



Committee on Transportation and Infrastructure
U.S. House of Representatives

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March 17, 2015

BACKGROUND MEMO

TO: Members, Subcommittee on Economic Development, Public Buildings and
Emergency Management
FROM: Staff, Subcommittee on Economic Development, Public Buildings and
Emergency Management
RE: Roundtable Policy Discussion on “What is Driving the Increasing Costs and
Rising Losses from Disasters?”

PURPOSE

On Wednesday, March 18, 2015, at 9:30 a.m., in 2253 Rayburn House Office Building, Members of the Subcommittee on Economic Development, Public Buildings and Emergency Management will participate in a roundtable discussion on “What is Driving the Increasing Costs and Rising Losses from Disasters?”. The purpose of the roundtable is to examine and discuss data related to disaster costs, the trends observed over time, and the projections for the future given the policies in place today. Participants will include the Federal Emergency Management Agency (FEMA), the Congressional Research Service (CRS), the Government Accountability Office (GAO), and experts from academia and the private sector.

BACKGROUND

On January 27, 2015, the Subcommittee hosted a Congressional hearing where Chairman Barletta announced that he would be launching a comprehensive analysis of and ongoing discussion about trends in disaster costs across the government and private sectors, the drivers of the trends being observed, and what policy changes should be considered to bend the cost curve on disasters. The first discussion will focus on collected and needed data and information. Future conversations will focus on the principles that should drive the Nation’s disaster assistance posture; appropriate roles and responsibilities for the public and private sectors; and ultimately potential solutions and recommendations for reducing costs.

The Rising Costs of Disasters

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.¹ In 2005, it was reported that since 1952, the cost of natural disasters to the federal government more than tripled, as a function of gross domestic product.²

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.³

Few Disasters Account for Most Costs

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.⁴ However, CRS also found that 25 percent of all disasters account for over 92 percent of disaster costs.⁵ Therefore, the remaining 75 percent of smaller disasters constitute less than eight percent of FEMA disaster spending.

The Increase in Disaster Declarations

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,”⁶ the Governor of the affected state may request that the President declare a major disaster. Below is a snapshot of declarations over the last decade:

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

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

³ 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).

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

⁵ *Id.*

⁶ 42 U.S.C. § 5170.

Year	Major Disaster Declarations	Emergency Declarations	Fire Management Assistance Declarations	Total
2015	1	0	0	1
2014	45	6	33	84
2013	62	5	28	95
2012	47	16	49	112
2011	99	29	114	242
2010	81	9	18	108
2009	59	7	49	115
2008	75	17	51	143
2007	63	13	60	136
2006	52	5	86	143
2005	48	68	39	155

Source: <http://www.fema.gov/disasters/grid/year>

The chart above illustrates a recent decline in the number of disasters since 2011, a year that experienced the most disaster declarations in history. However, CRS has analyzed the number of disaster declarations back to 1953 and observed a steady increase through 2011.⁷ FEMA reports that over two thirds of all disasters were declared in the last two decades, between 1996 and 2013.⁸

It has been suggested that the number of disaster declarations has increased because of an artificially low per capita threshold⁹, which FEMA relies on in making recommendations to the President for or against a disaster declaration. While other factors are considered, once state-wide damage reaches a certain level of damage per capita, it is likely that a disaster declaration will be recommended to the President. FEMA has not adjusted this indicator to keep pace with inflation, income or other growth indicators. But this argument ignores factors, such as population density, building in disaster prone areas, and other factors that could also be causing the increased declarations.

Recent Trends in Federal Disaster Assistance

FEMA was established in 1979 as the centralized location for federal disaster assistance and coordination of the federal government's disaster activities. Over time, however, numerous other agencies have received authorities and appropriations for additional federal activities and programs focused on disaster recovery. For example, most recently, the following programs have been significantly involved in disaster recovery, and as such, have received significant funding in the wake of Hurricane Sandy.

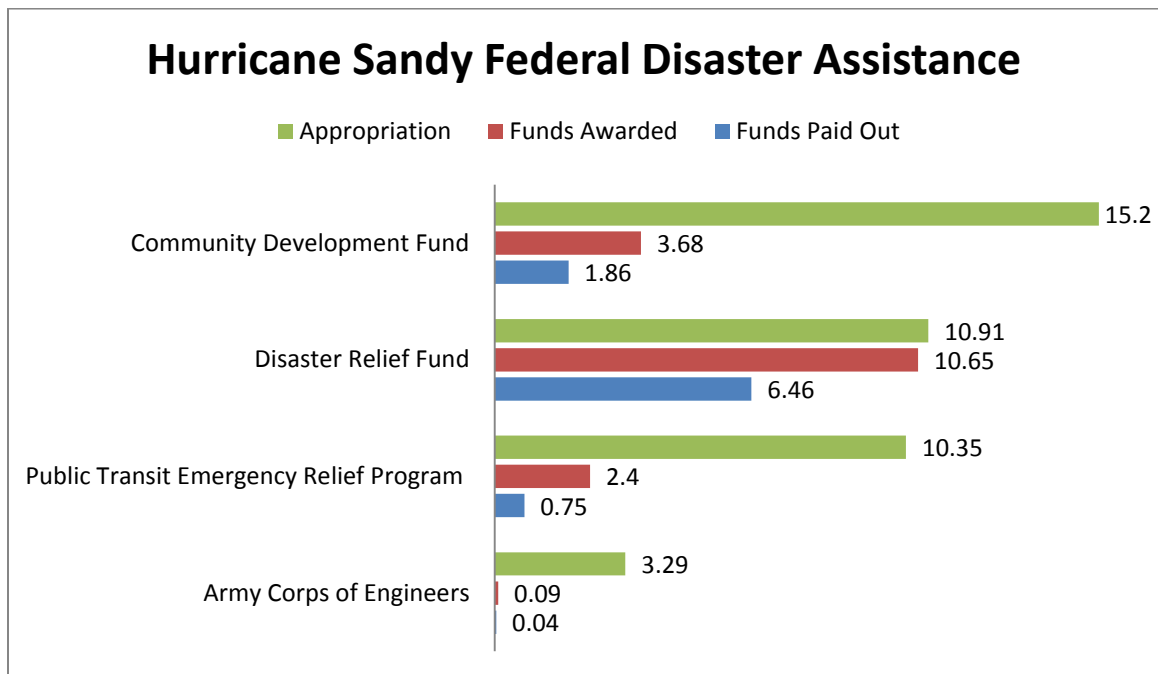
⁷ CRS Report 42702 *Stafford Act Declarations 1953-2011: Trends and Analyses and Implications for Congress* by Bruce R. Lindsay and Francis X. McCarthy.

⁸ Federal Emergency Management Agency. Available at <http://www.fema.gov/disasters/grid/year>.

⁹ Senator Tim Coburn, *An Imperfect Storm: How the Outdated Federal Rules Distort the Disaster Declaration Process and Fleece Taxpayers*. December 21, 2014.

- Housing and Urban Development (HUD) Community Development Block Grant Disaster Funds (CDBG-DR) – Congress can provide specialty funding for disaster recovery through HUD’s CDBG Program.
- 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 (DHS) 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.

Of the funds appropriated for Hurricane Sandy recovery, FEMA did not receive the greatest allocation. The top four programs are depicted below:



Source: <http://www.recovery.gov/Sandy/whereisthemoneygoing/monthly/Pages/default.aspx>

Participants

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