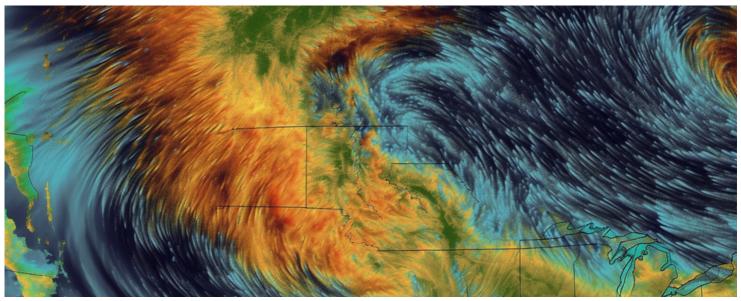
ATNOSPHERICS 06.09.23

DISASTER PREPAREDNESS



Bottom Line Up Front:

- FEMA estimates that its Disaster Relief Fund will run out of money by August when the Atlantic and Gulf coasts face their worst hurricane risk and when wildfires tend to be fiercest in the West. FEMA's latest monthly report shows the fund reaching a deficit of \$159 million in August and \$6.3 billion in September unless Congress replenishes the account.
- However, FEMA has recently come into crossfire for what some are calling an "overstepping of bounds," particularly with spending at the US-Mexico border. This spending, coupled with reports that the organization is operating at 65% capacity, could be indicators of decreased funds and/or more oversight to come.
- In 2022 alone weather and climate disasters cost the US \$145B, the second-highest total on record, behind only 2020. Within that year, 18 weather and climate disasters in the US resulted in at least \$1B in damages indivdually.
- Not just within the US, but also around the globe, the frequency and intensity of disasters are expected to increase due to climate change - making their impact on economic and human costs even more severe.





Blue terms are connected to the word of the week via news outlets and searches, whereas black and gray terms are not directly related, but still dominate the social space.

Disaster Preparedness defined: Disaster preparedness is the act of preparing for natural disasters, human-induced hazards, and biological warfare. This can be done through policy, planning, stockpiling, training, and equipping people at the individual, local (community / business), state, and federal levels. While disaster preparedness is largely related to FEMA and natural disasters, it is also important to consider its role in places like schools, sporting events, hospitals, and government. Although terms like disaster preparedness, emergency management, and disaster response have been increasingly prevalent in the headlines, this is a relatively new field that doesn't necessarily fit neatly into any one category or sector. As a result, there is a great deal of learning, coordination, and trial-and-error that is continually taking place as new challenges and situations arise.

Why this topic is important right now: In general, we are seeing an increasing number of adverse weather events and internal / external threats than we have seen in previous years. These events are happening at a greater frequency and a larger scale than before. With work on the FY24 NDAA taking place right now, this is an interesting time to consider the cost of preparing for disasters that may never happen, as well as the ramifications if we are underprepared for such an event. Separately, there is a huge technological component associated with this field, such as automated geospatial tools to help detect and map storms, machine learning to identify building structure capabilities, phone data to understand movement, contact tracing, and density, and genetic engineering to develop new structures and medicines. With technology continuing to evolve, this will yield greater opportunities, and threats, within this field.

TECHNOLOGY



The average cost of a billion-dollar disaster has increased by more than 50% since 1980. This is due to a number of factors, including inflation, population growth, and the increasing value of property in disaster-prone areas.

- Bard, 2023

AI Generated Image

The United States is a country that is prone to natural disasters. In the past few years, the country has experienced a number of devastating hurricanes, wildfires, and floods. These disasters have caused billions of dollars in damage and have displaced millions of people. In response to these disasters, the US government has taken a number of steps to improve disaster preparedness. In 1979, the Federal Emergency Management Agency (FEMA) was created to coordinate the federal government's response to natural disasters and other emergencies. FEMA provides financial assistance to individuals and communities affected by disasters, and it also works to help communities build resilience to disasters.

