

# **GIS 4 Disasters** Advancing National Preparedness, Response & Recovery

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# 2017 U.S. Costliest Disaster Year on Record

Minnesota Hail Storm and North Dakota, South Upper Midwest Severe Weather Dakota, and June 9-11 Montana Drought Spring-Fall 2017 Midwest Tornado Outbreak March 6-8 \$2.5B \$2.5B Western Wildfires. California Firestorm \$2.5B Summer-Fall Central/Southeast 2017 Tornado Outbreak \$9.4B \$1.2B February 28-March 1 \$2.1B California Missouri and Arkansas Flooding ● \$1.5B \$1.8B \$2.2B Flooding and Central February 8-22 \$2.2B Severe Weather \$1.7B April 25-May 7 Colorado Hail Storm and Central Severe Weather Southeast Freeze \$2.1B May 8-11 March 14-16 \$2.1B \$1.1B Southern Tornado Midwest Severe Outbreak and Weather Western Storms June 27-29 \$198B Hurricane Harvey January 20-22 August 25-31 Midwest Severe Weather \$65B June 12-16 Hurricane \$102B Hurricane Irma South/Southeast Severe Weather Maria September 6-12 March 26-28 September 19-21

#### U.S. 2017 Billion-Dollar Weather and Climate Disasters

Sources: Map NOAA, Cost estimates VOX

## **Economic Impact**

- --- 2017 Estimated cost \$300-\$400 Billion
- 2005 Previous Record \$214.8 Billion

1980-2017 Year-to-Date U.S. Billion-Dollar Disaster Event Frequency (CPI-Adjusted) Event statistics are added according to the date on which they ended. 0-2 4-6 6-8 8-10 **10-12 12-14** 2-4 14-16 16 NUMBER OF EVENTS 10 1980198219841986198919911993199519971999200120032005200720092011201320152017 Oct Jul Apr **Current Trend** Source: NOAA 

Frequency of events are increasing.



#### Concept Development Study, Pilots and Prototypes to advance preparedness and response



OGC Disasters Concept Development Study: Will assess the current state of data and product exchange technologies as used in disaster planning, response, and recovery.

The information gained in the CDS will aid in developing *a series of future pilots* that will in turn advance the state of Spatial Data Infrastructures *that support disaster risk reduction across the globe*.





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http://www.opengeospatial.org/projects/initiatives/disasterscds



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