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Who Says You Can't Go Home?

An Assessment of the Gap Funding Initiative: A recovery program for Survivors of Superstorm Sandy

A Report Written For New Jersey Community Capital

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May 2018

Acknowledgements

We would like to share our gratitude with all of those who have helped us with this research project. Special thanks to the Bloustein School's Director of Information Technology, Martin O'Reilly, and Event Services and Facilities Manager, Amy Cobb, for their logistical and administrative help with the Bloustein School facilities. We thank all of our interviewees for their time and commitment to helping us. We give a warm thank you and express our tremendous appreciation to our faculty advisor, Dr. Andrea Hetling. Finally, we thank New Jersey Community Capital (NJCC) as an organization for their tireless efforts of ensuring better lives for all New Jerseyans by way of their community development and revitalization efforts. Specifically, we would like to thank Peter Grof, Colleen Otremsky, and Cara Purcell for their hard work, information sharing, and encouragement throughout this entire process. We are grateful to be a part of a research project that brings attention to a sensitive time in New Jersey's history, and the impact this research project may have on future disaster recovery efforts. The recommendations in this report are solely those of the authors and do not represent the expressed or implied views of any stakeholder, interviewee, or NJCC staff members.

Table of Contents

Table of Acronyms

Acronym	Definition
ARC	American Red Cross
CDBG-DR	Community Development Block Grant - Disaster Recovery
FEMA	Federal Emergency Management Authority
GFI	Gap Funding Initiative
HAC	Homeowner Award Calculation
HUD	The United States Department of Housing and Urban Development
LMI	Low - Moderate Income
NAACP	National Association for the Advancement of Colored People
NJCC	New Jersey Community Capital
NJDCA	New Jersey Department of Community Affairs
NYDIS	New York Disaster Interfaith Service
RFP	Request for Payment
RREM	Reconstruction, Rehabilitation, Elevation and Mitigation
SPSS	Statistical Program for Social Sciences
SSNJRF	Superstorm Sandy New Jersey Relief Fund
VCA	Voluntary Compliance Agreement

List of Tables

Executive Summary

Superstorm Sandy made landfall on the New Jersey southern coastline on October 29th, 2012. The Superstorm damaged or destroyed 346,000 homes, rendered 22,000 units uninhabitable, caused $36.8 billion in damages, and killed 37 people in New Jersey (State of New Jersey, 2013; Smith, 2013). In July 2014, almost two years after the storm, New Jersey Community Capital (NJCC), the American Red Cross, the Superstorm Sandy New Jersey Relief Fund, and the New Jersey Department of Community Affairs worked together to administer the Gap Funding Initiative (GFI), which assisted low and moderate income (LMI) survivors to rebuild their homes. NJCC created GFI to help individuals for whom NJ's Reconstruction, Rehabilitation, Elevation, and Mitigation (RREM) program was insufficient. Households approved by the RREM program were able to apply for the "Home Repair Initiative" (the program that eventually became GFI), which was designed to assist survivors whose costs of rebuilding exceeded the funds available to them, including resources such as insurance, federal dollars, and state recovery programs. Applicants were required to apply for the program, prove that RREM funds were insufficient, and advance construction funds.

NJCC asked a team of graduate students from the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey to assess the program. Specifically, NJCC instructed the team to investigate the following research questions:

1. What are some best practices of multi-pronged approaches to disaster recovery?
2. What were the challenges and benefits of the GFI program? And how could these insights help other communities recover from disasters?
3. How can public-private disaster recovery funds be used to best serve survivors of disaster recovery?

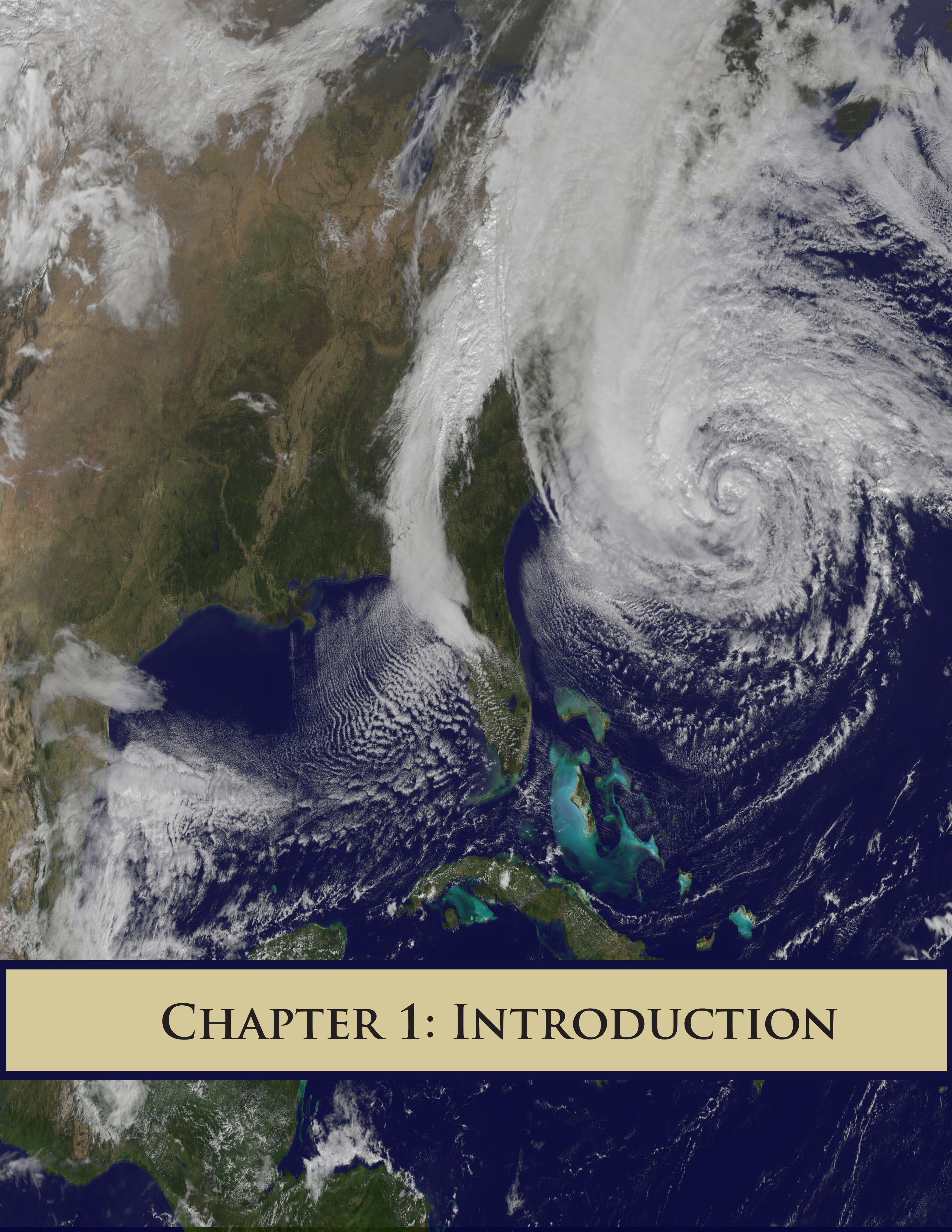
Based on an extensive literature review on disaster relief, qualitative coding of interviews with key stakeholders, and a quantitative analysis of GFI program data, the research team reached two overarching insights.

First, the GFI program's responsiveness to survivor needs, as well as its ability to navigate the complex state rebuilding process, makes it a model for future public-private recovery efforts. Throughout the three and a half years of GFI, NJCC adjusted the application process to better suit client needs by streamlining paperwork, meeting with NJDCA to improve application review time, and securing approval from funders to adjust program requirements.

Second, GFI largely succeeded in its stated purpose of providing gap finances to low and moderate income homeowners. Three quarters (76%) of the awardees were LMI. Moreover, an equity analysis of funding outcomes and application process times indicated similar experiences among survivors by race, age, county, and income. Adapting to client needs is essential to creating a survivor-centered program. GFI was survivor-centered because of its ability to fund vulnerable homeowners and adapt to client needs.

Finally, based on our findings, the research team recommends that future homeowner rebuilding programs:

- Empower homeowners to select the program that matches their needs
- Involve contractors at all program stages
- Reach out to homeowners through various means
- Facilitate collaboration among stakeholders
- Consider equitable payment structures
- Ensure flexibility of funding



Chapter 1: Introduction

Introduction

On October 28th, 2012, following meteorologist predictions of widespread devastation from a pending storm, New Jersey Governor Chris Christie famously pleaded with coastal and barrier island residents "don't be stupid, get out" (Associated Press, 2012). That same day, President Barack Obama signed an emergency declaration enabling the state to request federal funding and other assistance before the storm hit. The next day (October 29th), Superstorm Sandy made landfall on the New Jersey southern coastline.

