



Committee on Transportation and Infrastructure  
U.S. House of Representatives  
Washington DC 20515

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April 21, 2017

**SUMMARY OF SUBJECT MATTER**

**TO:** Members, Subcommittee on Economic Development, Public Buildings, and Emergency Management  
**FROM:** Staff, Subcommittee on Economic Development, Public Buildings, and Emergency Management  
**RE:** Subcommittee Hearing on “Building a 21st Century Infrastructure for America: Mitigating Damage and Recovering Quickly from Disasters”

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**PURPOSE**

The Subcommittee on Economic Development, Public Buildings, and Emergency Management will meet on Thursday, April 27, 2017, at 10:00 a.m. in 2167 Rayburn House Office Building, for a hearing titled “Building a 21st Century Infrastructure for America: Mitigating Damage and Recovering Quickly from Disasters.” The purpose of the hearing is to examine how to protect infrastructure against future disaster damage, how to lower the overall disaster costs, and to identify challenges facing the Federal Emergency Management Agency (FEMA) in responding to, recovering from, and mitigating against disasters, both natural and manmade. Witnesses include two former FEMA Administrators, the State of Oregon, the Build Strong Coalition, and the International Association of Fire Chiefs.

**BACKGROUND**

**Disaster Losses and Federal Disaster Spending Have Increased Significantly**

According to numerous studies, disaster losses and federal disaster spending have increased significantly over the last 50 years. In 2012, Munich Re, the world’s largest reinsurance company, reported that between 1980 and 2011, North America suffered \$1.06 trillion in total losses, including \$510 billion in insured losses, and an increase in weather-related events five-fold over the previous three decades.<sup>1</sup> In 2005, it was reported that since 1952, the

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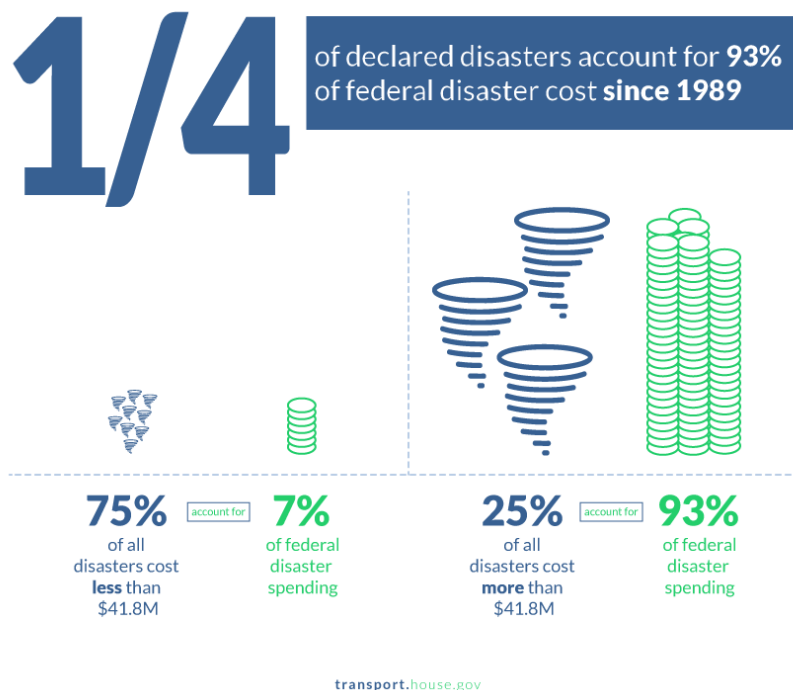
<sup>1</sup> Munich Re (2012). *Severe weather in North America – Perils Risk Insurance*. Munich, Germany: Muchener Ruckversicherungs-Gesellschaft.

cost of natural disasters to the federal government more than tripled, as a function of gross domestic product.<sup>2</sup>

There are numerous causes that may be driving these costs including population growth and increased density in disaster-prone areas, changes in weather and fire events, and changes in disaster relief programs. In a recent report, FEMA acknowledged the increase in the number of extreme disaster events and increased vulnerabilities throughout the United States due to shifting demographics, aging infrastructure, land use, and construction practices.<sup>3</sup>

### A Few Disasters Account for Most Costs

The Congressional Research Service (CRS) analyzed data from over 1,300 major disasters since 1989, and adjusting for inflation, found that FEMA obligated more than \$178 billion for these disasters.<sup>4</sup> However, CRS also found that 25 percent of all disasters account for over 92 percent of disaster costs.<sup>5</sup> Therefore, the remaining 75 percent of smaller disasters constitute less than eight percent of FEMA disaster spending. See the diagram below:



<sup>2</sup> The Princeton University Geoscience 499 Class, *The Increasing Costs of U.S. Natural Disasters*. Geotimes, November 2005.

