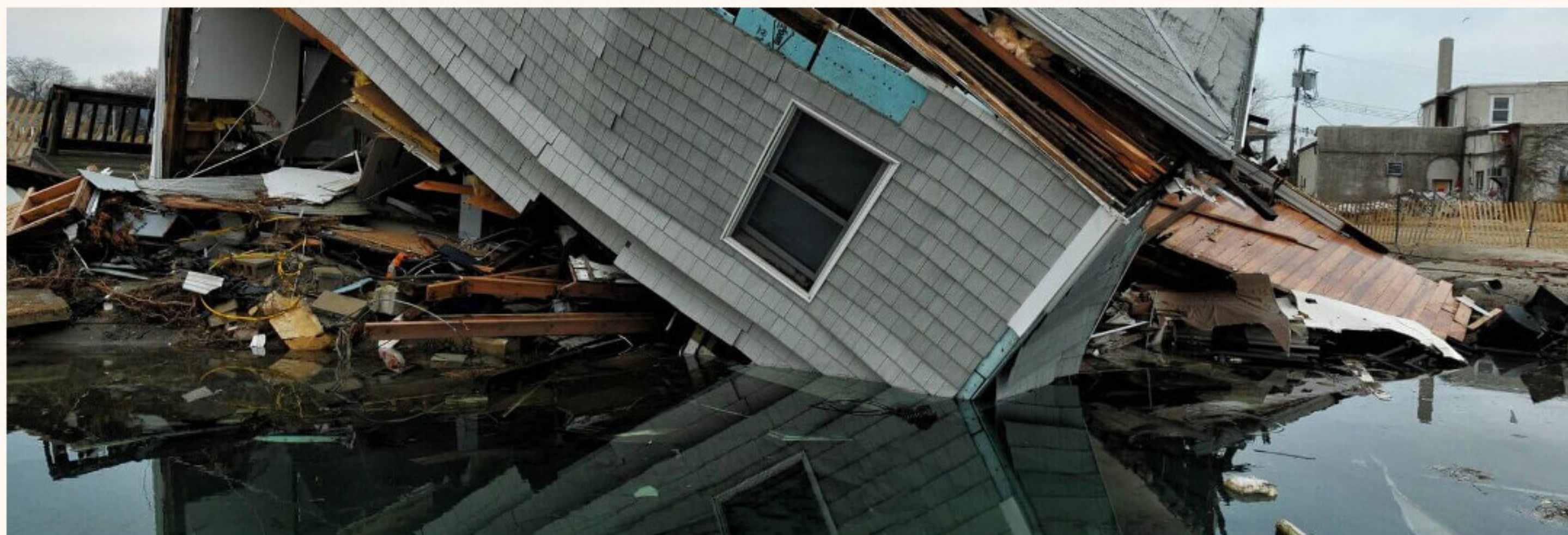
- No Internet access in the wake of a disaster
- Access to property maps and imagery while offline
- Ability to complete and save mobile damage assessments without a connection

### Solution

- TerraGo Edge on iOS and Android Devices
- Offline maps, forms and data collection
- Customized damage assessment forms and workflow

### Results

- Rapid mobile damage assessments without connectivity
- Custom forms enable accurate damage surveys
- Improved field crew productivity and data timeliness



## The Challenge

In the face of catastrophic hurricane, tornado, flood and other events, TOHSEP provides preparation, evacuation, sheltering and recovery programs. Some of the most important and time-sensitive recovery efforts are the preliminary damage assessments performed by TOHSEP, often in conjunction with state and FEMA (Federal Emergency Management Agency) crews, as these surveys are the very first step to activating an array of federal programs to assist in the response and recovery efforts. Often performed as "walking" or "windshield" surveys completed from vehicles, they are rapid damage assessments on the critical path to state and federal resources. The speed of data collection and accuracy of reporting is paramount to the recovery effort itself. But in the wake of a disaster, the IT infrastructure and networks are often unavailable, or at least greatly compromised.

There is no doubt that emergency communications have been greatly enhanced by Internet and mobile technology, helping governments communicate instantly via web, Facebook and Twitter. But when it comes to catastrophic disasters, the network isn't typically there when it's needed most; and it certainly can't be relied upon for all response and recovery efforts. That creates a bit of a paradox when it comes to leveraging the latest mobile technology in disaster response scenarios.

"In the event of a disaster, we can't count on internet access. That is a lesson we learned during Hurricane Gustav. It's great when we hear the National Guard is working to setup a temporary satellite Wi-Fi, but we can't stop working until a new network becomes available. So in the past, you relied a lot on pen and paper. With the use of TerraGo GeoPDFs and TerraGo Edge, property maps and imagery, will always be available in an emergency, even without an internet connection. What we need for future damage assessments is a mobile solution that combines both offline maps and custom forms on our tablets and smartphones." - Earl Eues, Director of the Terrebonne Parish Office of Homeland Security and Emergency Preparedness

## The Solution

TOHSEP teams, often working in conjunction with state, FEMA, American Red Cross and citizen emergency response team (CERT) volunteers will fan out in property zones to assess the damage after a disaster event. TOHSEP needs a mobile solution that can be instantly deployed to individuals and organizations, available on personal phones or government-issued tablets, ideally for both iOS and Android. They need to be able to quickly complete GPS-tagged forms with all the required inspection fields and photos of the property. If there is a network or cellular connection, the surveys should be synced to headquarters immediately. But in no way can TOHSEP guarantee network connectivity or afford to put damage assessments on hold until it is restored. For this reason, offline maps and forms with a mobile device database are "must haves". Mobile teams need to keep working, gathering data and completing damage assessments as soon as humanly feasible.

"With TerraGo Edge, we will have a way to leverage mobile technology without completely relying on the network. That's an incredibly important distinction for emergency management. " - Earl Eues, Director of the Terrebonne Parish Office of Homeland Security and Emergency Preparedness

## The Results

TerraGo Edge gives TOHSEP the best of both worlds in the toughest conditions; mobile technology that works even when the network doesn't. With maps and imagery, personnel will be able to find the properties they need to assess. With custom forms, they can complete accurate surveys that are the basis for recovery. Recent hurricanes and other catastrophic events have changed the way Terrebonne Parish, the Gulf Coast and the entire nation respond to large scale events. The lessons learned from these events are numerous, far-reaching and broader than any single technology. But for Terrebonne's OHSEP, being able to perform rapid, mobile damage assessments without network connectivity is an important improvement and critical part of helping the community when it needs it most.

"Now our teams will have the maps and forms they need to keep working, to assess the damage to our communities and properties in the immediate wake of a disaster. And that's where recovery really begins." - Earl Eues, Director of the Terrebonne Parish Office of Homeland Security and Emergency Preparedness