Superstorm Sandy damaged or destroyed 346,000 homes, rendered 22,000 units uninhabitable, caused $36.8 billion in damages, and killed 37 people in New Jersey (State of New Jersey, 2013; Smith, 2013). Six months after the storm about 39,000 families statewide were still unable to return to their damaged or destroyed homes, with many looking at new mandatory renovations to lift homes in flood zones (NBC, 2013). In the months that followed the storm, government agencies, nonprofit partners, and local residents worked together to rebuild the state and get residents back into their homes. During this time, the government distributed $8.6 billion in aid. Individual residents, private businesses, and the nonprofit sector donated an estimated $380 million to help the survivors (Office of the State Comptroller, 2018).

In July 2014, almost two years after the storm, New Jersey Community Capital (NJCC), the American Red Cross (ARC), Superstorm Sandy New Jersey Relief Fund (SSNJRF), and New Jersey's Department of Community Affairs (NJDCA) worked together to administer the Gap Funding Initiative (GFI), which assisted low and moderate income (LMI) survivors still struggling to rebuild their homes. NJCC created GFI to help individuals for whom NJ's Reconstruction, Rehabilitation, Elevation, and Mitigation (RREM) program was insufficient. Households approved by the RREM program were able to apply for the "Home Repair Initiative" (the program that eventually became GFI), which was designed to assist survivors whose costs of rebuilding exceeded the funds available to them, including resources such as insurance, federal dollars, and state recovery programs. Applicants were required to apply for the program, prove that RREM was insufficient to pay for their home repair costs, and advance the costs of construction.

ARC and the SSNJRF initially funded GFI with $15.2 million. Survivors could receive a maximum award of $30,000. NJCC administered the program through December 31, 2017, spending $1 million in administrative costs. The program awarded $16.4 million in housing assistance to 749 homeowners, helping 1,640 New Jersey residents.

NJCC asked a team of graduate students from the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey to assess the program. Specifically, NJCC instructed the team to investigate the following research questions:

1. **What are some best practices of multi-pronged approaches to disaster recovery?**
2. **What were the challenges and benefits of the GFI program? And how could these insights help other communities recover from disasters?**

3. **How can public-private disaster recovery funds be used to best serve survivors of disaster recovery?**

This report is divided into seven sections: a review of U.S. based relief work best practices and challenges, background on GFI, explanation of the research methods conducted for this paper, a summary of stakeholder interviews, a description of the process and impact of GFI from interviews and program metrics, a discussion of these results, and finally program recommendations and policy considerations for future public-private disaster recovery programs.

Chapter 2: Background

Background

Federal and local responses to disaster relief
Significant funding from various sources is needed to recover from the extensive damage caused by natural disasters. Federal funds are the largest source of funding for recovery work, but must follow multiple steps before reaching the homeowner. To appropriate federal funding for disaster recovery, Congress must pass and the President must sign legislation. This process can be very lengthy; following Superstorm Sandy, it took roughly three months for the federal government to release funds.

After a state secures funds from federal agencies, the state must design and implement the disaster recovery programs, which presents another set of programmatic challenges to rebuilding. Local governments are under pressure to distribute the funds immediately, even if they have not yet received those funds (Cheatham, 2015; Gair, 2016). Local governments often face the same program implementation challenges that the federal government does, except with fewer resources. Brad Gair, former head of New York City's Housing Recovery Operations testified that no local government **"can successfully create and setup in a few months what amounts to a multibillion dollar corporation…while tens of thousands of desperate customers must wait anxiously for help as hope dwindles"** (Gair, 2016, p.2).

Federal funding is often not enough to cover all recovery expenses, necessitating additional state and local public and private programs to meet the gap. Coordination between federal and local programs is another major challenge to both the process and impact of relief programs. Gair testified that the poor integration of federal programs leads "to extensive delays and universally bad results" of disaster recovery because of excessive bureaucracy and duplications of benefits (Gair, 2016, p.2).

Comparative cases of local homeowner initiatives
Responses to the Loma Prieta earthquake of 1989 and Hurricane Katrina in 2005 provide strong comparative cases and background to Superstorm Sandy. In both cases, local governments in collaboration with nonprofit agencies established public-private disaster recovery programs to meet homeowners' unmet financial needs.

Following the Loma Prieta earthquake, California established the California Disaster Assistance Program (CAL-DAP), a program designed to be a lender of last resort for survivors who had a financial gap after accessing the relevant federal programs and insurance payouts (Zhang & Peacock, 2010). The program in California faced many of the challenges that plague public-private partnerships. In a keynote address regarding CAL-DAP, George G. Mader, former

"No local government can successfully create and setup in a few months what amounts to a multibillion dollar corporation…while tens of thousands of desperate customers must wait anxiously for help as hope dwindles"
- Brad Gair

Senior Lecturer at Stanford's School of Earth Sciences, discusses the challenges that state and nonprofits that administer recovery programs face. He explained, "Those administering programs are put in the unenviable position of having to see that funds are spent according to dictates of programs. Not only do they have to see that funds match detailed requirements, they also have to make certain that claims do not falsely describe the conditions of the damage" (Mader, n.d.).

Following Hurricane Katrina, area nonprofits established a program that awarded funds to low-income survivors who had financial gaps after receiving funds from the federal Road Home Program. Road Home allocated funded based on the home's pre-storm value. Funds could be directed to three paths; survivors were able to rebuild their home within three years, sell their home to Louisiana Land Trust, or relocate and sell their property for two-thirds of its pre-storm value (Berglund & Loukaitou-Sideris, 2016). However, in many instances, three years proved too short a time for survivors who could not front construction costs and survivors who lost deeds or other important documentation during the disaster (Berglund & Loukaitou-Sideris, 2016). Based on lessons from the Katrina recovery, a home rebuilding program should be flexible, holistic, and should approach home rebuilding as a social and physical restructuring program (Berglund & Loukaitou-Sideris, 2016).

Equity considerations during rebuilding

Rebuilding homes is an important priority in the recovery, rebuilding, and resiliency process. However, a focus on homeowners alone may exacerbate existing social and economic inequalities at the community level. A focus on rebuilding homes prioritizes helping homeowners, who by definition likely have more assets than people who do not own their own home. Residents who do not own their homes cannot directly benefit from recoveries designed around home rebuilding programs. Additionally, while the federal government is the largest source of recovery funds, the majority of these funds are focused on emergency relief rather than long-term recovery, which may put individuals with the fewest resources at risk. Long-term rebuilding is funded mostly by residents' personal saving accounts, loans, and by private insurance (Zhang et al., 2010). To avoid inequity and to ensure that the hardest hit areas and populations are supported, local governments should create a process to monitor housing types, income, and race while designing a recovery program (Peacock et al., 2014).

As an analysis of Katrina's rebuilding stated, "treating the built environment as the root cause of poverty and social unease fails to understand the history of disenfranchisement faced by many communities that is perpetuated during and after disasters" (Berglund & Loukaitou-Sideris, 2016, p.137). Although housing is an essential step in the rebuilding process, recovery programs that emphasize housing may exacerbate inequity in a community if not contextualized with the realities of the communities being served. As explained in *The road home: an examination of the successes and challenges of housing non-profits in New Orleans since Katrina*, "…the fixation on restoring homes and other structures, while vital to the recovery process, does not repair the economic and social disparities faced by some communities in need of other services as well" (Berglund & Loukaitou-Sideris, 2016, p. 125).

Based on their close relationships with and knowledge of their community, many nonprofit agencies have the potential to offer insights and support to overcome inequity challenges. In the wake of Superstorm Sandy, NJDCA signed the Voluntary Compliance Agreement (VCA), an attempt by the Latino Action Network, the Fair Share Housing Center, and the NAACP to reallocate large portions of the Superstorm Sandy CDBG-DR funds into the historically disenfranchised communities, Limited English Proficiency populations and Low-Moderate Income (LMI) populations of New Jersey. Among other things, the VCA asked NJDCA to revisit the Community Development Block Grant - Disaster Relief Action Plan to allocate additional funds towards the Fund for the Restoration of Multi-Family Housing, the Sandy Special Needs Housing Funds, the Housing Counseling program, and the Tenant Based Rental Assistance program, all of which primarily served LMI clientele. The VCA also required NJDCA to create and fund an entirely new LMI Homeowner Rebuilding program separate from RREM, re-evaluate previously rejected RREM applications, and lay out rules for the protection of RREM applicants (Voluntary Compliance Agreement, 2013).

For all disaster rebuilding processes, it is incumbent on local governments to anticipate potential inequities, "and help target resources to areas that were hardest hit and are lagging" (Peacock et al., 2014, p. 367). One step local governments can take to anticipate the potential for inequality and mitigate it is to include community-based organizations, often nonprofits, in the planning and implementation of relief programs.

Overcoming challenges

To overcome the challenges of the funding and collaboration between federal and local governments, as well as equity concerns, research highlights the importance of complementary structures and initiatives. Past research finds four common best practices: relationships and role clarity among stakeholders, the inclusion of community members, streamlined application process, and public-private partnerships.

