



the CENTER for
CATASTROPHE
PREPAREDNESS
and RESPONSE

C|C|P|R



Cities, Communications and Catastrophe: Improving Robustness and Resiliency

The Stafford Act: Priorities for Reform

Mitchell L. Moss

Henry Hart Rice Professor of Urban Policy and Planning
Robert F. Wagner Graduate School of Public Service

Charles Shelhamer

Research Scientist
Robert F. Wagner Graduate School of Public Service

Prepared with the support of
The Center for Catastrophe Preparedness & Response

CONTENTS

Executive Summary	3
Key Recommendations	6
Section 1: Federal Disaster Policy	7
1.1: The Stafford Act	7
1.2: Federal Response to Disasters	8
Section 2: History of Federal Disaster Policy	10
2.1: Limited Federal Role	10
2.2: Civil Defense	11
2.3: FEMA	11
2.4: The Stafford Act	11
2.5: FEMA Under James Lee Witt	12
2.6: Mitigation	12
2.7: U.S. Department of Homeland Security	12
2.8: Hurricane Katrina	13
Section 3: Catastrophic Incidents	14
3.1: New Policies for Catastrophic Incidents	15
3.2: Strengthen Local Government	16
3.3: Utilities	16
3.4: Small Business	18
3.5: Insurance	19
3.6: Congressional Appropriations and Regulations	20
3.7: Mitigation and Modernization	21
3.8: Twenty-First Century Threats	21
Conclusion	23
Notes	25

We want to express our appreciation to Robert Berne, Senior Vice President for Health at New York University and Principal Investigator of NYU’s Center for Catastrophe Preparedness & Response (CCPR), Brad Penuel, Director of CCPR, David Berman, Associate Director of CCPR, and CCPR Research Associate Ryan Hagen, for their support.

We are also grateful to Admiral James Loy (Retired), Senior Counselor of the Cohen Group, Brad Gair, Deputy Commissioner for Operations of the New York City Office of Emergency Management, and Joe Picciano, Deputy Regional Director of FEMA Region II, for their comments and suggestions.

NYU Wagner graduate students David Garlick, Sarah Kaufman, and Paul Nelson provided valuable research assistance.

EXECUTIVE SUMMARY

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act) is the principal legislation governing the federal response to disasters within the United States. The act spells out – among other things – how disasters are declared, the types of assistance to be provided, and the cost sharing arrangements between federal, state, and local governments.

The Federal Emergency Management Agency (FEMA) is the primary federal agency responsible for responding to disasters within the United States, carrying out the provisions of the Stafford Act, and distributing assistance provided by the act.

The Stafford Act establishes two incident levels – emergencies and major disasters. Emergencies tend to be smaller events where a limited federal role will suffice. Major disasters are larger events – but this can run the gamut from a blizzard in Buffalo to a major earthquake in southern California that affects millions. In other words, no distinction, and no special response, is provided in the Stafford Act following catastrophes such as major earthquakes and hurricanes. The Stafford Act should be amended to establish a response level for catastrophic events.

The Stafford Act does not adequately recognize 21st century threats. For example, the definition of a major disaster does not cover chemical, biological, radiological, or nuclear attacks or accidents. The act should further be amended to encompass 21st century threats.

This report does not focus on the performance of government agencies immediately following a disaster – these have been well documented by others. Rather, this report focuses on the federal role in the long-term recovery and rebuilding process following catastrophes, and what can be done to improve the effectiveness of the federal government in aiding these efforts.

Following most disasters, assistance provided by the Stafford Act is adequate. However, following a catastrophic event – such as the September 11 attacks or Hurricane Katrina – the level of assistance may not fulfill vital needs, and restrictions imposed by the act can needlessly limit recovery efforts.

Loans to state and local governments designed to reimburse lost tax revenue are capped at \$5 million, and this cap has proven inadequate following catastrophes. For FY 2002 and 2003, New York City lost anywhere from \$2.5

to \$2.9 billion in tax revenues following the September 11 attacks. New Orleans had to lay off almost half of its workforce – some 3000 employees – after Katrina because the city did not have enough cash on hand to meet its payroll obligations. Yet, state and local governments perform the bulk of work following a disaster. Police and fire departments perform rescues and ensure public order and safety. Building inspectors determine which structures are safe and which have to be demolished. Sanitation workers remove debris. Civil servants administer public recovery programs. All of this has to occur before the private market can effectively rebuild.

The Stafford Act should be amended to abolish the \$5 million cap on loans to reimburse for lost tax revenue. Furthermore, sections of the Stafford Act that allow the federal government to fund overtime pay of public employees should be amended to allow the federal government to, in part or in full, pay the salaries of state and local public employees in areas stricken by a catastrophe for a limited amount of time. This will ensure that areas affected by a catastrophe do not face the dual challenge of overwhelming devastation and a bankrupt local government forced to layoff workers.

Equally important, the restoration of utilities – electricity, water, sewer, and telecommunications – is critical. Lives can be saved and suffering minimized with rapidly restored utilities. However, the Stafford Act only provides coverage to public or non-profit utility providers, thus failing to account for the modern utility industry that contains many private, for profit companies. The Stafford Act should be amended so that, following a catastrophe, utility workers are recognized as “emergency responders,” enabling them to receive security escorts and priority access to food, fuel, water, and shelter. While any expansion of the Stafford Act to cover non government entities – such as private utilities – is controversial, we further recommend that the act be modified to provide reimbursement to private, for profit utilities for the replacement of damaged equipment and facilities, and for emergency work performed following a catastrophe, as is already afforded to public and not for profit utility companies.

In addition to the resumption of government services and utilities, long term recovery following a catastrophe depends on small business. This is especially true in urban areas where corner delis, dry cleaners, and other small businesses provide vital services that make life possible for

business and residents. More than 4,400 small businesses, employing some 43,500 workers, were located in the immediate vicinity of the World Trade Center when the September 11 attacks occurred. Of those, more than 700 small businesses, employing 8,005 workers, were destroyed in the World Trade Center complex alone. In the greater New Orleans region, more than 72,000 businesses were damaged by Hurricane Katrina, of which 85 percent had fewer than 19 employees. In Mississippi, an estimated 70,000 businesses were either completely destroyed or severely damaged by the storm.

Under current federal policy, when a major disaster is declared, businesses are referred to the Small Business Administration's Economic Injury Disaster Loan (EIDL) Program. EIDLs are capped at \$1.5 million in assistance to each business, and include both economic injury and physical damage assistance that can be used to replace real estate and inventory, and cover payroll, rent, and utility bills. Only loans, not grants, are provided. While EIDLs are of great assistance, delays in receiving the loans are common. Following a catastrophe, many small businesses would better benefit from expedited micro loans designed to defer immediate costs and provide a quick infusion of several thousand dollars. Provisions should also be made to provide grants to established small businesses, as opposed to just loans.

An underlying assumption of federal policy is that assistance to business and individuals should first come from insurance. It is essential for businesses and individuals to have insurance, and for the government to encourage insurance coverage to minimize the amount of taxpayer money spent following a disaster. The problem is that, following a catastrophe, important documents needed by businesses and individuals to document ownership and proof of insurance may have been lost, making it difficult for people to apply and receive both government assistance and insurance in a timely fashion. In addition, insurance companies have, in the past, moved to minimize losses, leaving victims in difficult financial positions and, as demonstrated along the Gulf Coast, hampering the ability of the private sector to jump into action and rebuild.

The Stafford Act and its regulations should be modified to allow cash assistance – which is capped at \$30,000 per household, and further subdivided with caps on repairs, temporary housing assistance, and other items – to flow to qualified homeowners and renters following a catastrophe, regardless of insurance coverage, in order to cover immediate costs. This assistance could later be

reimbursed to the government when insurance coverage is received, or through income taxes.

To make up for these and other gaps in the Stafford Act, Congress historically has appropriated billions of dollars and made special provisions to provide additional assistance following catastrophes. After the 1994 Northridge (Los Angeles) Earthquake, Congress appropriated \$11 billion. \$40 billion was appropriated following the September 11 attacks, and \$110 billion was appropriated after Hurricanes Katrina and Rita.

The distribution of this funding, along with Stafford Act assistance, is governed by an elaborate, but well intentioned, set of procedures. The result is that it takes months, if not years, for the responsible federal agencies to process and distribute the assistance. For example, as of January 2007, of \$42 billion provided to the Federal Emergency Management Agency (FEMA) for distribution following Katrina, \$25 billion has been distributed. With the bulk of immediate rescue and recovery work, along with long term planning, zoning, and rebuilding resting in the hands of state and local governments, federal assistance should be provided to state and local governments as quickly as possible.

Often delays are not caused by provisions of the law, but exist within regulations and interpretations. During the 1990s, FEMA successfully responded to catastrophes and major disasters like the 1993 Midwest floods and the 1994 Oklahoma City bombing by relaxing the regulations that implement the Stafford Act. A similar result could occur if FEMA designed its Public Assistance Program in a fashion such that one damage survey and estimate was written for each affected community or state. This would allow FEMA to quickly provide assistance to state and local governments in a form similar to a block grant.

Every catastrophe poses unique challenges. While the recommendations outlined in this report are necessary to provide adequate assistance and long term recovery following a catastrophe, they may not meet all needs. A general rider within the Stafford Act for catastrophic events, giving the President, in consultation with Congress, the authority to waive Stafford Act provisions and regulations following a catastrophe represents the most effective means of providing regulatory flexibility following a catastrophe. To prevent an open ended mandate, the rider could also require the President, after an initial damage assessment, and in coordination with Congress, to set a cap on the amount of immediate and

long term recovery assistance that will be provided for the catastrophe.

Many catastrophes are predictable and will occur again. Another major earthquake will strike California. Another hurricane will hit the Gulf Coast. Following a disaster, up to 20% of funding provided by FEMA can be directed towards mitigation efforts to prevent future damage. The Stafford Act also allows funds to be used to upgrade damaged infrastructure so that it incorporates the latest safety features. However, mitigation practices are not standardized, and limited staff and planning resources can hamper results. Regulations should be reformed to aggressively encourage the reconstruction of improved infrastructure, and, in addition to providing funding for mitigation projects, Congress should fund mitigation staff and planning capacity within state and local governments. Without the underlying capacity to provide effective mitigation, no amount of money will result in the reconstruction of devastated communities in a way that prevents future catastrophes.

KEY RECOMMENDATIONS

- Amend the Stafford Act to provide a new level of response for catastrophic incidents.
- Amend the definition of a Major Disaster in the Stafford Act to recognize 21st century threats such as chemical, biological, radiological, and nuclear attacks and accidents.
- Eliminate the \$5 million cap on tax recovery assistance for state and local governments.
- Expand the Stafford Act to allow FEMA to pay, in part or in full, the salaries of public employees in areas stricken by a catastrophe.
- Expand Stafford Act coverage to include private, for profit utility providers.
- Offer a mix of grants and loans to established small businesses.
- Provide expedited micro grants and loans to small businesses to help defer immediate costs.
- Following a catastrophe, waive proof of insurance requirements and provide immediate assistance to those in need, which can later be reimbursed to the government when insurance payments are made.
- FEMA's Public Assistance Program should be revised so that money is provided in a fashion similar to block grants.
- Strengthen regulations to aggressively encourage mitigation and the reconstruction of improved infrastructure following disasters.
- Build a rider into the Stafford Act, giving the President, in consultation with Congress, the authority to waive Stafford Act provisions and regulations following a catastrophe.



SECTION 1: FEDERAL DISASTER POLICY

1.1 The Stafford Act

The Robert T. Stafford Disaster Relief and Emergency Assistance Act¹ (the Stafford Act) is the principal legislation governing the federal response to disasters within the United States. The act spells out – among other things – how disasters are declared, types of assistance to be provided, and cost sharing arrangements between federal, state, and local governments. The act also establishes two incident levels – emergencies and major disasters.

