Improving Situational Awareness through Technology

R. Buckminster Fuller once said that, “Humanity is acquiring all the right technology for all the wrong reasons.” At the Federal Emergency Management Agency (FEMA), we are applying technology to save lives, protect property, and help survivors and communities respond to and recover from disasters. Those are the right reasons.

FEMA IS SHARING
Sharing our information makes sense. It improves transparency, enhances situational awareness, and builds a common operating picture. More importantly, it can bring more people on board to help those survivors and communities. You can access FEMA’s data and data feeds at www.fema.gov/help/rss today.

DATA IS STATIC – like the location of FEMA's 10 Regions or tips to prepare for earthquakes. DATA FEEDS are dynamic – like the status of evacuation routes or shelters. And we are sharing both data and data feeds in multiple formats.

HOW CAN YOU HELP?
Share your data and data feeds too. Store locations. Operating status. Distribution centers. Network facilities. Stock levels. And more. Information is power. And you have the power to share with us at FEMA-DMSE-Saver2@dhs.gov right now.

VALUE PROPOSITION
So why bother? How does it really help survivors and communities? It informs decision-making. If we know that your supermarket is re-opening on Elm Street, a food distribution center can be moved to the other side of town where it won’t compete, but rather provide support where it is actually needed. If we know there is a mobile communication unit with portable antennas near the local high school, joint field operations and recovery centers can be positioned nearby to ensure connectivity. If we know there is only one bank in town and it survived the disaster, we know who can help provide financial advice and assistance to survivors. And if we share data back and forth, it will inform your decision-making too. Distribute your supplies to where power has been restored. Avoid roadblocks and evacuation routes. Overcome curfews to support recovery. Inform your employees and families about assistance. It’s all worth the bother.

HOW TO PROVIDE INPUT
Every organization has that technology expert – get that person involved, and everything gets easier from there. We prefer to receive data as a data service. FEMA can ingest currently supported geospatial data standard services directly into our platform if your company has the ability to provide them. If you would like information regarding how to create a geospatial data service there are a number of solutions available, including open source software.

We will also accept other and more traditional approaches. Our order of preference is:

• Web Feature Service (WFS)
• Really Simple Syndication (RSS) a feed
• Extensible Markup Language (XML) a feed
• Web Map Service (WMS)
• Shapefile (ESRI vector data file)
• Excel Spreadsheet (template provided upon request)
Data is static — like the location of FEMA’s 10 Regions or tips to prepare for earthquakes. Data feeds are dynamic — like the status of evacuation routes or shelters. And we are sharing both data and data feeds in multiple formats. Regardless which approach you select for submission, the data at a minimum should include:

- Unique store ID (join field to existing data we already have) - number, double
- Status – text 10 characters

Additionally we request the following data structure:

- Street address – text 50 characters
- City – text 30 characters
- State – text 25 characters
- Zip – text 9 characters
- Latitude – number, double
- Longitude – number, double
- Hours of operation – text 30 characters
- Phone – text 15 characters
- Type – text 20 characters (indicate if location is a warehouse, super store, retail, etc)
- Existing or new location, or closed (we can use this as a flag to add a new facility or remove one from our database)

FEMA will provide all appropriate safeguards to ensure this data is not distributed or used for anything other than specified homeland security and emergency response needs.

For more information, please visit [http://www.fema.gov/privatesector](http://www.fema.gov/privatesector). For more discussion, reach out to us at [FEMA-private-sector@dhs.gov](mailto:FEMA-private-sector@dhs.gov), or sign up to receive email updates at [http://www.fema.gov/help/getemail](http://www.fema.gov/help/getemail).