First, ahead of a storm, emergency and recovery preparedness will affect how a jurisdiction recovers. Optimizing the role, establishing relationships, and creating lines of communications between each stakeholder, including the local government and insurance companies,"is essential to achieve a sustainable disaster recovery that would increase the host community's welfare and decrease their vulnerability to future shocks" (Eid & El-adaway, 2017, p. 3). Insurance companies are important stakeholders because while the federal government provides the largest recovery funds, long-term rebuilding is funded mostly by residents' personal saving accounts, loans, and by private insurance (Zhang & Peacock, 2010; Eid & El-adaway, 2017).

Second, community stakeholders should be included in both the planning and implementation for successful rebuilding (Eid & El-adaway, 2017). Community partners or local nonprofits are important to the recovery and rebuilding process because they are embedded into the communities, they have the trust of the community members, know the community, and will remain in place after the initial recovery phase is complete (Harris, 2017). They also can effectively distribute the limited recovery funds to those with the greatest need (Berglund & Loukaitou-Sideris, 2016). The importance of local governments' relationships within the community played important roles in the recoveries and rebuilding of the 1994 Northridge earthquake in Los Angeles, the 1995 Kobe earthquake in Japan, and the 2005 Hurricane Katrina in New Orleans (Olshansky et al., 2006).

Third, it is important to reduce the funding application burden on the homeowner. One way is to reduce paperwork and create a data sharing platform (Cheatham, 2015; Gair, 2016). This data system should be formalized with shared client intake that is multi-faceted: rebuilding, mental health, debris removal, etc. (NYDIS, 2015). In addition to data sharing, virtual case management services will reduce application process times and provide flexibility for survivors who continue to work and fulfill family obligations that may prevent them from visiting a nonprofit or government office for assistance (Cheatham, 2015).

Finally, public-private partnerships are essential because nonprofits often assist with the non-financial pieces of recovery. The quality of communication between nonprofits and the public sector defines how well communities recover. To best work with community partners, the New York Disaster Interfaith Services (NYDIS) (established in the aftermath of 9/11) suggests that the government programs share data with nonprofits involved in the rebuilding process, develop referral systems with nonprofits, and allow survivors to select their own rebuilding and/or contracting organizations (NYDIS, 2015).

Case study: Superstorm sandy and gfi

Case study: Superstorm sandy and GFI

Sandy rebuilding programs in New Jersey

In New Jersey, following Superstorm Sandy, NJDCA established many relief programs for storm survivors. NJDCA funded relief programs for:

- Renters and landlords (e.g., Fund for Restoration of Large Multi-Family Housing, the Blight Reduction Pilot Program, and Incentives for Landlords and Tenant-Based Rental Assistance);
- Economic revitalization (Loans to Small Businesses, Grants to Small Businesses, Neighborhood and Community Revitalization, Tourism Marketing, etc.);
- Support for governmental entities (FEMA Match, Code Enforcement, Enhancement of Public Services, etc.); and
- Supportive services and planning

Another critical initiative was RREM, NJDCA's main homeownership construction initiative.

On April 29, 2013, the Obama Administration approved NJDCA to launch RREM, a grant program that utilized CDBG-DR grants to assist survivors affected by Superstorm Sandy with repairing their damaged homes and meeting new elevation or code requirements established by FEMA. The approval was part of NJ's Action Plan, a requirement of major infrastructure riders on CDBG-DR grants. NJDCA initially secured $600 million to issue RREM grants to 6,000 homeowners. The maximum award was $150,000, and although intended to be issued primarily to LMI recipients, eligibility for the program was capped for households with adjusted gross income of $250,000. Applications for the RREM program closed on August 1, 2013 (Christie Administration, 2013).

Funding allocation for the RREM program increased dramatically during the application process and afterwards, increasing from the initial $600 million to more than $1.3 billion. The enormous increase occurred for a myriad of reasons, among them contractor fraud that required NJDCA to pay the same award twice, more applications than NJDCA expected, and the need to re-evaluate applications that were denied based on incorrect reconstruction information from FEMA. As of January 30, 2018, NJDCA paid out $1.2 billion of the $1.3 billion allocated. LMI homeowners received 45% of RREM funds; NJDCA awarded $501 million to survivors who qualified as Urgent Need and more than $412 million to LMI qualified homeowners. These sums reflect the funds paid out to survivors ($913 million); however, NJDCA currently reports a slightly higher 47% accrual to LMI recipients by including the "Program Delivery" portion of the RREM budget (another $288 million that is more than 50% LMI). The "Program Delivery" portion of the RREM budget does not reflect direct benefits paid to homeowners, but rather payments to implement the RREM program, which includes things like salaries paid to NJDCA employees (DCA Master Data 2018).

According to interviews conducted by the research team, the goal of RREM was to get survivors back in their homes as quickly as possible and make sure survivors were treated fairly. RREM's mission was to reimburse construction projects. NJDCA worked with nonprofits to implement RREM and get resources into the community. To inform survivors about the state's programs, NJDCA created flyers, sent mailers, emails, conducted door-to-door canvassing, and created television advertisements.

Gap Funding Initiative

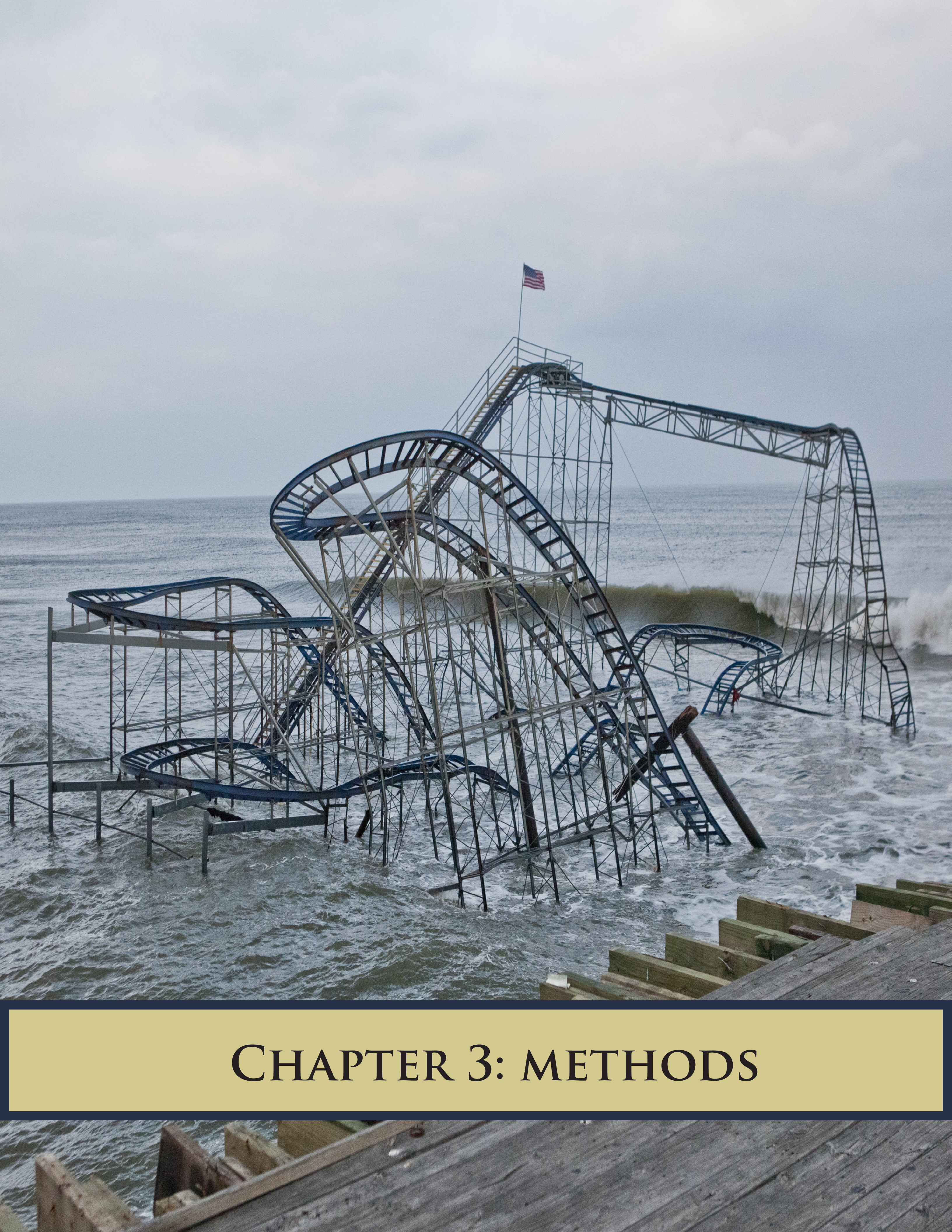
The Gap Funding Initiative (GFI) was created in July of 2014, two years after Superstorm Sandy. The Fund was motivated by the recognition that RREM funds and the FEMA maximum allocation were not enough to cover all the funding homeowners needed to rebuild. GFI's goal was to provide the gap finances needed to get survivors back in their homes. All survivors who intended to apply for GFI had to first apply for and be approved by RREM. Survivors who received funds from RREM were eligible for GFI as long as they had unmet need (as defined by the state). To apply for GFI, applicants were required to fill out an application and meet the following five requirements:

1. Have an "Unmet Need" in excess of the construction contingency determined in the "Homeowner Award Calculation" document provided by RREM
2. Have an annual adjusted income below $100,000/ meeting the LMI criteria established by the RREM program
3. Prove that the applicant's home was in one of the nine NJ counties damaged by Sandy
4. Have already been approved for a RREM grant
5. Include the applicant's "Homeowner Award Calculation" with the homeowner and the RREM housing advisor's signature to the GFI application

In short, to apply for GFI, applicants needed to be approved by RREM and have all the documents necessary to prove it. Additionally, homeowners applying for GFI were required to select one possible repayment structure for reconstruction, or RREM Pathways. Applicants had to follow either RREM Pathway B or Pathway C because Pathway A construction projects had largely finished by the time GFI was introduced.