Emergencies

Emergencies are defined as “Any occasion or incident for which, in the determination of the President, federal assistance is needed to supplement State and local efforts².” Emergencies tend to be smaller events where a limited federal role will suffice. Total federal assistance for any one emergency may not exceed \$5 million, except where the President determines further assistance is required³.

During an emergency, the federal government has the authority to, among other things⁴:

- Utilize its resources, facilities, and personnel to assist state and local efforts;
- Coordinate disaster relief assistance;
- Disseminate warnings and provide technical and advisory assistance to state and local governments;
- Provide assistance through federal agencies;
- Remove debris;
- Provide eligible households up to \$30,000⁵ in assistance; and
- Assist in the distribution of medicine, food, and other supplies.

Major Disasters

If a disaster causes “damage of sufficient severity and magnitude to warrant major disaster assistance,⁶” the President may declare it to be a major disaster. Such a declaration brings to bear the full resources and authority of the federal government under the Stafford Act, allowing it to, among other things⁷:

- Utilize, donate, or lend federal resources, facilities, and personnel to state and local governments;

- Distribute food, medicine, and other supplies;
- Remove debris, clear roads, and construct temporary bridges;
- Provide search and rescue teams;
- Provide emergency medical care, shelter, and needed temporary facilities;
- Disseminate warnings, information, and technical advice;
- Utilize the resources of the Department of Defense;
- Pay up to 75% of the cost of repairing or replacing state and local facilities and infrastructure;
- Provide financial assistance to private, non-profit utility companies;
- Provide eligible households up to \$30,000⁸ in assistance;
- Provide unemployment assistance, food coupons, and other assistance to eligible individuals; and
- Authorize loans of up to \$5 million for local governments to supplement tax revenue lost as a result of the major disaster.

Under the Stafford Act, not all disasters may qualify as a major disaster. Only “Natural catastrophes (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion⁹” are eligible to qualify as a major disaster if they rise to a level sufficient to be declared such by the President.

This has very important implications and excludes many types of disasters from receiving full coverage under the Stafford Act. For example, riots, civil disturbances, refugee or evacuee situations, and chemical, biological, radiological, or nuclear incidents in of themselves cannot qualify as major disasters under the Stafford Act.

However, if needed, other options are available. For example, the President may declare an emergency. Following Hurricane Katrina, 43 emergency declarations were issued – one for nearly every state in the Union – to assist local efforts across the country to house Katrina evacuees¹⁰. Riots and civil disturbances



traditionally have been covered through their effects – fires and explosions. For example, after the 1992 Los Angeles riots, a major disaster was declared as a result of “Fire During a Period of Civil Unrest¹¹.”

The President also possesses power under other laws, including the National Emergencies Act,¹² and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980¹³ to respond to major disturbances of the public order, environmental disasters, and incidents that result in the release of hazardous substances¹⁴. Title V of the Homeland Security Act of 2002 also gives US Department of Homeland Security the power to act in the event of a nuclear or public health incident¹⁵.

1.2 Federal Response to Disasters

The Federal Emergency Management Agency (FEMA) is the federal agency responsible for coordinating and disseminating relief under the Stafford Act.

After receiving a request from the governor of the affected state¹⁶, the President may declare an emergency or major disaster. Upon such declaration, a Federal Coordinating Officer (FCO) is appointed¹⁷. Normally, the FCO is an employee of FEMA who has received training to serve as an FCO, and is not the Director of FEMA.

FEMA – through the FCO – works with other federal agencies, charities, and state and local governments; including police, fire fighters, and other first responders. As the following table shows, for the ten-year period between 1996 and 2006, FEMA responded to 151 emergencies and 597 major disasters.

Before FEMA can take action, state and federal officials must conduct a Preliminary Damage Assessment (PDA). As FEMA explains, “This information is included in the Governor’s request to show that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the local governments and that federal assistance is necessary²⁶.” When a severe event occurs, the Governor may submit a disaster declaration request – and the President may declare a disaster – before the PDA is conducted. However, the PDA must still be conducted at some point²⁷.

While the Stafford Act authorizes a wide range of assistance that the federal government can provide following a disaster, not all of it – depending on the disaster – is utilized. As FEMA explains, “The determination

Emergency and Major Disaster Declarations 1996 – 2006¹⁸		
Type	Number of Emergency Declarations	Number of Major Disaster Declarations
Blackout ¹⁹	4	0
Drought	0	2
Earthquake	0	7
Flood	4	206
Gas leak and explosion	1	0
Grain elevator explosion ²⁰	1	0
Hurricane/ tropical storm	67 ²¹	115
Landslide	0	30
Severe storm and/or tornado	1	59
Severe storm/ tornado and flooding	1	63
Severe storm/ tornado, flooding and landslides	0	3
Space shuttle disaster ²²	2	0
Terrorist attacks	2 ²³	2 ²⁴
West Nile Virus ²⁵	2	0
Wildfire	10	13
Winter storm	56	97
Total	151	597

of which programs are activated is based on the needs found during damage assessment and any subsequent information that may be discovered²⁸.”

Prior to the creation of the Department of Homeland Security, FEMA was an independent agency that reported directly to the President. However, since 2002, FEMA has been part of the US Department of Homeland Security. Under this new arrangement, FEMA continues to coordinate federal disaster response, but it has lost its independent decision-making capabilities. FEMA must report to the Secretary of the Department of Homeland Security and make decisions within the larger framework of the Department.

Since 2002, FEMA, and the Department of Homeland Security, have also been tasked with responding to Incidents of National Significance²⁹. All emergencies and major disasters under the Stafford Act are Incidents of National Significance, but so are other instances where the federal government plays a large role in providing security or assistance – such as the Super Bowl, Olympics, inaugurations, and political conventions³⁰.

Other agencies – in addition to FEMA and the Department of Homeland Security – provide critical disaster recovery assistance that falls outside the scope of the Stafford Act. This includes the Department of Housing and Urban Development, which provides Community Development Block Grants (CDBG) to aid rebuilding, and the Small Business Administration (SBA), which provides economic assistance to businesses following a disaster.



SECTION 2: HISTORY OF FEDERAL DISASTER POLICY

Many of the problems facing current federal disaster policy stem from the way it has evolved over the past two centuries, reflecting the expanding role of the federal government and the changing character of disasters facing the nation. Federal government agencies, such as FEMA and the US Department of Homeland Security, have been cobbled together by combining previously existing bureaucracies with their own policies, objectives, and constituencies.

The net result is that today, following a disaster, the President appoints a Federal Coordinating Officer (FCO) – a position created by the Disaster Relief Act of 1969 with the intention of streamlining federal relief efforts. The FCO reports to the Director of FEMA – an agency created by executive order in 1979 to streamline federal relief efforts. FEMA, in turn, is part of the US Department of Homeland Security, an agency created by Congress in 2002 to “ensure the preparedness of our nation’s emergency response professionals, provide the federal government’s response, and aid America’s recovery from terrorist attacks and natural disasters³³.”

Compounding matters, multiple layers of law and regulations – the Stafford Act, the Homeland Security Act of 2002, the Post Katrina Emergency Management Reform Act of 2006, and the National Response Plan – mean a disaster can simultaneously be declared a Major Disaster, a Catastrophic Incident, and an Incident of National Significance – and be responded to in accordance with the provisions of all of those laws.

As outlined in a report prepared by the Berkeley School of Law, the overlapping laws caused confusion following Hurricane Katrina:

“Although Governor Blanco requested President Bush to provide federal support by declaring a “major disaster,” federal agencies did not fully mobilize because they were awaiting the Secretary of Homeland Security’s declaration of an “Incident of National Significance,” which is required to trigger the National Response Plan. Secretary Chertoff did not declare an Incident of National Significance until

August 30, 2005 and consequently, delayed a significant part of federal government mobilization of support functions for Hurricane Katrina³⁴.”

In recent years, the role and guarantees of assistance from the federal government following a disaster have been continually expanding, taking on ever increasing responsibilities. Yet these expanding promises have been met with shrinking federal support and the bulk of response and recovery work remains in the hands of state and local governments.

Despite its huge responsibilities, FEMA only has approximately 2,500 full time employees, backed up by 5,000 disaster “reservists,” spread out across 10 district offices and Washington, DC³⁵. At the same time, FEMA has witnessed a decrease in funding and staff. According to figures compiled by the *Los Angeles Times*, following the creation of the Department of Homeland Security in 2002, FEMA’s budget was cut 2% to 18%, 500 employees left, and the agency shifted its focus from natural disasters to terrorism – with three out of every four grant dollars provided by FEMA to local preparedness and first-responders going to terrorism related measures³⁶.

2.1 Limited Federal Role

For the first century and half of the republic there was a widespread belief that disaster assistance was the responsibility of charity and state and local government. For example, after the 1906 San Francisco earthquake, federal aid was directed through the Red Cross³⁷. In response to the devastating Mississippi River floods of 1927, President Coolidge defined the federal government’s role as largely mobilizing private charitable contributions to help those in need by stating it was the duty of the federal government, “To direct the sympathy of our people to the sad plight of thousands of their fellow citizens, and to urge that generous contributions be promptly forthcoming³⁸.”

A definition of what constituted a disaster, and automatic guarantees of federal assistance, did not exist. Rather, following a disaster, Congress passed resolutions spelling out the type of relief to be provided on a case-by-case basis.

The first such resolution to provide aid to multiple individuals affected by a disaster was passed in 1803, following a large fire in Portsmouth, New Hampshire. To assist the recovery of what was then an important port city, Congress authorized the Secretary of the Treasury to temporarily suspend the “Collection of bonds due to the United States by merchants of Portsmouth, in New Hampshire, who have suffered by the late conflagration of that town³⁹.” In all, over 100 Congressional disaster resolutions were passed between 1803 and 1950⁴⁰.

2.2 Civil Defense

The Cold War and the Civil Defense Act of 1950⁴¹ shifted the responsibility for declaring disasters from Congress to the President⁴². Presidential disaster declarations have been a hallmark of federal relief policy ever since, even though the process for Presidential disaster declarations was not firmly established until 1974⁴³.

The 1950 Act also funded a universal relief program that eliminated the need for Congress to appropriate funding on a retroactive case-by-case basis. Under the 1950 Act, funding was only made available to state and local governments⁴⁴. Families, individuals, and businesses were not eligible.

However, with disaster recovery spread among numerous agencies, problems of implementation often hindered the federal response. In the words of one FEMA watcher, “Civil defense programs might have helped scare the Soviets into thinking that the U.S. was serious about nuclear war... (but) the federal government’s involvement in natural disasters, meanwhile, was mostly ad hoc and too little, too late⁴⁵.”

In an attempt to improve the federal response, the Disaster Relief Act of 1969 introduced the role of the Federal Coordinating Officer (FCO) into the government’s disaster response⁴⁶. Immediately following a disaster, a FCO is appointed by the President to coordinate federal relief efforts in the affected area. A FCO is still appointed today for all federally declared disaster areas⁴⁷.

In the aftermath of the 1974 Tornado Super Outbreak, which spawned 148 tornadoes in a single day⁴⁸, Congress passed the Disaster Relief Act of 1974⁴⁹. This act established a process for coordinating state and federal relief operations and tied federal assistance to a Presidential disaster declaration⁵⁰. More importantly, the 1974 Act expanded the scope of federal assistance by establishing the Individual and Family Grant Program, enabling families and individuals to receive money directly from the federal government following a disaster.

2.3 FEMA

Despite the 1969 and 1974 Acts, emergency and disaster activities remained fragmented across more than 100 agencies. In an effort to streamline the number of federal agencies with whom state and local officials had to work, President Carter established the Federal Emergency Management Agency (FEMA) through a 1979 Executive Order, thereby creating a cabinet-level agency that reported directly to the President⁵¹. FEMA was “tasked with responding to, planning for, recovering from and mitigating against disasters” and absorbed many agencies that had formerly administered disaster relief programs⁵².