<sup>3</sup> Federal Emergency Management Agency, *National Strategy Recommendations: Future Disaster Preparedness*. September 6, 2013. Available at [http://www.fema.gov/media-library-data/bd125e67fb2bd37f8d609cbd71b835ae/FEMA+National+Strategy+Recommendations+\(V4\).pdf](http://www.fema.gov/media-library-data/bd125e67fb2bd37f8d609cbd71b835ae/FEMA+National+Strategy+Recommendations+(V4).pdf).

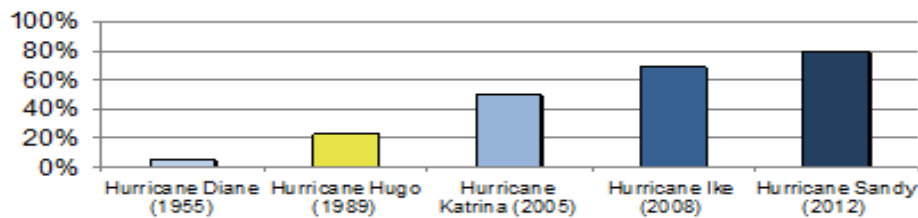
<sup>4</sup> CRS Memo *Data Analysis for House Transportation and Infrastructure Committee*, January 14, 2015.

<sup>5</sup> *Id.*

## **The Percentage of Disaster Costs Covered by the Federal Government is Increasing**

FEMA is the federal government’s lead agency for preparing for, mitigating, responding to, and recovering from disasters and emergencies related to all hazards whether natural or man-made. When state and local resources are overwhelmed and the “disaster is of such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments,”<sup>6</sup> the Governor of the affected state may request that the President declare a major disaster. As the following diagram illustrates, the financial burden of disaster response has fallen increasingly on the federal government.

**Role of Federal Government in Disaster Loss Payment  
(proportion of total economic loss)**



Sources: E. Michele Kerjan, [Have We Entered an Ever-Growing Cycle of Government Disaster Relief?](#) - Presentation before the U.S. Senate (2013).

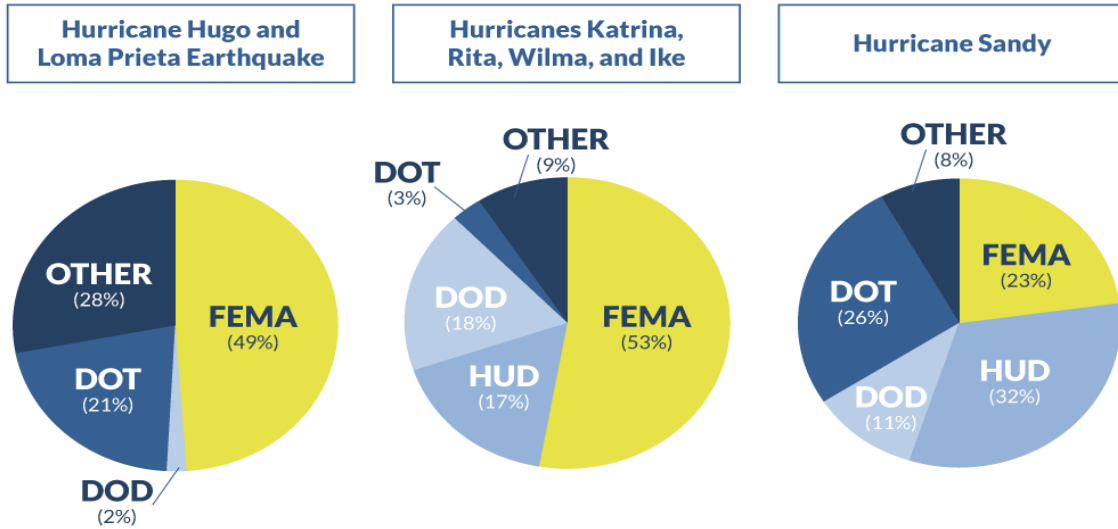
## **The Number of Federal Disaster Assistance Programs is Increasing**

FEMA was established in 1979 to centralize and better coordinate the federal government’s disaster activities, which had been scattered across the government and poorly coordinated in response to the Three Mile Island nuclear disaster and several other disasters. Over time, numerous other agencies have received authorities and appropriations for additional federal activities and programs focused on disaster recovery. These programs have differing legal authorities, eligibility requirements, and objectives. The following diagram illustrates how over time the number of non-FEMA disaster assistance programs and the amount of funding made available for non-FEMA disaster assistance programs have grown.

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<sup>6</sup> 42 U.S.C. § 5170.

## Growth of Non-FEMA Federal Disaster Aid



Most recently, the following programs have been significantly involved in disaster recovery, and, as such, received funding in the wake of Hurricane Sandy.