Pathway B applicants had to complete the entire RREM construction process before receiving any GFI funding. Upon completing the RREM construction process, the homeowner needed to apply for final inspection from the RREM program manager, schedule the inspection, pass the inspection, apply for the final payment from RREM and then receive the final RREM payment before becoming eligible to submit a Request for Payment (RFP) to NJCC. Upon receiving the RFP document, NJCC wired the full amount of the GFI grant to the homeowner's account. Later in the life-cycle of GFI, NJCC waived the RFP process for Pathway B applicants and instead wired the money upon submission of the RREM inspection document.

GFI applicants who chose Pathway C were required to find a contractor, sign a construction contract, and deposit funds into an escrow account monitored by the NJDCA before applying for GFI. Upon approval and award calculation, NJCC wired the full amount of the homeowner's grant into the escrow account for use in construction. In Pathway C, the homeowner secured GFI funds prior to construction.



Chapter 3: Methods

METHODS

The research goal of this project was to assess the benefits and challenges of the GFI program and apply these findings to best practices for public-private partnerships more generally. The research team used both qualitative and quantitative methods to investigate the process and impact of the GFI program. Our qualitative analysis was based on key stakeholder interviews and our quantitative analysis utilized GFI applicant and awardee data to conduct: a) a process flow analysis from the homeowner's perspective and b) an equity analysis of outcomes by race, county, income, and senior-status. Program recommendations are based on the findings from these three strategies: interviews, process flow, and equity analysis.

First, four individual interviews and one group interview were conducted and coded to further understand GFI within the context of public-private disaster recovery grantmaking. Potential interviewees were identified from departments and organizations suggested by NJCC. Individual interviewees included: an executive director of one of GFI's largest funding sources, a state government official, an employee of a nonprofit contractor, and an executive director of a network of disaster recovery nonprofits. The group interview was conducted with three staff members from NJCC. The research team contacted interviewees by email to schedule a telephone interview with at least two team members. These interviews consisted of a series of questions and ranged from 45 to 90 minutes in length. (Please see Appendix I & II for an email template and foundational questions). Interviewees were asked to be recorded for the purpose of note taking; only one person declined, but allowed the research team to take notes. All responses are confidential. Following the interview, the research team emailed individuals to confirm and clarify details discussed during the interview. The research team coded and assessed the data for patterns to create themes.

Second, the research team examined the GFI award application process from a homeowner's perspective by analyzing GFI program data on 1,491 applicants, including 749 awardees. The team constructed process flow charts that model the steps applicants had to navigate to receive a GFI award from NJCC. Two process flow charts were constructed to reflect the two paths that applicants could take (Process Flow Pathway B and Process Flow Pathway C, see appendix III). Outcomes of interest included the time spent at critical stages in the process and applicant drop-outs over time. Time was measured in days and calculated by subtracting the applicant start date from the date at which NJCC reported the applicant had finished the relevant step. Applicant dropout figures for each step were calculated by summing the amount of applicants that completed each step and subtracting them from the number calculated for the step immediately preceding. In reporting drop-out figures, the research team was careful to avoid confusing applicants who moved into the Pathway B or Pathway C with applicants who dropped out; once applicants passed the step at which they were required to choose their Pathway, data for Pathway B and Pathway C applicants were summed and analyzed separately. A series of t-tests were conducted to determine whether the means for three key length of time variables as well as the average funds secured differed significantly by pathway. The team also compared average days for early versus late applicants to assess whether the speed of the process changed over time. Finally, the team examined funds secured by ARC or SSNJRF to assess whether that piece of the program affected outcomes.

Third, the research team conducted an equity analysis to determine if there were relationships between awardee demographics and outcomes. The demographics examined included race, age, income, and county. The team re-coded three demographic variables. The original race variable, which had multiple response categories with few respondents, was recoded into two categories: White and non-White. Awardees' age was recoded into a dichotomous variable for seniors (age 65 and older) and non-seniors. The county variable was recoded to contain four response categories: Atlantic, Monmouth, Ocean, and "other," which included counties with fewer households, specifically Bergen, Cape May, Hudson, Essex, and Union counties. Outcomes included GFI funds secured and length of time to secure funds. Finally, a series of bivariate tests were conducted to determine statistically significant relationships between demographics and outcomes.

Chapter 4: Results

Results

GFI had many successes, particularly its flexibility and its ability to complement RREM funding. This section of the report covers three sets of results: the coded interview findings, the GFI process flow analysis, and the equity analysis of demographics and outcomes.

Interview Findings

Interviewees often disagreed in striking ways when asked to describe the successes and failures of the Superstorm Sandy recovery, including questions as broad as whether the recovery was successful or not overall. Some respondents reported that the recovery went well and the successes were poorly reported. Others interpreted the recovery as unsuccessful due to a variety of factors including fraud, state government inadequacies, homeowner and contractor mistakes as well as failures in the federal government's National Flood Insurance Program. However, interviewees agreed that GFI was successful in meeting its goals and assisting survivors who needed assistance.

The interview data presented three key themes: RREM's challenges, GFI's successes, and suggestions for future survivor-centered disaster recovery programs. The responses from the interviewees are described below and provide additional viewpoints on the complexity of disaster recovery efforts and the story of Superstorm Sandy.

RREM challenges

Interviewees perceived the design of disaster programs as being particularly difficult, explaining that in all new disaster programs, implementation is developed as the program unfolds. Interviewees continuously used the phrase, "the state was building the plane as they were flying it." Interviewees perceived the following challenges:

• **The program may be ineffective if the initial planning process underestimates the level of need.** Some interviewees perceived NJDCA's pool of approved contractors as inadequate to the demand of Pathway C survivors. Interviewees often made it clear that they believed NJDCA underestimated the scale of the problem RREM was trying to solve. Others believed that the state did not have enough staff for oversight and outreach. Interviewees believed that this perceived staffing problem may have contributed to larger issues of inequity and fraud in the Superstorm Sandy recovery. Although the state set up one-on-one consultations, including housing advisors to assist survivors with their paperwork, project managers who managed the rebuilding process, and a compliance and monitoring team to ensure support through the entire process, interviewees believed that survivors were broadly unaware of the assistance available.

• **The complex web of public and private entities in the rebuilding process can create challenges.** State programs do not exist in a vacuum. Most interviewees believed that survivors struggled to deal with the many entities included in the recovery process, including NJDCA, their municipality, flood insurance companies, banks, and mortgage companies. Interviewees reported that survivors struggled with each entity's separate regulations. As an example, one interviewee relayed an experience in which a survivor struggled to secure approval from their township before they could move back into their home. Interviewees also noted that in some municipalities, construction is not allowed in the summer. Interviewees perceived interaction with banks, mortgage companies, and insurance companies as an added complication for survivors. Some interviewees felt that banks and mortgage companies should have advocated for proper payouts from the insurances companies. This issue of flood insurance companies not fully funding claims, which interviewees spoke at length about, was featured on *60 Minutes* in February 2015. The report found that incorrect reports were used to deny flood claims presented by Superstorm Sandy Survivors (Ha, 2015). In response, FEMA allowed survivors who filed underpayment claims to go through a review process in May 2015. Following the report, an additional $6.4 million in payouts went to 300 families. Some interviewees explained that had survivors originally secured the proper claim, they would not have needed RREM.

• **Stakeholders perceived that some contractors did not fully understand the costs, timeline, and expectations of programs.** Interviewees perceived confusion among applicants about RREM's rules. Interviewees believed survivors were not aware that RREM would take a lien on their houses. Interviewees also described RREM applicants as having misused RREM money on purchasing new furniture or appliances rather than construction expenses. Similarly, interviewees noted that survivors seemed unaware that any subsequent funding the homeowner received would reduce their funding from RREM during the rebuilding process. Many of the interviewees perceived a connection between these issues and RREM's design and outreach strategy, arguing that RREM failed to prioritize client needs when designing and implementing the program.