While the creation of FEMA, according to one expert, “Improved disaster response by establishing a one-stop shop to speed communication⁵³,” President Carter’s authority to create FEMA was limited, forcing him to transfer staff and procedures from existing agencies – and not creating a new, more centralized response system. This created a situation that was, according to an individual involved in the reorganization, like “Trying to make a cake by mixing the milk still in the bottle, with the flour still in the sack, with the eggs still in their carton⁵⁴.”

During the 1980s, and into the early 1990s, FEMA was repeatedly criticized and under utilized. A report from the early 1990s revealed that FEMA was a dumping ground for political appointees, and had 10 times the number of appointees as other agencies⁵⁵. The universal low point – up to that time – came in 1992 following Hurricane Andrew when FEMA failed to respond for three days, and managed only a sluggish performance thereafter; in part because director Wallace Stickney had no prior disaster experience⁵⁶.

2.4 The Stafford Act

In the 1980s, as the costs of federal disaster relief efforts began to escalate, Congress questioned the President’s use of disaster declarations for non-natural disasters, primarily in response to President Carter’s use of the Disaster Relief Act to help manage the Cuban refugee influx into Florida and the Three Mile Island accident, among other incidents⁵⁷. To address these concerns, Congress passed the Robert T. Stafford Disaster Relief and Emergency Assistance Act in 1988⁵⁸.

The act limits the declaration of a major disaster to “Any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal

wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood or explosion⁵⁹.”

Under the Stafford Act, the Cuban refugee crisis would not have qualified as a major disaster and thus would not have been eligible for the full range of federal disaster assistance. The Stafford Act also grants the President authority to declare an emergency, although this designation does not trigger the same level of federal assistance as does a major disaster declaration⁶⁰.

In addition to defining the terms under which the President may authorize the use of federal funds to assist states and localities in need, the Stafford Act:

- Established a 75-percent federal / 25-percent state and local cost sharing plan;
- Provided public assistance for emergency work, repair and restoration, and debris removal; and
- Emphasized mitigation, including the establishment of mitigation grants⁶¹.

Mitigation measures may be implemented prior to, during or after an incident and involve “ongoing actions to reduce exposure to, probability of, or potential loss from hazards⁶².” The Stafford Act was amended in 1993 to expand the scope of mitigation to include actions such as the acquisition of property in flood plains, and a 1994 amendment to the Act incorporated most of the provisions of the Civil Defense Act of 1950⁶³, which expanded FEMA’s abilities to respond to disasters⁶⁴.

2.5 FEMA Under the Leadership of James Lee Witt

Under James Lee Witt, President Clinton’s FEMA director, the agency experienced a remarkable turnaround. Witt, who had previously served as the head of the Arkansas Office of Emergency Services, was widely praised for his effective management, and brought in professional staff – which greatly improved the agency. FEMA also loosened its regulations and “gave more aid more quickly,⁶⁵” which contributed to a quicker and more effective response.

2.6 Mitigation

During the late 1990s, Congress sought out additional approaches to control the cost of federal disaster assistance. In 1998, the United States Government Accountability Office (GAO) issued a report⁶⁶ outlining specific approaches to reduce these costs, including the dedication of more resources to disaster mitigation. The

Disaster Mitigation Act of 2000 modified the Stafford Act by establishing a national program for pre-disaster mitigation and provided additional mitigation funding to states that develop “Enhanced Mitigation Plans⁶⁷.” Today, disaster relief in the United States is administered through FEMA according to the guidelines set forth in the Stafford Act and as amended by the Disaster Mitigation Act of 2000⁶⁸.

2.7 US Department of Homeland Security

Although federal disaster relief policy has been subject to many changes since the passage of the Disaster Relief Act of 1950, nothing transformed the legislative landscape as much as the terrorist attacks of September 11th, 2001. The attacks thrust homeland security and counter terrorism to the forefront of the national political agenda, and drastically shifted the priorities of disaster response from natural disasters to terrorism.

In June 2002, the US Department of Homeland Security (DHS) was created to realign “the current confusing patchwork of government activities into a single department whose primary mission is to protect our homeland⁷⁰.” The creation of the Department of Homeland Security represented the most significant transformation of the U.S. government in more than half a century. FEMA was one of the many agencies folded into the new department.

The creation of the US Department of Homeland Security could have provided an opportunity to conduct a comprehensive review and revision of disaster response policies in the United States. However, the laws and policies of FEMA were simply moved into the larger Department, and a new level of law and management was blended on top of the Stafford Act.

FEMA suddenly found itself as a small agency of approximately 2,500 employees competing for resources within a mammoth department of over 180,000 employees. According to figures compiled by the Los Angeles Times, following the creation of the Department of Homeland Security in 2002, FEMA’s budget was cut 2% to 18%, 500 employees left, and the agency shifted its focus from natural disasters to terrorism – with three out of every four grant dollars provided by FEMA to local preparedness and first-responders going to terrorism related measures⁷¹. FEMA’s focus on all hazards – from natural to man made disasters – became lost within the larger Department of Homeland Security’s focus on terrorism.

In a 2003 report, the Government Accountability Office (GAO) warned that FEMA's placement within the Department of Homeland Security had the potential to reduce FEMA's focus on natural disasters and recommended that FEMA needed to take steps to ensure this did not occur:

“Moreover, the placement of FEMA within DHS represents a substantially changed environment in which FEMA will conduct its missions in the future, and missions that focus on reducing the impacts of natural hazards, such as hazard mitigation and flood insurance may receive decreased emphasis. Sustained attention to these programs will be needed to ensure they maintain or improve their effectiveness in protecting the nation against, and reducing federal costs associated with, natural disaster⁷².”

Submitted almost two years before the devastation of Hurricane Katrina, the GAO report provided a word of warning about shortcomings within FEMA that have since been echoed in reports following Hurricane Katrina issued by the White House⁷³, the U.S. House of Representatives⁷⁴, and the U.S. Senate⁷⁵.

2.8 Katrina

Hurricane Katrina revealed that despite advances in technology and communication, and despite the creation of the Department of Homeland Security, the country remains ill prepared to respond to and recover from a major catastrophe. Systemic problems of management, resource allocation, and leadership within FEMA were also brought to light, which Congress has attempted to correct in the Post Katrina Emergency Management Reform Act of 2006.

Signed by President Bush on October 4, 2006, the Act works to correct the most glowing errors of FEMA's management following Hurricane Katrina and looks to build professional management and staff within FEMA. For example, the Act requires the head of FEMA to be a professional disaster manager who possesses a “demonstrated ability in and knowledge of emergency management and homeland security; and not less than 5 years of executive leadership and management

experience in the public or private sector⁷⁶.” Previously, there had been no such requirement, and often the head of FEMA was a political appointee who had little or no previous disaster experience.

To further improve professionalism within the agency, the act also requires FEMA to develop a human capital plan and career paths for its employees, authorizes recruitment and retention bonuses, and offers educational programs for senior staff⁷⁷.

To improve response, the Act establishes a new level for “Catastrophic Incidents⁷⁸,” that, when declared, will bring to bare “Regional Strike Teams⁷⁹” and a “Surge Capacity Force⁸⁰” to ensure that FEMA arrives on the scene as soon as possible and is backed up by enough staff to provide an effective response. Changes were also made to the Stafford Act to develop a national disaster housing strategy⁸¹, provide more money for pre-disaster mitigation⁸², and create programs to facilitate family reunions⁸³ and the location of displaced children⁸⁴.

Hurricane Katrina revealed far more than shortcomings within the management of FEMA. Combined with the September 11 attacks and the 2004 Tsunami, these events demonstrate that we now inhabit a world where catastrophes of unimaginable scale have become part of the every day reality. New policies must be developed, and the Stafford Act must be reformed to reflect this fact.

While the Post Katrina Act added a definition for “Catastrophic Incidents,” the catastrophic response provisions of the Post Katrina Act were not included in the Stafford Act, and as such there remains no distinction within the Stafford Act between a “major disaster” and a “catastrophe.”

SECTION 3: CATASTROPHIC INCIDENTS

Hurricane Katrina and the September 11th terrorist attacks underscore weaknesses in the nation's disaster relief policies as they relate to catastrophic events, a sentiment bluntly echoed in the White House report on the federal response to Hurricane Katrina:

“Our current system for homeland security does not provide the necessary framework to manage the challenges posed by 21st Century catastrophic threats⁸⁵.”

The failure of the federal government to respond in the hours and days immediately following Hurricane Katrina have been widely documented, and attempts are being made by the federal government to reform FEMA and improve the immediate response to disasters. However, long-term recovery and rebuilding following a catastrophic event remains plagued by recurring problems, including gaps in coverage and delays in providing aid to deserving individuals. This report does not focus on the shortcomings of the federal response immediately following catastrophes – these have been well documented by others⁸⁶. Nor does this report examine the day-to-day functioning of the Stafford Act – indeed, the Stafford Act adequately responds to most disasters that strike the United States, such as floods, tornadoes, and wildfires. Rather, this report focuses on long-term recovery and rebuilding efforts, and what can be done to improve the effectiveness of federal efforts following a catastrophic event. This section analyzes frequent problems and provides recommendations.

Catastrophes, by definition, tend to occur in large metropolitan regions due to the concentration of people and infrastructure. For example, a category 5 hurricane striking an undeveloped coast will generate less damage than a category 3 hurricane hitting a major city. Recent catastrophes include the 1989 Loma Prieta Earthquake (San Francisco), the 1994 Northridge Earthquake (Los Angeles), Hurricane Hugo (1989), Hurricane Andrew (1992), Hurricanes Katrina and Rita (2005), the Midwest Floods of 1993, and the September 11 attacks of 2001.

Generally speaking, disasters in densely developed urban areas have greater impacts than those that occur in rural areas due to the interconnectedness of metropolitan populations, economies and infrastructures, and their role in the national economy. An article by the *American Behavioral Scientist* stated, “The shock of severe disaster

in a major city creates a cascade of disruption among interdependent operating systems that shatters the existing functional capacity of the wider metropolitan region⁸⁷.”

The results of a catastrophe, and the failure to adequately recover, can have national and international ramifications, especially when critical infrastructure is damaged or destroyed. According to the Department of Homeland Security's National Response Plan, critical infrastructures are those concentrations of natural, physical and economic resources “so vital to the United States that their incapacity would harm the nation's physical security, economic security, or public health⁸⁸.” The costs associated with damage to critical infrastructure are enormous and impact not only the localities affected by the disaster directly, but also the nation as a whole.

The attacks on the World Trade Center virtually suspended international transportation and commerce for a day. By the end of 2001, jobs in the financial sector as a whole had declined by 9 percent in New York City, and employment in securities trading had dropped by 15 percent⁸⁹.

Hurricanes Katrina and Rita revealed the vulnerability of critical infrastructure clusters in the Gulf. Offshore oil and natural gas refineries were decimated, with approximately 90 percent of crude oil production and 70 percent of natural gas production in the Gulf of Mexico completely shut down in the month following the hurricanes⁹⁰. Katrina destroyed or severely damaged 66 energy-producing structures, while Rita destroyed or damaged 41 more. Fortunately, many of the high-volume platforms emerged unscathed, but one large platform, the Mars facility, which accounts for 10 percent of all Gulf of Mexico oil production, was so badly damaged that it was forced to stop production altogether until early 2006⁹¹. Rising gasoline and natural gas prices across the United States in the months following the hurricanes revealed the impact that damage to critical infrastructure in one region can have on the entire nation.

Other critical infrastructure clusters remain vulnerable to catastrophes. For example, the St. Louis and Memphis regions are home to some of the largest air cargo and freight rail traffic in the country. In 1812, the largest recorded earthquake to strike the continental United States – the New Madrid earthquake – hit approximately

150 miles south of St. Louis and was felt as far away as Charleston, South Carolina^{92 93}. Nearly a third of U.S. container ships enter Los Angeles area ports. A tsunami affecting the ports of Los Angeles could result in \$60 billion in damage and close them for two months⁹⁴. Should a natural or man-made disaster strike these places, the national economy, as well as the well-being of local individuals, would be put at serious risk.