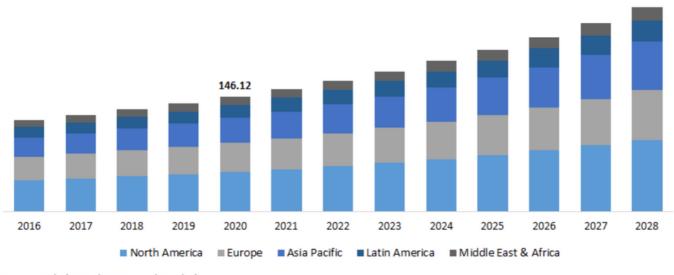
In 2011, the US government developed the National Preparedness Goal, which sets national standards for disaster preparedness. The goal is to ensure that all Americans are prepared for disasters, regardless of their location or socioeconomic status. The goal also emphasizes the importance of community-based disaster preparedness, and it encourages communities to work together to develop and implement disaster preparedness plans.

The private sector has also played a role in disaster preparedness. Insurance companies have developed new products and services to help people protect themselves from financial losses caused by disasters. Technology companies have developed mobile apps and other tools to help people stay informed about potential hazards and to get help in the event of a disaster. Businesses have developed disaster preparedness plans and have trained their employees on how to respond to disasters.

The US government and the private sector have made significant progress in improving disaster preparedness. However, there is still more work to be done. By continuing to work together, we can make our communities more resilient to disasters and help to save lives.







Source: Polaris Market Research Analysis

Public sentiment surrounding disaster preparedness can vary widely across different regions and demographics in the US. Below are key areas where all communities share similar attitudes:

Community Engagement: Community engagement and volunteerism in disaster preparedness is generally welcomed and supported, such as training programs, neighborhood networks, or local preparedness events.

Personal Responsibility: In tandem with government involvement, there has been increasing recognition of the significance of individual and community preparedness. People increasingly recognize their role in safeguarding themselves, their families, and their communities against disasters by maintaining emergency supplies, creating evacuation plans, and being aware of potential threats.

Government Responsibilities: People generally expect their government, at various levels (federal, state, and local), to play an essential role in disaster preparation and response efforts. Citizens expect them to allocate sufficient resources, develop comprehensive plans, and coordinate response efforts effectively.

Funding and Resources: There is often an increasing call for additional funding and resources to support disaster preparation efforts, such as investing in infrastructure, early warning systems, public education campaigns, and emergency response capabilities. Although public opinion may differ on which areas should receive priority, funding allocation and allocation rates remain essential for disaster preparedness efforts.

INFORMATION:

- 1. European Commission. (2022, July 22). Disaster Preparedness Fact Sheet. Retrieved from European Civil Protection and Humanitarian Aid Operations: https://civil-protection-humanitarian-aid.ec.europa.eu/what/humanitarian-aid/disaster-preparedness_en
- 2. Frank, T. (2023, June 2). This Hurricane Season May See a Key FEMA Disaster Fund Run Out of Money. Retrieved from Scientific American: https://www.scientificamerican.com/article/this-hurricane-season-may-see-a-key-femadisaster-fund-run-out-of-money/
- 3. Hooks, E., & Currie, C. (2023). The Impacts of FEMA's Strategic Plan on Disaster Preparedness and Response. Subcommittee on Economic Development, Public Buildings, and Emergency Management. Washington, D.C.: Committee on Transportation and Infrastructure.
- 4. Jacob, J. (2023, June 5). Natural Disaster Preparedness to be Automated in West America. Retrieved from Geospatial World: https://www.geospatialworld.net/prime/specialfeatures/natural-disaster-preparedness-automated-expanded-american-west-coast/
- 5. Lindsay, B., & Webster, E. (2020). Congressional Primer on Responding to and Recovering from Major Disasters and Emergencies. Washington, D.C.: CRS Reports.
- 6. National Centers for Environmental Information. (2022, April 21). Calculating the Cost of Weather and Climate Disasters. Retrieved from National Centers for Environmental Information: https://www.ncei.noaa.gov/news/calculating-cost-weather-and-climate-disasters
- 7. Neptune. (2023). Atmospherics. Retrieved from Portal.
- 8. Science for Disaster Reduction Interagency Coordination Group. (2021). Integrating Science & Technology with Disaster Response. Washington, D.C.: NIST.

TECHNOLOGY:

1. MidJourney. (2023). [MidJourney image response to prompts about disaster preparedness].

- 2. Neeva. (2023). [NeevaAI response to prompts about disaster preparedness].
- 3. OpenAI. (2023). [ChatGPT response to prompts about disaster preparedness].
- 4. YouChat. (2023). [YouChat response to prompts about disaster preparedness].
- 5. Google. (2023). [Bard response to prompts about disaster preparedness].

SENTIMENT:

1. Multiple social platforms and proprietary listening tools.