• **Stakeholders percieved that some contractors did not fully understand the costs, timeline, and expectations of programs, either.**
Interviewees perceived that contractors were not aware of all the RREM requirements and processes. Interviewees relayed stories of contractors accepting RREM advance money from survivors and not following compliance requirements. Interviewees also relayed stories of contractors who did not complete rebuilding a given property because RREM would not pay second installments on projects that did not follow the RREM regulations.

• **Survivors often did not have a clear and easy process to report fraud.** Interviewees explained that in order to file a fraud claim, survivors had to provide proof of payment, a police report, and complaint letter in order to receive assistance. Some interviewees believed that NJDCA and NJ's Department of Consumer Affairs should have communicated better and shared resources for identifying good contractors with survivors, including their licenses. Some interviewees noted that there are still survivors that have not yet completed rebuilding their homes.

Successes of GFI

Regardless of some of the challenges, all interviewees agreed that GFI was successful. Interviewees believed that the GFI program helped many survivors and demonstrated a promising model for how to design a public-private program in the following ways:

• **GFI leveraged private funds, enabling more survivors to gain access to the public funds to rebuild their homes.** Interviewees often said that GFI's private funding sources "unlocked" the state's RREM dollars. Some interviewees noted that the GFI program "keeps the survivors' needs in mind and lets that guide the policy decisions." For example, throughout the process, applicants spoke to the same NJCC staff, which created consistent policies when survivors called with questions. Applicants stated that NJCC's sensitivity comforted survivors through the

The GFI program "keeps the survivors' needs in mind and lets that guide the policy decisions."

challenging process of rebuilding.

• **Partnered effectively.** According to some interviewees, when NJCC added the option of Pathway B, staff were open about why these changes had to be made and how they affected the partners. Interviewees explained that NJCC effectively advocated for processes that expedited the process for survivors and worked well with state partners.

• **Inventive and efficient with its funding.** Interviewees relayed a story in which NJCC repackaged recaptured funds from GFI to a nonprofit contractor that helped pay for the rebuilding of survivors homes.

Stakeholder suggestions for best practices

After providing information on the challenges of RREM and the successes of GFI, interviewees shared the following lessons and suggestions:

• **Construction programs.** Some interviewees viewed Pathway C as the better model because the state interacted with mortgage companies, handled fraud issues, and offered resources to assist survivors. Interviewees suggested future programs should be a mixture of Pathways B and C because survivors would be able to select a state vetted contractor and receive case manager support. Interviewees argued that additional case managers are necessary to help with construction project management and survivor support. Some interviewees felt that one of the most important aspects of case managers was the mental health support they provided survivors simply by working with the survivor throughout the entire process. In addition to case managers, interviewees recommended thoroughly considering the vetting process, application requirements, time frames, funding, financing, insurance, project scope, and necessary documentation. Interviewees recommended that state funding should support both contractors and miscellaneous living expenses. Interviewees suggested keeping the state's final cost saving measures, including unit-costs, mandatory bonding, and escrow accounts. Finally, interviewees suggested that site visits are helpful to understand the issue at hand because as one interviewee noted, "until you experience it, I don't think you can fully comprehend it."

• **Staffing concerns and setting expectations.** Interviewees suggested that some aspects of disaster recovery requires people skills, empathy, and patience more than technical understanding or ability. Interviewees also recommended that staff learn to articulate how complex and slow the rebuilding process can be and communicate that to the general public. Interviewees recommended that staff expect the unexpected, be flexible, and put the survivor first.

• **Partnership considerations.** Some interviewees noted the value of collaboration, reflecting that "collectively we did more than we ever could have individually." In describing successful collaboration, interviewees touched on organizations that provided capacity building for smaller nonprofits by providing trainings and organizations that created their plan by producing a needs assessment and conferring with national experts on tactics.

Concluding words from GFI employees:

"Initially, the response is more humanitarian or the need for emergency assistance. But very quickly thereafter another reality emerges—picking up the pieces of one's life. This is where sustained efforts are needed, not only financial and economic supports, but also physical and emotional health interventions. Housing is not only a matter of shelter, but a basis for the livelihoods of the storm survivors, before and after the storm. So addressing housing is critical. Where will my children go to school, if I cannot find a new home in my community? How do I get to work if I need to move far away? Who will help me rebuild my home? Interventions need to be flexible for the many different scenarios that emerge."

"A state has a tremendous amount of pressure to respond as quickly as possible after the emergency and to be ready to help survivors rebuild as soon as conditions permit. But in the period right after the disaster and before rebuilding can safely begin, the state could play a huge role in both helping people find temporary housing or even begin thinking about the cost-benefit of rebuilding. As for private funders, perhaps a bit of patience in the beginning to see what common struggles survivors are having and then being targeted, flexible, creative, and innovative when creating their programs."

- **Transparency and flexibility.** Interviewees emphasized the importance of flexibility and transparency between organizations. Interviewees emphasized alleviating stress on homeowners by ensuring nonprofits communicated with each other. Interviewees also argued that directly funding nonprofit organizations to distribute funds may have decreased fraud concerns. This partnership process must also be transparent to build and maintain survivor trust.

- **National best practices.** Interviewees suggested that the federal government could put together a template of best practices, allowing recovery programs to launch quicker. One interviewee noted that providing states with a toolkit could help states prepare for disasters in ways that would benefit survivors.

GFI Process From Homeowner Perspective

The flowchart process analysis examined the length of time it took survivors to complete the GFI process. Appendix III: Process Flow Charts consists of two figures that depict the homeowners' experience, focusing on length of time and dropouts at critical points (see appendices for images).

An analysis of the Pathway B process (see Pathway B Process Flow) indicates that the GFI approval process was significantly shorter than the time needed to receive funding after approval. The average time from the initial GFI application to applicant approval was 144 days and an additional 357 days to receive Pathway B funding, meaning Pathway B applicants navigated the entire GFI process in an average of 501 days. This was not true for Pathway C (see Pathway C Process Flow in Appendix III); Pathway C applicants received their funding in only 72 additional days on average, navigating the entire GFI process in an average of 216 days. As such, Pathway C provided funding quicker than Pathway B.

Within the application process (as seen in both process flows) NJCC completed its processes faster than either DCA or the applicant completed their steps. On average, NJCC employees reviewed a homeowner's application for funding within 17 days; the median application review time was seven days. The next step in the approval process required the homeowner to pick a contractor in conjunction with the RREM program and request a "Homeowner Award Calculation" (HAC) document from the NJDCA. On average, this step took 64 days from the initial application. The homeowner's request for their HAC took DCA 111 days from the initial application and 47 days from the homeowner's request to complete on average. Of the 144 days for a completed GFI process, NJCC was actively working on applications for 50 of those days. For the remaining 94 days, either the homeowner or the DCA was collecting documentation.

Within the funding process, the majority of the homeowner's time was spent coordinating with NJDCA. On average, the homeowner was approved by GFI for funding at 144 days and was able to submit their final "Request for Payment" draw upon completed construction at 501 days (see Pathway B Process Flow in Appendix III).

The steps that presented significant bottlenecks for survivors included requesting the HAC from the NJDCA (a loss of 257 applicants) and the application consideration period after the homeowner provided the award calculation to GFI (a loss of 284 applicants).

Additionally, a series of t-tests were conducted to determine whether the average funds secured differed between Pathway B and Pathway C recipients. Table 1 shows the mean dollar values and length of time for both pathways. The team found that there was no statistically significant difference between Pathway B and Pathway C awardees in average amount of GFI funds secured.

Table 1: Amount Funded & Average Time to Award By Pathway

	Pathway B (n=425)	Pathway C (n=292)
Amount Funded		
Average Amount Funded (SD)	\$21,286 (\$6,707)	\$20,995 (\$7,262)
Total Time for Application		
Average Days	503	216

Finally, a series of t-tests were conducted on the applications received before August 15, 2014 (n=720) and applications received on or after August 15, 2014 (n=520)[1] to determine whether the means for three key length of time variables differed for early applicants as compared to later applicants. Those variables were:

• How long from the start of the application process did it take the homeowner to request the HAC document from DCA?
• How long from the start of the application process did it take the homeowner to get the HAC from DCA?
• How long did it take the DCA to provide the homeowner the HAC from when the homeowner asked for the document?

Results in Table 2 suggest that the means of both groups of applications differed significantly in all three variables. The first test, comparing "Early Applications" with "Late Applications" in the length of time it took the homeowner to request the HAC from NJDCA, found a mean of 28.06 days for "Early Applications" and a mean of 115.39 days for "Late Applications" ($p<0.01$). The second test, comparing

1 746 applications were submitted before August 15, 2014 and 745 were submitted after August 15, 2014; however, only 720 of the applications submitted before August 15, 2014 and 520 of the applications submitted after August 15, 2014 completed the steps examined in these tests.