3.1 New Policies for Catastrophic Incidents

As threats facing the nation have expanded to include acts of terrorism as well as natural disasters of unprecedented scale, and as more people move to areas vulnerable to catastrophic hurricanes and earthquakes, it has become critically important that federal disaster policy address catastrophic events.

Unfortunately, one of the biggest shortcomings of the Stafford Act is that it only recognizes two levels of disasters – emergencies and major disasters. Emergencies are normally smaller, limited scale events. The second category – major disasters – is intended for larger events, but this can run the gamut from a blizzard in Buffalo⁹⁵ to a major earthquake in California that impacts millions. A third category should be created to differentiate catastrophes from major disasters.

Recognition now exists within the government that a third level of response for catastrophic events is needed. Following Hurricane Katrina, Congress passed the Post-Katrina Emergency Management Reform Act of 2006⁹⁶, which was signed by President Bush on October 4, 2006. The law established a new level – a catastrophic incident – defined as:

“Any natural disaster, act of terrorism, or other man-made disaster that results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area⁹⁷.”

The new level, as it is established in the 2006 Act, is designed to improve the immediate federal response following a catastrophic incident by providing “Regional Strike Teams⁹⁸” and a “Surge Capacity Force⁹⁹” to ensure that FEMA arrives as soon as possible and is backed up by enough staff to provide an effective response.

The 2006 Act also made changes to the Stafford Act by requiring FEMA to develop a national disaster housing strategy¹⁰⁰ and create programs to facilitate family reunions¹⁰¹ and locate displaced children¹⁰². These changes are intended to prevent a repeat of the most visible problems caused by Hurricane Katrina. However, the catastrophic incident provisions of the Act were not included in the Stafford Act – they are included in sections of law that deal with national emergency management, and thus represent a further piecemeal development of federal disaster policy.

The new provisions will bring extra capacity to bear in the days and weeks following a major disaster if it rises to the level of a catastrophic incident. However, under the Stafford Act, the President may still only issue an emergency or major disaster declaration. In other words, for the long-term recovery aspects of the Stafford Act designed to rebuild devastated communities, there remains no distinction between a blizzard or tornado and the massive destruction caused by a catastrophic earthquake, hurricane, or terrorist attack.

Recommendation: Add a Definition for Catastrophic Incident to the Stafford Act

Amend Section 102 of the Stafford Act by adding the definition for a catastrophic incident, based on the definition in the Post-Katrina Emergency Management Reform Act of 2006¹⁰³, as:

“Any natural disaster, act of terrorism, or other man-made disaster that, in the determination of the President, results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area and warrants declaration of a catastrophic incident under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby¹⁰⁴.”

Further, amend the Stafford Act to provide additional support to state and local governments, utilities, small businesses, and individuals by adding a new subchapter

for Catastrophic Incident Assistance Programs, as outlined in the following subsections below.

Efforts should also be made to integrate portions of other laws and the National Response Plan that deal with catastrophic events into the Stafford Act to prevent conflicting and overlapping statutory requirements¹⁰⁵.

3.2 Strengthening Local Government

State and local governments are responsible for the bulk of rescue, recovery and rebuilding activities following a disaster. Police and fire departments perform rescues and ensure public order and safety. Building inspectors determine which structures are safe and which have to be demolished. Sanitation workers remove debris. Civil servants administer public recovery programs. All of this must be done before private sector can effectively rebuild.

Following a catastrophic event and facing a devastated tax base, state and local governments often find it difficult to meet day-to-day operating costs, and – unlike the federal government – many states and local governments must balance their budget and cannot utilize deficit spending to cover shortfalls. This can have devastating effects. For example, following Katrina, New Orleans had to lay off almost half of its workforce – some 3000 employees – due to a shortage of cash¹⁰⁶.

After the September 11 attacks, New York City lost anywhere from \$2.5 to \$2.9 billion in tax revenue for FY 2002 and 2003¹⁰⁷. Tax revenue losses following Hurricane Katrina were even more devastating. According to a Congressional Research Service report, almost three-quarters of Louisiana state personal income and retail sales (72.8 percent and 72.2 percent, respectively) were generated in the declared disaster parishes, with 24.3 percent of personal income and 22.3 percent of all retail sales generated in the New Orleans metropolitan statistical area (MSA)¹⁰⁸.

The Congressional Research Service (CRS) further estimated that if the region affected by Hurricane Katrina lost approximately half of its economic activity in September 2005, then the state of Alabama lost \$38.0 million in revenue, Mississippi \$108.0 million and Louisiana \$179.6 million for that month alone¹⁰⁹. Although longitudinal projections of tax revenue loss are difficult to assess, the impact on state and local tax coffers is clear: catastrophes have the potential to lower revenues to dangerously low levels, placing an

enormous burden on state and local budgets.

Under the Stafford Act, governments can apply for Community Disaster Loans (CDLs) to compensate for tax revenues lost in the wake of disasters. However, in 2000, a cap of \$5 million was placed on CDLs¹¹⁰. Local tax revenue losses following disasters, particularly in concentrated urban areas where large numbers of people are affected, easily exceeds the \$5 million cap. Faced with the loss of a significant proportion of the local tax base following a catastrophe, state and local governments are inadequately protected by the CDL provisions of the Stafford Act. Without supplemental appropriations from Congress, states and localities confronted with unprecedented losses in local tax revenue following a catastrophe do not have an adequate means to quickly recover forgone revenue and continue government services.

Recommendation: Expand the Reimbursement for Lost Tax Revenue

By being capped at \$5 million, Community Disaster Loans (CDLs) available under the Stafford Act are woefully inadequate to help governments recover from the loss of forgone local tax revenues following a catastrophe. When a catastrophe decimates a region, the local tax base may be crippled in the immediate term and recover only gradually. Under such circumstances, the provision of essential and potentially life-saving public services, along with the ability of state and local governments to finance long term rebuilding and recovery programs will be strained. Therefore, it is imperative that the \$5 million cap on CDLs be abolished.

Furthermore, sections of the Stafford Act that allow FEMA to fund overtime pay of public employees should be amended to allow FEMA to fund, in part or in full, the salaries of public employees in areas stricken by a catastrophe for a limited amount of time. This will ensure that areas impacted by a catastrophe do not face the dual challenge of overwhelming devastation and a bankrupt local government forced to layoff workers.

3.3 Utilities

The importance of utilities is often overlooked until their functionality is threatened. North American electric power systems revealed their vulnerability in August 2003, when a blackout swept across parts of the Midwest and the Northeast, interrupting the daily lives of millions of Americans. Following a catastrophe,

the restoration of utilities – electricity, water, sewer, and telecommunications – is critical. Lives can be saved and suffering minimized with rapidly restored utilities.

The Stafford Act only provides coverage to public or non-profit utility providers, thus failing to account for the modern utility industry that contains many private, for profit companies. As a result, the Stafford Act does not cover critical resources like electricity, water, and communications systems when they are provided by a private, for profit company.

Where the Stafford Act does provide coverage – to public or non-profit utility providers – it is divided into two parts. Up to 100 percent of the costs associated with performing emergency work in the aftermath of a disaster can be reimbursed. Secondly, up to 75 percent of the costs associated with rebuilding or replacing damaged infrastructure can be reimbursed.

September 11

As a result of the September 11th terrorist attacks, Consolidated Edison, the New York City electric and gas company, lost a major power substation at 7 World Trade Center. New York City-based telecommunications provider Verizon lost its facilities at 140 West Street – through which most Lower Manhattan telephone traffic was routed¹¹¹. Both companies, along with other energy and telecommunications firms, provided essential emergency and temporary services in the immediate aftermath of the attacks. The costs of providing such services and of rebuilding the damaged infrastructure were considerable, and they were borne, in large part, by the firms themselves. Neither Con Edison, a public-private enterprise, nor Verizon, a private company, were eligible for federal disaster relief under the Stafford Act.

Although Congress appropriated \$783 million through the U.S. Department of Housing and Urban Development (HUD) to compensate for damaged properties and businesses (including the restoration of utility infrastructure) related to the September 11th attacks¹¹², energy and telecommunications firms were forced to wage several battles with the federal government to win reimbursement. Ultimately, costs incurred by New York City utility companies for emergency and temporary services provided during the days and weeks immediately following the attacks were reimbursed in full, and the costs associated with permanent restoration and infrastructure improvements were reimbursed at 75 percent of proven costs¹¹³. This outcome is the same as

afforded automatically to public or private non-profit utilities under the Stafford Act – but the money was not paid to the private utilities until 2003 – two full years after the attacks.

Hurricane Katrina

According to the Federal Communications Commission, Hurricane Katrina destroyed more than 3 million customer phone lines, and more than a thousand cell phone sites¹¹⁴. Private telecommunications firms were among the first to repair destroyed communications lines, patching their way into New Orleans in the wake of Hurricane Katrina well ahead of the federal government. As occurred following September 11, under current federal disaster reimbursement policies these companies are unlikely to be compensated for the parts and labor used in their emergency recovery efforts unless special disposition is made.

Katrina also revealed another shortcoming of federal policy – that utility workers are not treated as emergency responders. As recounted in news reports, “BellSouth found a soggy, unhappy crowd of people outside its main downtown New Orleans switching facility soon after Katrina blew over. Company executives said they feared the crowd would try to forcibly enter the building to seize the food and water supplies inside – which could have disrupted the fragile telecommunications network even more¹¹⁵.” Fearing for their safety, and with gun shots being fired, BellSouth was forced to evacuate the building, shutting down phone lines in New Orleans that were still functional. BellSouth requested security and other assistance from the federal government, but were deigned priority because the Stafford Act did not cover them¹¹⁶.

Recommendation: Expand Coverage for Private Utilities

The Stafford Act should be amended so that, following a catastrophe, utility workers are recognized as “emergency responders,” thus enabling them to receive security escorts and priority access to food, fuel, water, and shelter.

While expansion of Stafford Act coverage to non-government entities is controversial, we further recommend that the act be modified to provide reimbursement to private, for profit utilities for emergency work performed following a catastrophe, as ultimately occurred after the September 11 attacks. The

Act should also be amended to provide federal funding to restore damaged or destroyed facilities, as is already afforded to public and not for profit utility companies.

3.4 Small Business

Small businesses form the backbone of the United States economy. This is especially true in urban areas, where corner delis, dry cleaners, and other businesses constitute the “soft” infrastructure of the center city¹¹⁷. In 2004, small businesses represented 99.7 percent of all employer firms and employed half of all private sector employees in the United States. According to the Small Business Administration’s Office of Advocacy, small businesses have generated between 60 and 80 percent of net new jobs annually over the last decade and are an indispensable driver behind U.S. economic growth, creating more than 50 percent of non-farm private gross domestic product (GDP)¹¹⁸.

More than 4,400 small businesses, employing some 43,522 workers, were located in the immediate vicinity of the World Trade Center when the attacks occurred in 2001. Of those, more than 700 small businesses, employing 8,005 workers, were destroyed in the World Trade Center complex alone¹¹⁹. In the 45 days following the attacks, \$795 million in sales were lost at the more than 3,400 businesses that were made inaccessible by the destruction¹²⁰. Following Hurricane Katrina, in the greater New Orleans region, more than 72,000 businesses were damaged, of which 85 percent had fewer than 19 employees. And in Mississippi, an estimated 70,000 businesses were either completely destroyed or severely damaged by Katrina¹²¹. Insurance may cover physical losses, but without further assistance, even the hardiest of small businesses will find it difficult to recover from the economic losses generated by a catastrophe.