- Housing and Urban Development (HUD) Community Development Block Grant Disaster Funds (CDBG-DR) – Congress can provide funding for disaster recovery through HUD’s CDBG Program. Most recently, funds were made available to provide non-competitive, nonrecurring assistance targeted at low-income areas impacted by disasters in 2011, 2012, and 2013.
- U.S. Department of Transportation (USDOT) Federal Transit Administration Emergency Relief Program (ERP) – The ERP’s purpose is to help states and public transportation systems pay for protecting, repairing, or replacing equipment and facilities that may suffer or have suffered serious damage because of an emergency, including natural disasters. The ERP is also intended to improve coordination between USDOT and the Department of Homeland Security to expedite assistance to public transit providers in times of disasters and emergencies.
- U.S. Army Corps of Engineers (Corps) – The Corps receives money for the rehabilitation, repair, and construction of projects. These funds are available to projects provided that they reduce future flood risk and support long-term sustainability.

## **Mitigation Measures as a Strategy to Reduce Disaster Losses**

Disaster mitigation includes actions taken to reduce loss of life and property by lessening the impact of disasters. Effective mitigation acts to minimize the potential loss from a disaster based on identifying and understanding the risks in a given area or community. Mitigation can encompass a wide variety of activities, including preparation and planning, elevating or moving structures prone to flooding, hardening structures to mitigate effects of hurricanes or earthquakes, and establishing building codes and zoning ordinances.

Mitigation not only saves lives but has been shown to also reduce disaster costs by minimizing damage from a disaster. For example, pursuant to a requirement of the *Disaster Mitigation Act of 2000*, the Congressional Budget Office (CBO) completed an analysis on the reduction in federal disaster assistance as a result of mitigation efforts.<sup>7</sup> That study examined mitigation projects funded from 2004 to mid-2007. CBO found that of the nearly \$500 million invested through Pre-Disaster Mitigation grants, future losses were reduced by \$1.6 billion for an overall ratio of three to one. In essence, for every dollar invested in mitigation, \$3 were saved. CBO's analysis reaffirmed a prior study commissioned by FEMA and conducted by the Multihazard Mitigation Council of the National Institute of Building Sciences that concluded that funding spent on mitigation reduces future disaster costs.<sup>8</sup>

### **Initiatives to Lower Disaster Costs and Losses**

#### *FEMA's Proposal to Establish a Disaster Deductible*

On January 20, 2016, FEMA published an advance notice of proposed rulemaking in the *Federal Register* soliciting comments on a proposal to establish a predetermined level of financial or other commitment from a state before FEMA will provide assistance under the Public Assistance Program when the President declares a major disaster. On January 17, 2017, FEMA issued a supplemental advance notice of proposed rulemaking providing additional details of the concept, including a model deductible program providing more specifics of what the deductible requirement may entail, including methodologies for calculating each state's deductible and credits. Comments were received until April 12, 2017.

FEMA believes the deductible model would incentivize states to make meaningful improvements in disaster planning, fiscal capacity for disaster response and recovery, and risk mitigation, while contributing to more effective stewardship of taxpayer dollars. For example, states could potentially receive credit toward their deductible requirement through proactive pre-event actions such as adopting enhanced building codes, establishing and maintaining a disaster relief fund or self-insurance plan, or adoption of other measures that reduce the state's risk from disaster events. The deductible model would increase stakeholder investment and participation in disaster recovery and building for future risk, thereby strengthening our Nation's resilience to disaster events and reducing the cost of disasters long term. During a hearing last Congress, many stakeholders expressed concern with this proposal.

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<sup>7</sup> Congressional Budget Office, *Potential Cost Savings from the Pre-Disaster Mitigation Program*. September 2007.

<sup>8</sup> Multihazard Mitigation Council, National Institute of Building Sciences (2005), *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities*.

*The FEMA Disaster Assistance Reform Act of 2015*

In the 114<sup>th</sup> Congress, Chairman Barletta, Chairman Shuster, former Ranking Member Carson, and Ranking Member DeFazio introduced H.R. 1471, *the FEMA Disaster Assistance Reform Act of 2015*. On February 29, 2016, the bill passed the House. This bipartisan legislation would have established a comprehensive study to assess disaster costs and develop recommendations for reducing those costs. Specifically, the legislation would have required the National Advisory Council to conduct the comprehensive study and include policy recommendations to help reduce future losses.

*Other Legislative Proposals*

Other legislative proposals that have been introduced include incentives to encourage the adoption and enforcement of efforts to mitigate structures from disaster hazards and shifting investments pre-disaster to avoid losses and federal costs in the wake of a disaster.

**WITNESS LIST**

Andrew Phelps  
Director  
Oregon Office of Emergency Management

Chief John Sinclair  
President and Chairman of the Board  
International Association of Fire Chiefs

Mark Berven  
President and Chief Operating Officer  
Nationwide Property and Casualty Operations  
On behalf of the BuildStrong Coalition

The Honorable W. Craig Fugate  
Former Administrator  
Federal Emergency Management Agency

The Honorable R. David Paulison  
Former Administrator  
Federal Emergency Management Agency