"Early Applications" with "Late Applications" in the length of time it took NJDCA to provide the HAC to the homeowner from the beginning of the process, found a mean of 91.81 days for "Early Applications and a mean of 137.10 days for "Late Applications" (p<.01). The third test, comparing "Early Applications" with "Late Applications" in the length of time it took NJDCA to provide the HAC from the date the homeowner requested it, found a mean of 61.61 days for "Early Applications and a mean of 21.70 days for "Late Applications" (p<.01).

Table 2: Length of Time By Applicants Date		
	Early Applications (n = 720)	**Late Applications (n = 520)**
Mean Days		
Initial Request* (SD)	28.06 (69.7)	115.39 (65.6)
DCA Provision* (SD)	91.81 (135.9)	137.10 (79.9)
From Request* (SD)	61.61 (122)	21.70 (52.1)

*p<.001

Equity Analysis

An equity analysis of GFI program data suggests that NJCC indeed met its goal to assist LMI survivors and reached the counties hardest hit by Superstorm Sandy. The research team examined key demographic characteristics of applicants and awardees, including race, age, income, and county along with two critical program outcomes, the amount of funds secured and the length of time it took from application submission to award. Summary statistics of each demographic and outcome variable can be found in Table 3. As shown in Table 3, the profiles of applicants and awardees are very similar and seem to match the target populations GFI intended to serve. For example, three quarters (76%) of GFI funding recipients were LMI households, with a mean household income of less than $48,000. The vast majority, close to nine out of every ten applicants and awardees, identified as White, matching the racial composition of the area. For example, in Ocean County, where most GFI recipients are residents, 92.9% of the population is White (U.S. Census, 2016). Three counties received the majority of the awards: Ocean (57.30%), Atlantic (20.7%), Monmouth (17.50%), and Other (4.5%).

Table 3: Demographic Summary		
	Awardees (n)	**Applicants (n)**
Race	**n = 683**	**n = 1,352**
White	89.80% (613)	88.70% (1,199)
Non-white	10.20% (70)	11.30% (153)
County	**n = 749**	**n = 1,489**
Ocean	57.30% (429)	54% (80)
Monmouth	17.50% (131)	19.40% (289)
Atlantic	20.70% (155)	18.80% (280)
Other	4.50% (34)	7.80% (116)
Age	**n = 738**	**n = 1,465**
Not Senior	60.20% (451)	55.80% (935)
Senior	38.30% (287)	31.60% (530)
Pathway	**n = 717**	**n = 1,432**
B	59.30% (425)	61.50% (880)
C	40.70% (292)	38.50% (552)
Average Income (SD)	$47,507.40 (37,822.86)	

Note: The sample size for each variable are slightly different due to missing responses

A series of bivariate tests were conducted as an equity analysis to determine any significant relationships between demographics (race, age, income, and county) with outcomes (funds secured and length of time). The majority of the tests showed no significant relationships and the differences between averages and proportions were small. The tables below show the means for dollar values, amount of funds from American Red Cross (ARC) and from Superstorm Sandy Relief Fund New Jersey (SSNJRF), and length of time for White and non-White applicants, seniors and non-seniors, and county. A second series of statistical tests looked to see if there were correlations between income and funds secured.

First, differences in outcomes by race were analyzed. Table 4 presents these results. There were no statistically significant differences between racial groups in the amount of funds received from GFI. On average, White awardees secured $20,978 and non-White awardees secured $21,085. The research team also noted that while the tests indicate that White awardees secured significantly more funds from SSNJRF than non-White awardees, the small sample size of non-White applicants means that outliers may affect these results and thus they should be interpreted with caution.

Table 4: Amount Funded By Race

	White (n=613)	**non-White (n=70)**
GFI Amount		
GFI Mean (SD)	$20,978 ($7,061)	$21,085 ($5,901)
ARC		
ARC Mean (SD)	$8,573 ($9,539)	$8,708 ($9,575)
Funds Secured	48% (291)	47% (33)
SSNJRF		
SSNJRF Mean* (SD)	$6,004 ($8,294)	$3,351 ($7,251)
Funds Secured* (N)	39% (241)	20% (14)
Total time for application		
Average Days	398 (230)	388 (208)

*p<.01

Second, the same outcomes were examined for difference in age, specifically whether or not seniors had different outcomes than non-seniors. Table 5 shows that there was no significant difference between seniors and non-seniors in amount of GFI secured. On average, both seniors and non-seniors secured $21,125.

Table 5: Amount Funded By Age

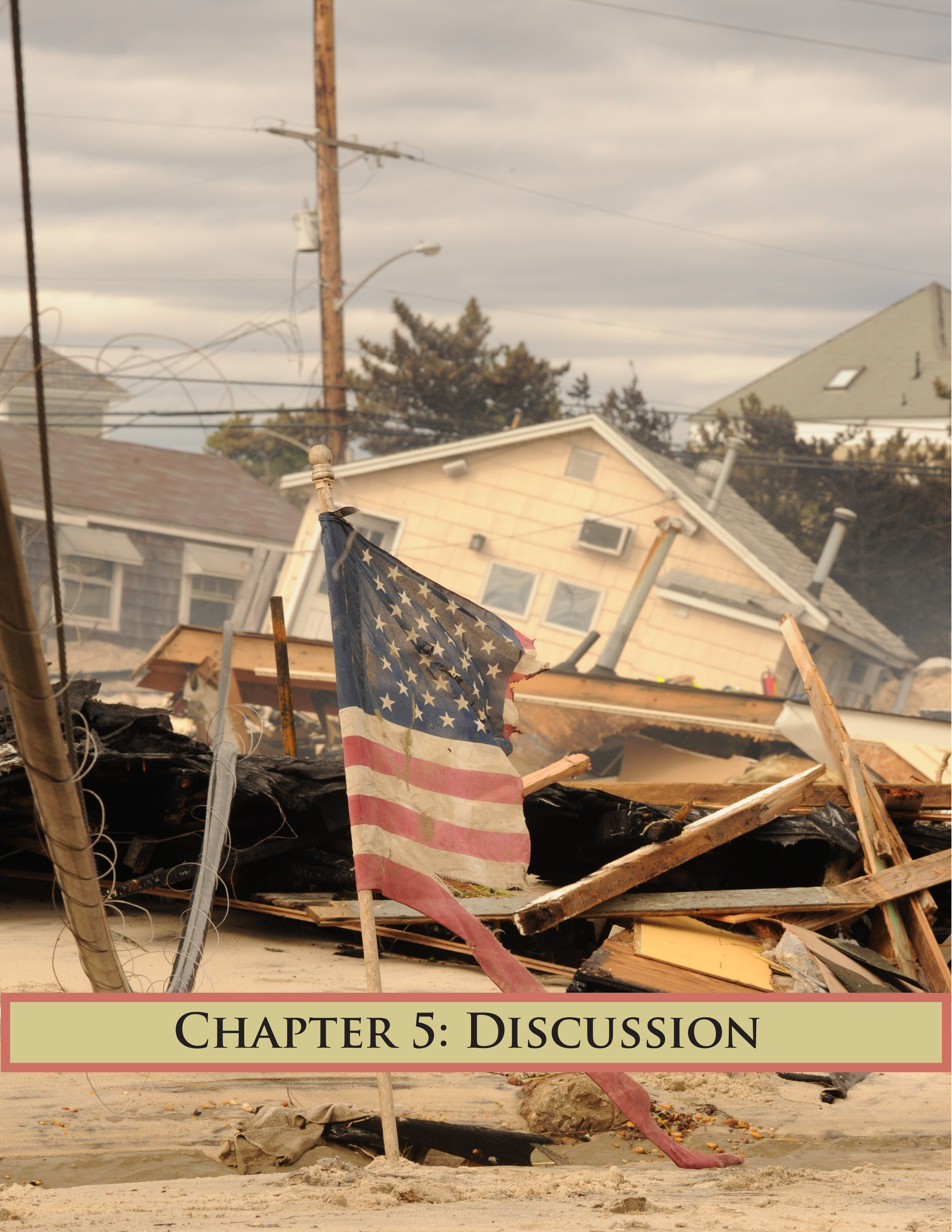
	Not Senior (n=451)	**Senior (n=287)**
Total Amount of Funds		
GFI Amount (SD)	$21,125 ($6,941)	$21,125 ($7,123)
SSNJRF		
Secured funds	40% (178)	35% (100)
Amount funded (SD)	$6,007 ($8,931)	$5,392 ($8,554)
ARC		
Secured Funds	49% (222)	45% (130)
Amount funded (SD)	$8,889 ($9,585)	$8,359 ($9,564)

Third, a county analysis answered the question of whether or not outcomes differed by county of residence. Table 6 shows that there was no significant difference in average funds by county (Atlantic $21,093, Monmouth $21,834, Ocean $20,422, and other $21,191). There was no significant difference in time.