Under current federal policy, when a major disaster is declared, businesses are referred to the Small Business Administration’s Economic Injury Disaster Loan (EIDL) Program. Open only to businesses located in a federally declared disaster area, EIDLs help small businesses meet financial obligations that they could have met had the disaster not occurred. EIDLs are capped at \$1.5 million in assistance to each business, and include both economic injury and physical damage assistance that can be used to replace real estate and inventory, cover payroll, and pay rent and utility bills¹²².

Many small businesses are unable to meet loan eligibility requirements, or they simply cannot survive long enough for federal assistance to arrive. This is what occurred in

New York City following the September 11th terrorist attacks. Many small businesses in Lower Manhattan did not qualify for the Small Business Administration’s EIDL program because they were unable to meet its requirements, which the SBA states are similar to what “generally is required for a bank loan¹²³”. While the SBA is as flexible as possible, important documents may have been destroyed, or may never have existed in the first place as many small businesses do not have the resources needed to keep detailed records. As Don Wilson, President of the national Association of Small Business Development Centers explained following Katrina, “Even if your CPA has copies of your records, their records may have been destroyed¹²⁴.”

As is true in many urban centers, the small businesses that clustered in Lower Manhattan were the corner delis, dry cleaners, and other businesses that bring vitality to the community and provide essential services that make it possible for businesses and residents to function in the neighborhood. Fortunately, to address the needs of these small businesses, private and non-profit Community Development Financial Institutions (CDFIs) stepped in.

Seedco, a national community development operating intermediary, and its CDFI subsidiary, Seedco Financial Services, assembled a comprehensive package of business supports including grants, loans, wage subsidies, and technical assistance to address the needs of the Lower Manhattan small businesses left devastated by the September 11th terrorist attacks¹²⁵.

The strength of Seedco’s business disaster assistance package, the Lower Manhattan Small Business & Workforce Retention Project (LMSB&WRP), lay in its multifaceted range of services. The LMSB&WRP was launched in the month immediately following the attacks and first facilitated small business’ access to affordable debt financing. At that time, businesses were in need of cash infusions – not million dollar loans, but quick grants and loans of a few thousand dollars – to help defray costs associated with physical damages, rent and other short-term expenses. By helping small business owners gain access to a combination of loans and grants, Seedco was able to mitigate some of the financial burden of recovery.

Targeting their eligibility criteria so that financing would reach very small businesses with concentrations of low-wage workers, Seedco was able to provide \$40 million in financial assistance to more than 1,500 businesses¹²⁶. The LMSB&WRP alone provided 383

loans to small businesses, awarded 763 grants, and aided 276 businesses with wage subsidies¹²⁷.

Seedco was not alone in its efforts to help rebuild Lower Manhattan's small business community in the wake of the terrorist attacks. According to a 2003 report by the National Community Capital Association, nine other CDFIs helped provide much needed financial assistance to Lower Manhattan's recovery efforts, and four of those had disaster recovery financing programs in place within weeks of 9/11: ACCIÓN New York, the Nonprofit Finance Fund, Renaissance Economic Development Corporation and Seedco¹²⁸.

In contrast, federal efforts intended to supplement shortcomings in the Stafford Act were made available to the entire country and were not focused exclusively on Lower Manhattan. A report released by the Small Business Administration's (SBA) Inspector General reveals that the agency's Supplemental Terrorist Activity Relief loans – which were set up to aid businesses “adversely affected” by the attacks – made loans to offices, franchises and businesses in places as far away from Ground Zero as Texas and Alaska. Investigators also found that of 59 loans examined, 85 percent were awarded to businesses that did not provide sufficient proof of financial harm caused by the terrorist attacks. The report underscores the weaknesses in the distribution of federal disaster aid to small businesses and the critical need for an improved, focused, and streamlined system for loan appropriation from the federal government¹²⁹.

As the risk of terrorism has joined natural disasters the long list of threats faced by the United States, and as disasters continue strike in densely populated urban areas, relief policies for local businesses must change to address the needs of a broader swath of small business owners. Small business' fundamental role as an employer and engine of the local economy underscores the critical need for assistance when a catastrophe strikes. Getting small businesses back on their feet following catastrophes on the magnitude of September 11th and Hurricane Katrina must become a priority of rebuilding and recovery efforts.

Recommendation: Reform Loans for Small Businesses

Following catastrophes, small businesses often require a quick cash infusion of a few thousand dollars to cover rent, payroll, and other short-term expenses. The federal government provides loans, but small businesses often

lack resources to meet expenses during the period that is required to process federal loans. Currently, private and non-profit Community Development Financial Institutions (CDFIs) fill the gap and provide expedited micro loans and grants to small businesses. The federal government should establish similar programs within the Stafford Act, and provide greater assistance to CDFIs in order to expand their ability to provide aid following catastrophes.

As demonstrated after the September 11 attacks and Hurricane Katrina, many small businesses could not meet the strict eligibility requirements for EIDLs. Modifications should be made to allow established small businesses to receive support, even if they cannot meet the paperwork requirements. For example, waivers could be provided to small businesses that have been established in the neighborhood for a decade or more. Furthermore, federal efforts should be targeted to the immediate vicinity of the catastrophe, thus ensuring that aid flows to businesses that have been directly impacted by the catastrophe.

Currently, there are no federal grant programs – only loans – to assist small businesses. We further recommend converting some federal assistance for small businesses from loans to grants in order to ease the burden of loan repayments following a catastrophe. The amount of grants versus loans could be weighted depending on the size and history of the business.

3.5 Insurance

An underlying assumption of federal policy is that assistance to business and individuals should first come from insurance. The Stafford Act states, “The President... shall assure that no such person, business concern, or other entity will receive such assistance with respect to any part of such loss as to which he has received financial assistance under any other program or from insurance or any other source¹³⁰.”

It is FEMA's stated policy to encourage individuals and state and local governments to obtain insurance coverage¹³¹, and FEMA has stated when reviewing applications for assistance, “We consider the amount of insurance coverage because, by law, federal disaster assistance cannot duplicate insurance coverage¹³².”

It is essential for businesses and individuals to have insurance, and for the government to encourage insurance coverage as to minimize the amount of taxpayer money spent following a disaster. The problem is that,

following a catastrophe, important documents needed by businesses and individuals to document ownership and proof of insurance may have been lost, making it difficult for people to apply and receive government assistance in a timely fashion. Even more troubling, insurance companies have moved to minimize losses, leaving victims in difficult financial positions and, as demonstrated along the Gulf Coast, hampering the ability of the private sector to jump into action and rebuild.

In a bid to avoid payouts to those who had hurricane – but not flood – coverage following Katrina, insurance companies argued that the damage in New Orleans was caused by flooding, not the hurricane, and that the devastation along the Gulf Coast was caused by surge flooding, not hurricane winds^{133 134 135}. According to a report in the *New Orleans Times-Picayune*, “Representative Gene Taylor, a Republican from Mississippi, whose home was destroyed by Hurricane Katrina and denied coverage under his State Farm policy, said he obtained a copy of a memorandum from company headquarters instructing adjusters to deny wind claims in cases where damage was caused by both water and wind. That decision, which he called unconscionable, led to thousands of claims being denied¹³⁶.”

In February 2007, State Farm was found by a federal judge in Mississippi to have acted in a “grossly negligent way¹³⁷” after denying a homeowner’s claim following the hurricane¹³⁸. Numerous other Katrina related lawsuits against insurance companies are making their way through the courts, and in time judgments will be levied and settlements reached, resulting in payouts – but this may not come until years after the hurricane.

This is a considerable departure from the actions of Lloyds of London following the 1906 San Francisco Earthquake, which ordered its agents in San Francisco to, “Pay all our policyholders in full irrespective of the terms of their policies¹³⁹.”

Even when insurance companies act to make payments, the devastation that follows a catastrophe can overwhelm the industry and result in multi-month delays in insurance payments. Nearly 9 months after the hurricane hit, the insurance modeling firm ISO estimated that Louisiana had \$24.3 billion in insured losses, but records from the Louisiana Department of Insurance showed that only half that amount – \$12.5 billion – had been paid out by April 2006¹⁴⁰. A year after Katrina, thousands in Mississippi were also still waiting for insurance payments¹⁴¹.

Recommendation: Provide Assistance Regardless of Insurance Coverage

Government policy must continue to encourage insurance coverage so that insurance, and not taxpayers, foot the majority of the bill following a catastrophe. However, the Stafford Act and its regulations should be modified to allow cash assistance – which is capped at \$30,000 per household, and further subdivided with caps on repairs, temporary housing assistance, and other items – to flow to qualified homeowners and renters following a catastrophe without having to provide proof of insurance coverage. This will provide devastated families with immediate assistance in order to begin the recovery process. This assistance could later be reimbursed to the government when insurance coverage is received, or through income taxes.

3.6 Congressional Appropriations and Regulations

Following a catastrophe, Congress historically appropriates billions of dollars and includes special provisions to provide direct assistance to government, private utilities, small businesses, and individuals beyond what is authorized by the Stafford Act. Following the 1994 Northridge (Los Angeles) Earthquake, Congress appropriated \$11 billion¹⁴². \$40 billion was appropriated following the September 11 attacks¹⁴³, and \$110 billion after Hurricanes Katrina and Rita¹⁴⁴.

The distribution of this funding, along with Stafford Act assistance, is governed by an elaborate, but well intentioned, set of procedures. The result is that it takes months, if not years, for the responsible federal agencies to process and distribute the assistance. As illustrated by a January 2007 Wall Street Journal study, of the \$110 billion provided by Congress for the Gulf Coast, “no where near that amount of actual cash has been made available¹⁴⁵.” Of \$42 billion given to FEMA, \$25 billion has been spent. The Army Corps of Engineers has spent \$1.3 billion out of \$5.8 billion for levee repairs, and the Department of Housing and Urban Development has spent \$1.7 billion out of \$17 billion received¹⁴⁶.

Often the delays are not caused by provisions of the law, but rather exist within regulations and interpretations. In contrast to the present situation along the Gulf Coast, during the 1990s, FEMA successfully responded to catastrophes and major disasters like the 1993 Midwest floods and the 1994 Oklahoma City bombing by relaxing the regulations that implement the Stafford Act. This allowed FEMA to “give more aid more quickly¹⁴⁷” following a disaster.

Recommendation: Block Grants and Regulatory Reform

With the bulk of immediate rescue and recovery work, along with long term planning, zoning, and rebuilding in the hands of state and local governments, federal assistance should be provided to state and local governments as quickly as possible.

In addition, FEMA should redesign its Public Assistance Program so that one damage survey and estimate can be written for each affected community or state. This will allow FEMA to quickly provide assistance to states and local governments in a form similar to a block grant.

FEMA should redesign its Public Assistance Program so that one damage survey and estimate can be written for each affected community or state. This will allow FEMA to quickly provide assistance to state and local governments in a form similar to a block grant, and will enable state and local governments to use the money as they see fit to provide assistance to residents and businesses, rebuild infrastructure, and cover lost tax revenue.

Beyond this, every catastrophe poses unique challenges. While the recommendations outlined by this report are necessary to provide adequate assistance and long term recovery following a catastrophe, they may not meet all needs. A general rider within the Stafford Act for catastrophic events, giving the President, in consultation with Congress, the authority to waive Stafford Act provisions and regulations following a catastrophe represents the most effective means of providing regulatory flexibility following a catastrophe. To prevent an open ended mandate, the rider could also require the President, after an initial damage assessment, and in coordination with Congress, to set a cap on the amount of immediate and long term recovery assistance that will be provided for the catastrophe.

3.7 Mitigation and Modernization

Many catastrophes are predictable and will occur again. Another major earthquake will strike California. Another hurricane will hit the Gulf Coast. During the 1990s, FEMA aggressively moved to prevent recurring disasters. According to Howard Kunreuther, co-director of the Wharton Risk Center at the University of Pennsylvania, FEMA, “Got communities to take practical steps like encouraging homeowners to bolt buildings to foundations in earthquake-prone areas and elevate living

space in flood-prone ones¹⁴⁸.”

Following the 1993 Mississippi River floods, FEMA bought homes and businesses near the river and relocated the occupants to higher ground. According to the *Los Angeles Times*, the result for one Illinois town was that “although more than 400 people applied for disaster aid after the (1993) flood, only 11 needed to apply two years later when the river again jumped its banks¹⁴⁹.”

Following a disaster, up to 20% of funding provided by FEMA can be directed towards mitigation efforts to prevent future damage. The Stafford Act also allows funds to be used to upgrade damaged infrastructure so that it incorporates the latest safety features. However, mitigation practices are not standardized, and limited staff and planning resources can hamper results.

Recommendation: Build Up Mitigation Capacity

Following catastrophes, FEMA and Congress should act to relocate property and infrastructure away from disaster prone areas. Regulations should be reformed to aggressively encourage the reconstruction of improved infrastructure. In addition to providing funding for mitigation projects, Congress should fund mitigation staff and planning capacity within state and local governments. Without the underlying capacity to provide effective mitigation, no amount of money will result in the reconstruction of devastated communities in a way that prevents future catastrophes.

3.8 Twenty-First Century Threats

Not all disasters qualify as a major disaster. Only “Natural catastrophes (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion¹⁵⁰” qualify as a major disaster under the Stafford Act. Chemical, biological, radiological, or nuclear incidents do not qualify as a major disaster under the Stafford Act.

The President possesses power under other laws, including the Comprehensive Environmental Response, Compensation, and Liability Act of 1980¹⁵¹ and the National Emergencies Act,¹⁵² to respond to major disturbances of the public order, environmental disasters, and incidents that result in the release of hazardous substances¹⁵³. Title V of the Homeland Security Act of 2002 also gives Department of Homeland Security the

power to act in the event of a nuclear or public health incident¹⁵⁴.

However, these laws do not provide financial assistance designed to aid recovery, which is guaranteed by the Stafford Act. If needed, the President may declare an emergency under the Stafford Act, but this limits federal assistance to \$5 million, unless expanded by the President¹⁵⁵. If a chemical, biological, radiological, or nuclear attack or accident occurs, and if the recommendations of this report are adopted, such an incident could be declared a catastrophe. Nevertheless, there remains the possibility of a smaller scale incident that does not rise to the level of a catastrophe, but exceeds the scope of an emergency. To provide flexibility, the definition of a major disaster should be amended to allow the full range of Stafford Act options to come into play following a chemical, biological, radiological, or nuclear attack or accident.

The possibility of an accident or attack involving a chemical, biological, radiological, or nuclear agent remains a very real threat. Beyond causing a large number of casualties, such an incident has the potential to devastate local economies, wreck havoc on infrastructure, and generate the need for temporary housing. Recovery will require extensive, long-term investment, which the major disaster assistance programs of the Stafford Act are designed to facilitate. If the recommendations of this report covering catastrophic incidents are not adopted, it becomes even more imperative to amend the definition of a major disaster to include chemical, biological, radiological, or nuclear attacks or accidents.

Recommendation: Revise the Definition of a Major Disaster

The definition of a major disaster in Section 102 of the Stafford Act should be revised to include a chemical, biological, radiological, or nuclear attack or accident. This will provide the federal government new flexibility to, should such incident occur, declare it a major disaster and provide recovery assistance.

CONCLUSION

In the wake of the September 11th terrorist attacks and the devastation wrought by Hurricane Katrina, the limitations of the Stafford Act in providing federal disaster relief following a catastrophe have become increasingly clear. The need for reform of The Stafford Act has never been greater. As the White House report on the federal response to Hurricane Katrina stated:

“Our current system for homeland security does not provide the necessary framework to manage the challenges posed by 21st Century catastrophic threats¹⁵⁶.”

Catastrophic Events

The Stafford Act’s definition of a major disaster makes no distinction between a blizzard striking Buffalo and the devastation of Hurricane Katrina or the September 11 attacks. Section 102 of the Stafford Act should be amended to add a definition for a catastrophic incident, based on the definition in the Post-Katrina Emergency Management Reform Act of 2006¹⁵⁷, as:

“Any natural disaster, act of terrorism, or other man-made disaster that, in the determination of the President, results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area and warrants declaration of a catastrophic incident under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby¹⁵⁸.”

Expanded Coverage

Apart from failing to account for catastrophic events, the Stafford Act contains significant gaps that do not recognize 21st century threats. For example, the definition of a major disaster does not cover chemical, biological, radiological, or nuclear attacks or accidents, leaving questions about the scope of the federal response and types of assistance to be provided should such an incident occur. The definition of a major disaster in section 102 of the Act should be amended to include coverage for chemical, biological, radiological, or nuclear attacks or accidents.

The Act also does not recognize the modern utility industry. It only provides coverage to public and non-profit utility providers, failing to account for private, for profit utility companies that exist in many of today’s markets. The act should be amended to provide assistance to private, for profit utilities following a disaster. The act should also be amended to recognize utility workers as “emergency responders,” enabling them to receive security escorts and priority access to food, fuel, water, and shelter.

Moreover, the Act places limits on the amount of coverage that can be provided, which can hamper recovery efforts. Loans to governments designed to reimburse for lost tax revenue are capped at \$5 million, and loans to small businesses following a disaster are capped at \$1.5 million. In both cases, only loans – and not grants – are offered, and in both cases, the amount of assistance offered often pales in comparison to the need. These caps and the types of assistance offered to local governments and small businesses should be revisited.

To assist state and local governments that may face cash shortfalls following a catastrophe, sections of the Stafford Act that allow FEMA to fund overtime pay of public employees should be amended to allow FEMA to fund, in part or in full, the salaries of public employees in areas stricken by a catastrophe for a limited amount of time. This will ensure that areas impacted by a catastrophe do not face the dual challenge of overwhelming devastation and a bankrupt local government forced to layoff workers.

Expedited Coverage

Following catastrophes such as the September 11 attacks and Hurricane Katrina, Congress frequently appropriates billions of dollars beyond what is authorized by the Stafford Act to assist long-term rebuilding and recovery. However, this money is routed through federal agencies for distribution – often resulting in delays of a year or more before it reaches its intended recipients, thus slowing recovery efforts.

FEMA should redesign its Public Assistance Program so that one damage survey and estimate can be written for each affected community or state. This will allow FEMA to quickly provide assistance to state and local governments in a form similar to a block grant.

With regard to the provision of assistance to businesses and individuals, the underlying assumption of federal

policy is that assistance should first come from insurance. It is both prudent and necessary for businesses and individuals to have insurance, and for the government to encourage insurance coverage in order to minimize the amount of taxpayer money that is spent following a disaster. Regrettably, following a catastrophe, insurance companies move to minimize losses and federal regulations make it difficult to receive government assistance in a timely fashion, leaving victims in a difficult financial position. The Stafford Act and its regulations should be modified to allow cash assistance – which is capped at \$30,000 per household, and further subdivided with caps on repairs, temporary housing assistance, and other items – to flow to qualified homeowners and renters following a catastrophe, regardless of insurance coverage in order to cover immediate costs and jump start the recovery. This assistance could later be reimbursed to the government when insurance coverage is received, or through income taxes.

During the 1990s, FEMA successfully responded to catastrophes and major disasters like the 1993 Midwest floods and the 1994 Oklahoma City bombing by relaxing regulations that implement the Stafford Act. This allowed FEMA to give aid more quickly following a disaster. Given the immediate need for cash following a catastrophe, FEMA's regulations should be revised to allow more flexibility in providing assistance to deserving individuals and businesses, and to close bureaucratic catch 22's that frustrate the granting of assistance.

While the recommendations outlined by this report are necessary to provide adequate assistance and long term recovery following a catastrophe, they may not meet all needs. A general rider within the Stafford Act for catastrophic events, giving the President, in consultation with Congress, the authority to waive Stafford Act provisions and regulations following a catastrophe represents the most effective means of providing regulatory flexibility following a catastrophe. To prevent an open ended mandate, the rider could also require the President, after an initial damage assessment, and in coordination with Congress, to set a cap on the amount of immediate and long term recovery assistance that will be provided for the catastrophe.

Mitigation

Many catastrophes are predictable and will occur again. Another major earthquake will strike California. Another hurricane will hit the Gulf Coast. Following a disaster, up to 20% of funding provided by FEMA can be directed towards mitigation efforts to prevent future

damage. The Stafford Act also allows funds to be used to upgrade damaged infrastructure so that it incorporates the latest safety features. However, mitigation practices are not standardized, and limited staff and planning resources can hamper results. Regulations should be reformed to aggressively encourage the reconstruction of improved infrastructure, and, in addition to providing funding for mitigation projects, Congress should fund mitigation staff and planning capacity within state and local governments. Without the underlying capacity to provide effective mitigation, no amount of money will result in the reconstruction of devastated communities in a way that prevents future catastrophes.

Conclusion

In an era in which the United States faces unprecedented challenges and threats to the safety and well being of its citizens, the Stafford Act should be amended so that state and local governments are no longer forced to contend with an outdated federal disaster policy that does not recognize twenty-first century threats, does not address catastrophic events, and delays long term recovery by channeling funds through an array of federal agencies instead of providing assistance directly to state and local governments.

NOTES

- ¹ 42 U.S.C. 5121 et. seq.
- ² 42 U.S.C. 5122
- ³ 42 U.S.C. 5193
- ⁴ 42 U.S.C. 5192
- ⁵ The law stipulates \$25,000, as adjusted for inflation based on the Consumer Price Index. In 2006 dollars the adjustment comes out to \$29,268.
- ⁶ 42 U.S.C. 5122
- ⁷ 42 U.S.C. 5170 et seq.
- ⁸ The law stipulates \$25,000, as adjusted for inflation based on the Consumer Price Index. In 2006 dollars the adjustment comes out to \$29,268.
- ⁹ 42 U.S.C. 5122
- ¹⁰ “FEMA: Annual Major Disaster Declaration Totals.” FEMA Website. Online. http://www.fema.gov/news/disaster_totals_annual.fema. Accessed February 14, 2007.
- ¹¹ “FEMA: 1992 Federal Disaster Declarations.” FEMA. Online. <http://www.fema.gov/news/disasters.fema?year=1992> Accessed March 1, 2007
- ¹² 50 U.S.C. 1601 et seq.
- ¹³ 42 U.S.C. 9601 et seq.
- ¹⁴ Bea, Keith. “Report for Congress: Federal Disaster Policies After Terrorists Strike: Issues and Options for Congress.” Congressional Research Service: The Library of Congress. June 24, 2002. Page CRS-22.
- ¹⁵ Pub. L. No. 107-296
- ¹⁶ 42 U.S.C. 5170 and 42 U.S.C. 5191
- ¹⁷ 42 U.S.C. 5143
- ¹⁸ Data and the types of major disasters and emergencies listed are from “FEMA: Annual Major Disaster Declaration Totals.” FEMA Website. Online. http://www.fema.gov/news/disaster_totals_annual.fema. Accessed February 14, 2007.
- ¹⁹ Northeast Blackout of 2003
- ²⁰ For efforts following a Grain Elevator Explosion in Kansas.
- ²¹ 43 of the emergency declarations were related to sheltering Hurricane Katrina evacuees in other states.
- ²² For clean up in Texas and Louisiana following the Space Shuttle Columbia Disaster.
- ²³ For Virginia and New Jersey, as related to 9/11
- ²⁴ For New York and Virginia, as related to 9/11
- ²⁵ For actions related to controlling the West Nile Virus outbreak in New York City.
- ²⁶ “FEMA” The Declaration Process.” FEMA Website. Online. http://www.fema.gov/rebuild/recover/dec_guide.shtm Accessed February 14, 2007
- ²⁷ FEMA regulations, 206.36 (d).
- ²⁸ “FEMA” The Declaration Process.” FEMA Website. Online. http://www.fema.gov/rebuild/recover/dec_guide.shtm Accessed February 14, 2007
- ²⁹ “Incidents of National Significance” were created by the National Response Plan (see page 4 of the plan) and Homeland Security Presidential Directive #5, which can be viewed online at <http://www.whitehouse.gov/news/releases/2003/02/20030228-9.html>
- ³⁰ “DHS: National Special Security Events Fact Sheet.” Department of Homeland Security. Online. http://www.dhs.gov/xnews/releases/press_release_0207.shtm Accessed February 14, 2007
- ³¹ U.S. House of Representatives, *A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*, op cit., p. 131.
- ³² U.S. House of Representatives, *A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*, op cit., p. 131.
- ³³ “The Department of Homeland Security,” President George W. Bush, June 2002, p. 2 (available online at <http://www.dhs.gov/interweb/assetlibrary/book.pdf>)
- ³⁴ Chhean, Chhun, and Kakkar, Puneet. “Prime & Prepared: Updating the Stafford Act for a Coordinated National Response.” University of California, Berkeley School of Law. Spring 2006. Online. http://www.law.berkeley.edu/library/disasters/Chhean_Kakkar.pdf
- ³⁵ FEMA. FEMA History. Online. <http://www.fema.gov/about/history.shtm> Accessed April 23, 2007
- ³⁶ Gosselin, Peter and Miller, Alan. “Why FEMA Was Missing in Action.” Los Angeles Times. September 5, 2005. Online. <http://www.latimes.com/news/nationworld/nation/la-na-fema5sep05,1,2869010,full.story?coll=la-headlines-nation>
- ³⁷ Roberts, Patrick. “FEMA After Katrina.” Hoover Institution Policy Review #137. Online. <http://www.policyreview.org/137/roberts.html>. Accessed February 14, 2007.
- ³⁸ Gosselin, Peter and Miller, Alan. “Why FEMA Was Missing in Action.” Los Angeles Times. September 5, 2005. Online. <http://www.latimes.com/news/nationworld/nation/la-na-fema5sep05,1,2869010,full.story?coll=la-headlines-nation>