Table 6: Amount Funded By County				
	Atlantic (n=155)	**Monmouth (n=131)**	**Ocean (n=429)**	**All Others (n=34)**
GFI Award				
Average funded (SD)	$21,093 ($6,809)	$21,834 ($7,298)	$20,922 ($6,949)	$21,191 ($6,975)
SSNJRF				
Secured funds	36% (55)	42% (55)	37% (160)	38% (13)
Average funded (SD)	$6,230 ($9,077)	$6,336 ($9,375)	$5,460 ($8,481)	$5,540 ($8,754)
ARC				
Secured funds*	38% (59)	54% (71)	50% (241)	47% (16)
Average funded (SD)	$6,893 ($9,256)	$9,682 ($9,550)	$9,108 ($9,609)	$8,844 ($9,965)
Total Time For Application				
Average Days (SD)	385 (212)	377 (224)	411 (236)	376 (233)

*p<.05

Finally, a correlation test was conducted to determine if there was a relationship between income and the amount of funds provided by ARC and SSNJRF. ARC was significantly more likely to fund lower income applicants than higher income applicants (Pearson correlation -.453, p<.001). The remaining correlation tests showed no significance.



Chapter 5: Discussion

Discussion

This section discusses the research group's findings on GFI's process and outcomes and implications for best practices for future public-private disaster recovery programs.

Program Implementation

Throughout the three and a half years of GFI, NJCC adjusted the application process to better suit client needs by streamlining paperwork, meeting with NJDCA to improve application review turnaround time, and securing approval from funders to fund both Pathway B and C applicants. Stakeholder interviews reinforced these sentiments; interviewees often praised NJCC for their effective partnerships with other nonprofits and state agencies. These program adjustments were important to meet the program's goals. The responsiveness of the program enabled GFI to be survivor-centered, flexible, and collaborative.

The need for GFI's flexibility is demonstrated by the "bottlenecks" identified in the process flow charts. The bottlenecks highlight the areas of the program that caused the longest delays in GFI's process and demonstrate where applicants dropped out, both of which run counter to GFI's goal of getting people back into their homes quickly. In response to these bottlenecks, NJCC staff adapted the application process to overcome these process challenges.

First bottleneck

The research team identified the "Homeowner Award Calculation" (HAC) document as the first bottleneck. During this step, the survivor contacted NJDCA to obtain a RREM program document that proved the homeowner's RREM award amount. The research group's analysis suggests that requesting the HAC document from NJDCA, waiting to receive the document, and then providing it to GFI was the longest part of the application process for the average survivor. Having identified this step as being a particular problem in the application process, NJCC worked with NJDCA to make it easier for the survivor to obtain their HAC.

The research team conducted bivariate tests to determine if these changes affected the length of time to secure the HAC. The research team found that after August 15, 2014 (the date on which roughly half of GFI applications had been processed) applicants spent less time waiting for their HAC and applications submitted before August 15, 2014 were approved more quickly than applications submitted after August 15, 2014. These results suggest two important conclusions: one, over time, NJDCA decreased the amount of time it took to process and provide the HAC; and two, that the length of time it took NJCC to process applications increased with time.

NJCC employees worked with NJDCA employees to streamline NJDCA's process to provide NJCC with survivor's HAC document. Some interviewees praised GFI for working well with state partners to reduce the steps needed to secure a HAC document. This effort is at least partially explanatory for why NJDCA's average time for providing the HAC to survivors decreased over time.

There are several possible explanations for why the length of GFI's application process increased over time. The most likely explanation is that the quality of applications decreased over time. Of the 749 applicants in "Early Applications," 720 moved past the step in the process during which the applicant needed to provide GFI with the HAC from NJDCA. Alternatively, only 520 "Late Application" applicants successfully progressed afterward. While this is not proof of causation, the decrease in approved applicants does suggest that the quality of applications deteriorated, which in turn could explain why GFI's application approval process took longer over time. The research group argues that one possible explanation for the deterioration of applications over time is that the Voluntary Compliance Agreement signed between NJDCA and several nonprofit complainants required RREM program staff to re-examine and approve previously denied applications, some of which may have been incomplete or inadequate to begin with. These previously denied applications may have increased the amount of time spent on each application by NJCC staff.

The increase in HAC speed buttresses the argument for why GFI's application approval process increased over time as it shows that the increase in time of application approvals was primarily on the NJCC side and cannot be explained by increases in NJDCA processing time. NJCC created GFI around the RREM process, meaning that in order to deliver funds in a timely manner NJCC had to plan around the lengthy processing times endemic to the RREM program. In short, program flexibility and collaboration between stakeholders enabled GFI to respond to this bottleneck.

Second bottleneck

Another bottleneck the research team identified was the "Request for Payment" (RFP) step in the Pathway B process flow. Survivors who applied for GFI funding through RREM Pathway B had to complete construction, submit their final reimbursement documentation first to RREM and then to GFI, and finally fill out and fax a signed RFP to NJCC to receive GFI funding. The research team looked to see if there was a significant difference between length of times between the two pathways. While Pathway B and C applicants did not differ significantly in the speed with which their applications were approved, the speed with which approved applications were funded differed significantly between Pathway B and C. The average time from the initial GFI application to applicant approval was 144 days and an additional 357 days to receive Pathway B funding, meaning Pathway B applicants navigated the entire GFI process in an average of 501 days. Pathway C applicants received their funding in only 72 additional days on average, navigating the entire GFI process in an average of 216 days.

There are several possible explanations for these disparities in time; however, the most likely explanation seems to be that Pathway B required applicants to act as project managers for the construction, which was a more elaborate process compared to Pathway C. The repetitive and paperwork-heavy nature of many of the Pathway B steps is at least partially explanatory for the enormous disparity in funding times between the two pathways. NJCC responded to the disparity in funding times between Pathway B and Pathway C by eliminating the need for an RFP.

Interviewees often spoke about and literature emphasizes that the large amount of paperwork necessary to access recovery funds is challenging for homeowners. Survivors must navigate new government and nonprofit programs after losing their homes, their documents, and in some cases their loved ones. Interviewees spoke about the feeling of "death by paperwork" needed to secure funds. NJCC partnered effectively with nonprofit stakeholders to alleviate the paperwork burden on homeowners by adapting GFI to repackage the recaptured funds to a nonprofit contractor to help pay for the rebuilding of survivors homes.

NJCC recognized the bottlenecks and the paper heavy burden on homeowners and adapted the GFI application process. NJCC's decisions to streamline the HAC, eliminate the RFP, and repackage the funds are all examples of when NJCC adapted the GFI implementation to best suit homeowner needs by collaborating with state and nonprofit partners and prioritizing the homeowners.

Program Outcomes

Adapting to client needs is essential to creating a survivor-centered program. Looking at the process flows for both Pathway B and C, NJCC understood the need for a survivor-centered approach. NJCC worked with clients to help overcome the challenge of securing the correct paperwork. NJCC also worked with funders, ARC, and SSNJRF to approve Pathway B homeowners. This suggests that both ARC and SSNJRF pursued flexibility in their funding criteria. There was no significant difference in overall GFI funds by pathway, suggesting that pathway selection did not influence the amount of funds.