ep05,1,2869010,full.story?coll=la-headlines-nation

³⁹ “House Journal --Friday, January 14, 1803” in Journal of the House of Representatives of the United States, 1801-1804. Online <http://memory.loc.gov/cgi-bin/ampage?collId=llhb&file Name=021/llhb021.db&recNum=41>. Accessed February 14, 2007

⁴⁰ A list of legislation can be found in Representative Harold Hagan, “Authorizing Federal Assistance to States and Local Governments in Major Disasters,” Remarks in House, *Congressional Record*, Vol. 96, August 7, 1950, p. 11900-02, as reported in Congressional Research Service Memorandum from Keith Bea to Honorable Carolyn Maloney, November 26, 2001.

⁴¹ Public Law 81-875

⁴² Federal Emergency Management Agency (FEMA), *FEMA Independent Study Course 292: Disaster Basics*, “Unit 2: Background of Federal Disaster Assistance,” 2-5

⁴³ Congressional Research Service Memorandum from Keith Bea to the Honorable Carolyn Maloney. November 26, 2001.

⁴⁴ Public Law 81-875 mandated the following: “Provided that, in any major disaster, Federal agencies are authorized, when directed by the President, to provide assistance by performing on public or private lands protective and other work essential for the preservation of life and property, clearing debris and wreckage, making emergency repairs to and temporary replacements of public facilities of local governments damaged or destroyed in such major disaster, and making contributions to States and local governments for purposes stated in the Act.” (Available online at

<http://www.nww.usace.army.mil/dpn/publaw.htm#81-875-topics>, accessed February 26, 2007)

⁴⁵ Roberts, Patrick. “FEMA After Katrina.” Hoover Institution Policy Review #137. Online. <http://www.policyreview.org/137/roberts.html>. Accessed February 14, 2007.

⁴⁶ Federal Emergency Management Agency (FEMA), *FEMA Independent Study Course 292: Disaster Basics*, “Unit 2: Background of Federal Disaster Assistance,” 2-5

⁴⁷ 42 U.S.C. § 5143 Sec. 302 (available online at <http://www.fema.gov/library/stafact.shtm>)

⁴⁸ NOAA. “Natural Disaster Survey Report 74-1.” National Oceanic and Atmospheric Administration. Online. <http://www.publicaffairs.noaa.gov/storms/description.html> Accessed February 26, 2007.

⁴⁹ Public Law 93-288

⁵⁰ Federal Emergency Management Agency (FEMA), *FEMA Independent Study Course 292: Disaster Basics*, op cit., 2-6.

⁵¹ Federal Emergency Management Agency (FEMA), *About FEMA: Helping People Before, During, and After Disasters*, “FEMA

History” (available online at <http://www.fema.gov/about/history.shtm>)

⁵² Federal Emergency Management Agency (FEMA), *About FEMA: Helping People Before, During, and After Disasters*, “FEMA History” (available online at <http://www.fema.gov/about/history.shtm>)

⁵³ Roberts, Patrick. “FEMA After Katrina.” Hoover Institution Policy Review #137. Online. <http://www.policyreview.org/137/roberts.html>. Accessed February 14, 2007.

⁵⁴ National Academy of Public Administration. *Coping with Catastrophe*. February 1993, Page 13.

⁵⁵ Kamarck, Elaine. “The Gathering Storm.” Democracy: A Journal of Ideas. Issue #1, Summer 2006. Online. <http://www.democracyjournal.org/article.php?ID=6479> Accessed February 26, 2007.

⁵⁶ Kamarck, Elaine. “The Gathering Storm.” Democracy: A Journal of Ideas. Issue #1, Summer 2006. Online. <http://www.democracyjournal.org/article.php?ID=6479> Accessed February 26, 2007.

⁵⁷ Federal Emergency Management Agency (FEMA), *FEMA Independent Study Course 292: Disaster Basics*, op cit. 2-7.

⁵⁸ 42 U.S.C. § 4121 et seq. (available online at <http://www.fema.gov/library/stafact.shtm>)

⁵⁹ 42 U.S.C. § 5122 (2) (available online at <http://www.fema.gov/library/stafact.shtm>)

⁶⁰ A federally declared *emergency* is defined as a “any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.” For more information on the distinction between *major disaster* and *emergency* declarations, see 42 U.S.C. § 5122 Sec. 102.

⁶¹ Mitigation grants are federal disaster grants aimed at lessening the impact that disasters have on both people and property. FEMA currently has three mitigation grant programs: the Hazards Mitigation Grant Program (HGMP), the Pre-Disaster Mitigation program (PDM), and the Flood Mitigation Assistance (FMA) program.

⁶² U.S. Department of Homeland Security, *National Response Plan*, December 2004, p. 69 (available online at http://www.dhs.gov/dhspublic/interapp/editorial/editorial_0566.xml)

⁶³ 50 U.S.C. App.

⁶⁴ Federal Emergency Management Agency (FEMA), *FEMA Independent Study Course 292: Disaster Basics*, op cit. 2-8.



- ⁶⁵ Roberts, Patrick. "FEMA After Katrina." *Hoover Institution Policy Review* #137. Online. <http://www.policyreview.org/137/roberts.html>. Accessed February 14, 2007.
- ⁶⁶ United States General Accounting Office, *Disaster Assistance: Information on Federal Costs and Approaches for Reducing Them*, Statement of Judy A. England-Joseph, Director, Housing and Community Development Issues, Resources, Community and Economic Development Division, March 1998 (available online at <http://www.gao.gov/archive/1998/rc98139t.pdf>)
- ⁶⁷ "FEMA: The Disaster Mitigation Act of 2000." *FEMA*. Online. <http://www.fema.gov/plan/mitplanning/DMA.shtm>. Accessed February 14, 2007
- ⁶⁸ The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 51221, et seq., as amended by the Disaster Mitigation Act of 2000, Pub L. No 106-390, 114 Stat. 1552 (2000) (the Stafford Act).
- ⁶⁹ "The Department of Homeland Security," President George W. Bush, June 2002, p. 1 (available online at <http://www.dhs.gov/interweb/assetlibrary/book.pdf>)
- ⁷⁰ "The Department of Homeland Security," President George W. Bush, June 2002, p. 1 (available online at <http://www.dhs.gov/interweb/assetlibrary/book.pdf>)
- ⁷¹ Gosselin, Peter and Miller, Alan. "Why FEMA Was Missing in Action." *Los Angeles Times*. September 5, 2005. Online. <http://www.latimes.com/news/nationworld/nation/la-na-fema5sep05,1,2869010,full.story?coll=la-headlines-nation>
- ⁷² United States Government Accountability Office, "Disaster Assistance: Federal Aid to the New York City Area Following the Attacks of September 11th and Challenges Confronting FEMA," Statement of Jayetta Z. Heckler, Director, Physical Infrastructure Issues, September 24, 2003, p. 27-28 (available online at <http://www.gao.gov/new.items/d031174t.pdf>)
- ⁷³ The White House. *The Federal Response to Hurricane Katrina: Lessons Learned, A Report Submitted to President George W. Bush* by Frances Townsend, Assistant to the President for Homeland Security and Counterterrorism, February 23, 2006, (available online at <http://www.whitehouse.gov/reports/katrina-lessons-learned.pdf>)
- ⁷⁴ US House of Representatives. *A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*, February 15, 2006, (available online at http://katrina.house.gov/full_katrina_report.htm)
- ⁷⁵ US Senate. *Hurricane Katrina: A Nation Still Unprepared*. 2006. (available online at <http://hsgac.senate.gov/index.cfm?Fuseaction=Links.Katrina>)
- ⁷⁶ PL 109-295, section 503(c)
- ⁷⁷ PL 109-295, subtitle B
- ⁷⁸ PL 109-295, subtitle B
- ⁷⁹ PL 109-295, subtitle 507(f)
- ⁸⁰ PL 109-295, section 624
- ⁸¹ PL 109-295, section 683
- ⁸² PL 109-295, section 684
- ⁸³ PL 109-295, section 689c
- ⁸⁴ PL 109-295, section 689b
- ⁸⁵ *The Federal Response to Hurricane Katrina: Lessons Learned*, A Report Submitted to President George W. Bush by Frances Townsend, Assistant to the President for Homeland Security and Counterterrorism, op cit., p. 52.
- ^{86a} See *The Federal Response to Hurricane Katrina: Lessons Learned*, A Report Submitted to President George W. Bush by Frances Townsend, Assistant to the President for Homeland Security and Counterterrorism and U.S. House of Representatives, *A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*, op cit., p. 131.
- ⁸⁷ Comfort, Louise K., et al., "Coordination in Rapidly Evolving Disaster Response Systems," *American Behavioral Scientist*, Vol. 48, No. 3, November 2004, p. 295.
- ⁸⁸ U.S. Department of Homeland Security, *National Response Plan*, op cit., p. 64.
- ⁸⁹ United States Government Accountability Office, *September 11: Recent Estimates of Fiscal Impact of 2001 Terrorist Attack on New York*, March 2005, p. 6 (available online at <http://www.gao.gov/new.items/d05269.pdf>)
- ⁹⁰ Congressional Budget Office, "Macroeconomic and Budgetary Effects of Hurricanes Katrina and Rita," CBO Testimony by Director Douglas Holtz-Eakin, October 6, 2005, p. 3 (available online at <http://www.cbo.gov/ftpdocs/66xx/doc6684/10-06-Hurricanes.pdf>)
- ⁹¹ Congressional Budget Office, "Macroeconomic and Budgetary Effects of Hurricanes Katrina and Rita," CBO Testimony by Director Douglas Holtz-Eakin, October 6, 2005 (available online at <http://www.cbo.gov/ftpdocs/66xx/doc6684/10-06-Hurricanes.pdf>)
- ⁹² "The Mississippi Valley – Whole Lotta Shakin' Goin' On." *United States Geological Survey*. Online. <http://quake.wr.usgs.gov/prepare/factsheets/NewMadrid/> Accessed April 2, 2007
- ⁹³ "Historic Earthquakes." *United States Geological Survey*. Online. <http://earthquake.usgs.gov/regional/states/events/1811-1812.php> Accessed April 2, 2007
- ⁹⁴ Associated Press. "Report: California Tsunami Could Kill

1 Million.” [The Associated Press](#). December 12, 2005. Online. http://www.livescience.com/forcesofnature/ap_051212_tsunami.html

⁹⁵ The October 2006 Blizzard in Buffalo, NY, was declared a major disaster by President Bush. For more information, see <http://www.fema.gov/news/event.fema?id=7225>

⁹⁶ Public Law 109-295

⁹⁷ Public Law 109-295, sec. 602

⁹⁸ Public Law 109-295, subtitle 507(f)

⁹⁹ Public Law 109-295, section 624

¹⁰⁰ Public Law 109-295, section 683

¹⁰¹ Public Law 109-295, section 689c

¹⁰² Public Law 109-295, section 689b

¹⁰³ Public Law 109-295

¹⁰⁴ Public Law 109-295, sec. 602

¹⁰⁵ An in-depth review of the need to integrate other Federal standards into the Stafford Act, and the associated legal considerations, can be found in “Prime & Prepared: Updating the Stafford Act for a Coordinated National Response.” By Chhunny Chhean and Puneet Kakkar, of the University of California, Berkeley School of Law. The report is available online at http://www.law.berkeley.edu/library/disasters/Chhean_Kakkar.pdf

¹⁰⁶ CNN. “New Orleans to lay off 3,000 workers – Oct 4, 2005.” [CNN.com](#) Online. <http://www.cnn.com/2005/US/10/04/new.orleans/index.html> Accessed April 2, 2007

¹⁰⁷ United States Government Accounting Office, “September 11: Recent Estimates of Fiscal Impact of 2001 Terrorist Attack on New York,” March 2005 (available online at <http://www.gao.gov/new.items/d05269.pdf>)

¹⁰⁸ Maguire, Steven, *The Impact of Hurricane Katrina on the State Budgets of Alabama, Louisiana, and Mississippi*, Congressional Research Service, November 15, 2005, p. 2-3.

¹⁰⁹ Maguire, Steven, “The Impact of Hurricane Katrina on the State Budgets of Alabama, Louisiana, and Mississippi,” Congressional Research Service, November 15, 2005, p. 12-13 (available online at http://digital.library.unt.edu/govdocs/crs//data/2005/upl-meta-crs-7934/RL33154_2005Nov15.pdf?PHPSESSID=9785f903fd27e3502fe97d5e5f25e518)

¹¹⁰ 42 U.S.C. § 5184 Sec. 417 (available online at <http://www.fema.gov/library/stafact.shtm>)

¹¹¹ “The Lower Manhattan Development Corporation’s HUD-Funded Projects and Programs: Leading Economic Revitalization in Lower Manhattan,” Appleaseed, November 2004, p. 20-21 (available online at <http://www.renewnyc.com/content/pdfs/>

[appleseed_report.pdf](#))

¹¹² U.S. Department of Housing and Urban Development, “Public Law 107-206 Approved August 2, 2002,” Disaster Recovery Supplemental Appropriations for the Community Development Block Grant Program, 1992-2005 (available online at <http://www.hud.gov/offices/cpd/communitydevelopment/programs/dri/CDBGSuppAppStatutes.pdf>)

¹¹³ “Partial Action Plan S-2 for Utility Restoration and Infrastructure Rebuilding (As Approved by HUD as of 9/15/03),” Lower Manhattan Development Corporation, September 2003 (available online at http://www.renewnyc.com/content/PAP/6_1.pdf)

¹¹⁴ United States Government Accountability Office, “Hurricane Katrina: Providing Oversight of the Nation’s Preparedness, Response, and Recovery Activities,” Statement of Norman J. Rabkin, Managing Director, Homeland Security and Justice Issues, September 28, 2005 (available online at <http://www.gao.gov/new.items/d051053t.pdf>)

¹¹⁵ Broache, Anne. “Telecoms call for legal fixes after Katrina.” [Tech News on ZDNet](#). June 1, 2006. Online. <http://news.zdnet.com/2100-1035-6078811.html> Accessed March 1, 2007

¹¹⁶ Broache, Anne. “Telecoms call for legal fixes after Katrina.” [Tech News on ZDNet](#). June 1, 2006. Online. <http://news.zdnet.com/2100-1035-6078811.html> Accessed March 1, 2007

¹¹⁷ The term *soft infrastructure* is borrowed from Grinker, William, “Small Business Recovery: Lessons from 9/11,” *The Wall Street Journal*, September 27, 2005, p. B2.

¹¹⁸ United States Small Business Administration Office of Advocacy, “Frequently Asked Questions Fact Sheet,” October 2005 (available online at <http://www.sba.gov/advo/stats/sbfaq.pdf>)

¹¹⁹ New York City Partnership and Chamber of Commerce, *Economic Impact Analysis of the September 11th Attack on New York City*, November 2001, p. 62.

¹²⁰ Pettinato, Marla and Leigh Graham, *A Support Strategy for Small Businesses: Implications of Seedco’s Technical Assistance Initiative in Lower Manhattan after September 11, 2001*, Seedco, June 2004, p. i.

¹²¹ Larson, Jackie, “Will Small Businesses Be Able to Recover From Katrina?,” *Entrepreneur*, September 22, 2005 (available online at <http://www.Entrepreneur.com/article/0,4621,323552,00.html>)

¹²² United States Small Business Administration, Disaster Recovery, “Economic Injury Disaster Loans for Small Businesses,” March 2006 (available online at <http://www.sba.gov/disaster/recov/loaninfo/econinjury.html>)

¹²³ Abrams, Rhonda. “Helping small businesses in wake of Katrina.” *USA Today*. September 1, 2005. Online. [---

28 !\[\]\(624a4616fb661e6650a671b5324d9f7f_img.jpg\)](http://www.usatoday.com/money/smallbusiness/columnist/abrams/2005-09-</p></div><div data-bbox=)

01-small-business-katrina_x.htm

¹²⁴ Abrams, Rhonda. "Helping small businesses in wake of Katrina." *USA Today*. September 1, 2005. Online. http://www.usatoday.com/money/smallbusiness/columnist/abrams/2005-09-01-small-business-katrina_x.htm

¹²⁵ Pettinato, Marla and Leigh Graham, *A Support Strategy for Small Businesses: Implications of Seedco's Technical Assistance Initiative in Lower Manhattan after September 11, 2001*, Seedco, June 2004, p. i.

¹²⁶ Abramowitz, Adina, Lipson, Beth, and Schwartz, Jon. *Assessing Seedco's Lower Manhattan Small Business & Workforce Retention Program*. September 2005. Seedco. Page 10.

¹²⁷ Pettinato and Graham, op cit., p. 4.

¹²⁸ The other CDFIs included in the National Community Capital Association's report are: AAFE (Asian Americans for Equality) Community Development Fund, Inc.; BOC Capital Corporation; CREDIT Incorporated; Leviticus 25:23 Alternative Fund, Inc.; Neighborhood Trust Federal Credit Union; and Primary Care Development Corporation.

¹²⁹ Hakim, Danny, "Report Finds Far-Flung Use of 9/11 Loans," *The New York Times*, December 29, 2005.

¹³⁰ 42 U.S.C. 5155

¹³¹ Stafford act regulations, 206.3 d

¹³² Stafford Act regulations, 206.48 b 5

¹³³ CNN. "Katrina, time take their toll on Mississippi town – Feb 20, 2006." *CNN.com* Online. <http://www.cnn.com/2006/US/02/17/koch.katrina/index.html> Accessed April 2, 2007.

¹³⁴ USA Today. "Crazy-quilt insurance system delays Katrina recovery." *USA Today*. Online. http://blogs.usatoday.com/oped/2007/01/photo_limbo_mis.html Accessed April 2, 2007.

¹³⁵ Treaster, Joseph. "Judge Is Urged to Back Deal on Hurricane Damage Claims." *The New York Times*. March 1, 2007 Online. <http://www.nytimes.com/2007/03/01/business/01insure.html?r=1&oref=slogin> Accessed March 1, 2007

¹³⁶ Alpert, Bruce. "Insurance crises delays recovery, lawmakers say." *The Times-Picayune*. March 1, 2007. Online. <http://www.nola.com/news/t-p/washington/index.ssf?/base/news-1/1172733511108700.xml&coll=1> Accessed March 1, 2007.

¹³⁷ Kunzelman, Michael. "La. Katrina Insurance Suit Begins." *International Business Times*. February 12, 2007. Online. <http://www.ibtimes.com/articles/20070212/add20-katrina-insurance.htm> Accessed March 1, 2007

¹³⁸ Kunzelman, Michael. "Judge reduces jury's \$2.5 million award in Katrina insurance case." *North Country Times*. February 1, 2007. Online. http://www.nctimes.com/articles/2007/02/01/news/nation/16_38_341_31_07.txt Accessed March 1, 2007

¹³⁹ "San Francisco Rising – Earthquake Centenary Dinner." *Lloyds of London*. Online. http://www.lloyds.com/News/Centre/Briefings_and_speeches/San_Francisco_Rising_-_Earthquake_Centenary_Dinner.htm Accessed April 2, 2007

¹⁴⁰ Callimachi, Rukmini. "Insurance limbo delays rebuilding of Gulf Coast." *The Seattle Times*. June 12, 2006. Online. http://seattletimes.nwsourc.com/html/nationworld/2003055671_rebuild12.html Accessed March 1, 2007.

¹⁴¹ Chu, Kathy and Copeland, Larry. "Homeowners decked by Katrina still wait for insurers to pay up." *USA Today*. August 24, 2006. Online. http://www.usatoday.com/money/perfi/insurance/2006-08-24-katrina-insure-usat_x.htm Accessed March 1, 2007

¹⁴² Emergency Supplemental Appropriations Bill – HR 3759, PL 103-211

¹⁴³ Emergency Supplemental Appropriations Bill – HR 2888, PL 107-38

¹⁴⁴ Emergency Supplemental Appropriations Bills – HR 4939, PL 109-234 and HR 3673, PL 109-62

¹⁴⁵ Cooper, Christopher. "In Katrina's wake: Where is the money?" *The Wall Street Journal*. January 29, 2007.

¹⁴⁶ Cooper, Christopher. "In Katrina's wake: Where is the money?" *The Wall Street Journal*. January 29, 2007.

¹⁴⁷ Roberts, Patrick. "FEMA After Katrina." *Hoover Institution Policy Review #137*. Online. <http://www.policyreview.org/137/roberts.html>. Accessed February 14, 2007.

¹⁴⁸ Gosselin, Peter and Miller, Alan. "Why FEMA Was Missing in Action." *Los Angeles Times*. September 5, 2005. Online. <http://www.latimes.com/news/nationworld/nation/la-na-fema5s ep05,1,2869010.full.story?coll=la-headlines-nation>

¹⁴⁹ Gosselin, Peter and Miller, Alan. "Why FEMA Was Missing in Action." *Los Angeles Times*. September 5, 2005. Online. <http://www.latimes.com/news/nationworld/nation/la-na-fema5s ep05,1,2869010.full.story?coll=la-headlines-nation>

¹⁵⁰ 42 U.S.C. 5122

¹⁵¹ 50 U.S.C. 1601 et seq.

¹⁵² 42 U.S.C. 9601 et seq.

¹⁵³ Bea, Keith. "Report for Congress: Federal Disaster Policies After Terrorists Strike: Issues and Options for Congress." *Congressional Research Service: The Library of Congress*. June 24, 2002. Page CRS-22.

¹⁵⁴ Pub. L. No. 107-296

¹⁵⁵ 42 U.S.C. 5193

¹⁵⁶ *The Federal Response to Hurricane Katrina: Lessons Learned*, A Report Submitted to President George W. Bush by Frances