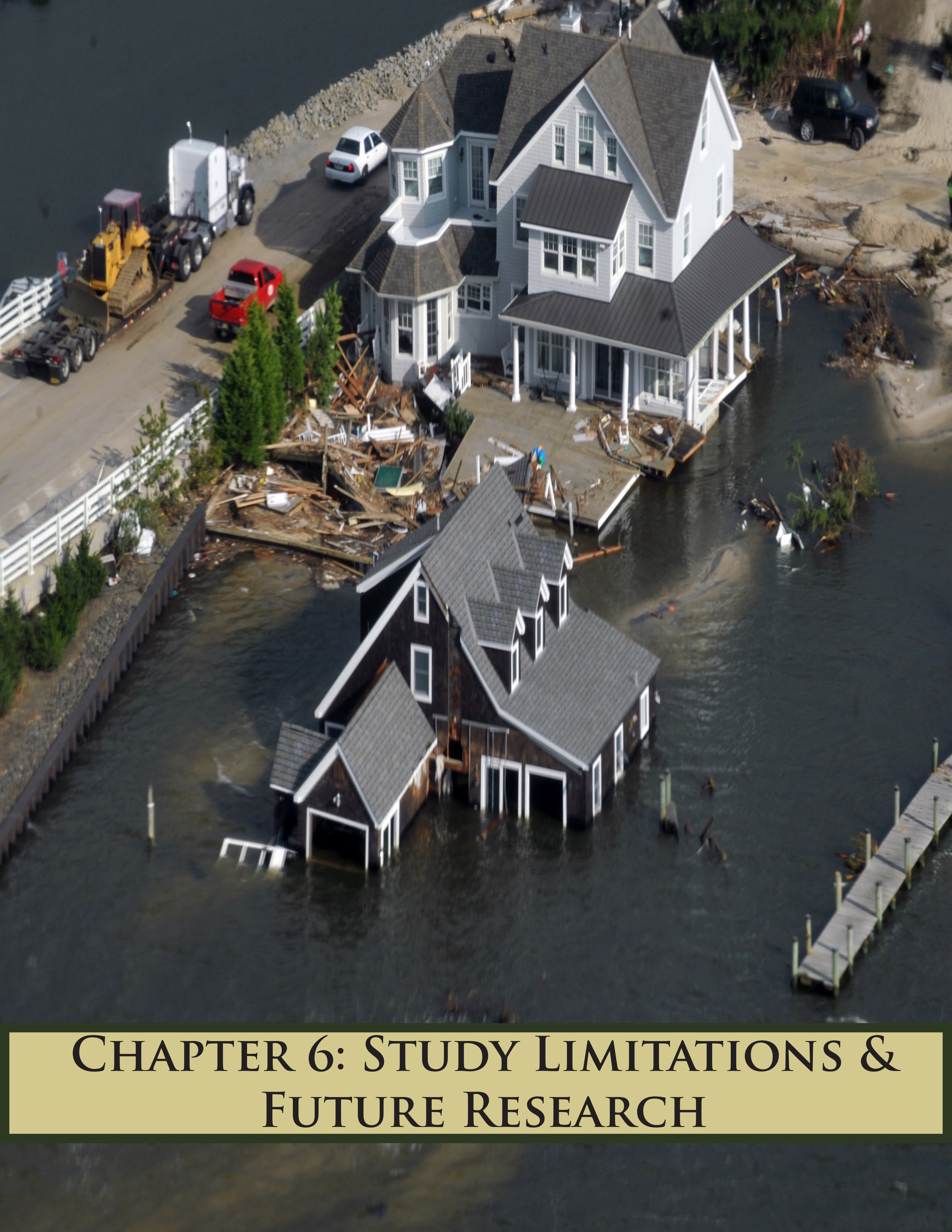
Additionally, GFI was survivor-centered because of its ability to fund vulnerable homeowners. GFI funded more LMI applicants than RREM (76% vs. 45%). ARC was significantly more likely to fund lower income applicants than higher income applicants (Pearson correlation -.453, $p<.001$). It is important to note that SSNJRF had a higher threshold for income eligibility. These tests show that funders prioritized vulnerable populations.

An additional series of bivariate tests were conducted to determine the equitable impact of the GFI funds. The bivariate tests looked to determine whether race, age, county, or age had a significant relationship with the amount of funds secured or the length of the application and funding period. The majority of tests were not statistically significant and therefore suggest an equitable impact of GFI.

Implications

The research group concludes that the GFI program ensured equitable outcomes in resource distribution, prioritized the survivor, adapted to homeowner needs, and emphasized collaboration between public and private entities. NJCC included these principles in GFI's design and implementation, going as far as to change certain processes of the GFI program during its implementation to better reflect the guiding themes where possible. The results were outcomes that reflected the original design and intent of the program.

As the interviews suggest and literature review shows, collaboration is essential among state and nonprofits to create a successful program. Interviewees argued that GFI was successful because it worked in tandem with RREM, while NJDCA was less successful because it did not collaborate well with nonprofits or successfully reach out to survivors. Therefore, it is imperative that public-private disaster recovery programs incorporate stakeholder inputs from design though program completion.



Chapter 6: Study Limitations & Future Research

Study Limitations & Future Research

Although this research was carefully prepared, this project has important limitations. Certain variables had a large number of missing responses preventing analysis of certain questions. One such variable was the amount of funding returned to NJCC after construction was completed. Although it would have been useful to explore the amount of funding that survivors returned and why, there were only 38 such instances in the data, preventing any statistical testing. Additionally, data on whether or not the construction was completed were not available. Finally, the data set contained multiple versions of the variable "the gap after the gap," or the amount of funds households still lacked after receiving an award. Based on the various versions of the data and lack of a data dictionary, it was challenging to know which data point to use. In terms of project scope, the research team would have liked to analyze outreach impacts; however, the team did not have concrete information on the outreach practices and therefore was unable to determine outreach impact.

To provide a more thorough impact analysis, future researchers need access to State as well as private program data. Supported by our literature review of other similar programs, creating a shared data infrastructure would alleviate this evaluation challenge in the future. Additional research on public-private disaster recovery programs should also include an assessment of the impact on outreach.

Future research should investigate equity concerns created by the use of construction reimbursement as a disaster relief grantmaking tool. RREM required homeowners to pay for construction up front and be reimbursed. This practice may cause the benefits of disaster relief grants to accrue unevenly based on the wealth of homeowners as wealthy homeowners may be better able to afford to pay costs upfront than other homeowners. This research would also address the role that other stakeholders have in this process, including mortgage and insurance companies.

Lastly, future research should consider including the voices of survivors for a more inclusive assessment and account of events.

Chapter 7: Program Recommendations

Program Recommendations

Based on the literature review, stakeholder interviews, and GFI data analysis, the research group recommends that homeowner rebuilding programs empower homeowners to select the program that matches their needs, involve contractors at all program stages, reach out to homeowners through various means, facilitate collaboration among stakeholders, consider equitable payment structures, and ensure flexibility of funding.

Empower homeowners to select the program that matches their needs

When considering disaster relief rebuilding programs, local governments should design construction programs that provide homeowners with choices in how they rebuild their home. Some survivors may prefer to manage their home's construction within a supportive government framework; others may prefer leaving the management of their construction projects to government case managers due to time, resources, or other constraints. Regardless of the pathway survivors choose, there should be ongoing support from the local government, state government oversight, timely disbursement of funds, and clear explanations of the program's process.

Involve contractors at all program stages

Contractors are key to any construction program. Ahead of a storm, local governments should consider creating a list of vetted home contractors and construction managers. This preparation step will decrease fraud and increase the incidence of successful and speedy construction. Additionally, state and local government consumer protection agencies should collaborate on contractor decisions. Contractors who wish to be included in the group of vetted contractors employed in state or local relief efforts should be required to secure certification. Future research should look into a payment structure for this kind of certification and the inclusion of small business and women and minority owned businesses.

Reach out to homeowners

One way to prioritize survivors is to focus on outreach before the program even begins and create a plan that targets hard to reach homeowners in order to ensure equity throughout the application process. When considering the appropriate format for a disaster relief application, organizations need to focus on simplicity and understanding. Many survivors will be dislocated and will have trouble collecting important documentation.

Facilitate collaboration among stakeholders

Recognizing that no single organization is able to manage a disaster recovery alone, it is important for local governments to establish roundtables for all stakeholders and to manage cooperation expectations while maximizing homeowner benefit. Community-based organizations that know the specific needs of their communities should be included. In addition to sharing local knowledge, a coalition of local organizations and government supports effective communications. In order to maintain good cooperation among all stakeholders throughout the entire process, resources need to be invested in shared data infrastructure to help facilitate information sharing before, during, and after the storm. By having this, organizations and local governments can ensure that the communication with survivors is seamless and reduces application redundancies. Moreover, with the quantity of stakeholders involved, the roles and level of authority of each partner should be clearly communicated.

Consider equitable payment structures

Local governments must also account for the equity concerns of a rebuilding program. To design a program that prioritizes all homeowners and not just the ones with the most resources, programs must address the mechanism by which grant funding is dispersed. It is important to recognize that reimbursement models of disaster relief homeowner assistance work better for people with resources because reimbursement requires upfront payments from the homeowner, which can often leave populations whose resources are already stretched unable to access such programs. Further research should be done to produce a stronger understanding of the effects of payment structures on disaster relief equity.

Ensure flexibility of funding

Lastly, it is paramount that funding and program implementation are flexible to ensure a continual match between the program and homeowner needs. Given the confines of government funding, private donations should be flexible enough that survivors can use funds for unforeseen circumstances. As seen during the greater Superstorm Sandy relief, survivors often received money from multiple sources. One of the strengths of public-private partnerships is the relative flexibility of private funds in comparison to public funds which are often tied to specific purposes. The research team recommends that for funds to be best leveraged, nonprofit programs should provide the services that federal and state funds cannot, including living costs, matching payments, or gap funding. This allows private funds to maximize federal and state funds while also addressing the gaps between public funds and survivor needs.

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Chapter 7: New Boardwalk and Benches, Flickr, https://www.flickr.com/photos/surfergirl30/9168703857

Appendix I

Appendix I
(Email example for interviews)

Greetings,

I hope this email finds you well. My name is Jazmyne McNeese, a public policy masters student at the Edward Bloustein School of Planning and Public Policy at Rutgers University. I'm working with a team of public policy graduate students conducting a research study on the Gap Funding Initiative (GFI), the program run for homeowners affected by superstorm Sandy that you and your organization helped to fund through New Jersey Community Capital. The evaluation's aim is to make recommendations for best practices in public-private disaster relief grantmaking going forward. Peter Grof recommended that we speak with you to better understand the impact that this program made on the people of New Jersey.

Should your schedule allow, we (myself and one teammate) would like to talk over the phone for no more than an hour. We believe your insights would be very helpful and would very much appreciate your help. Please let us know a few possible dates and times that work for you so that we may schedule accordingly.

If you have further questions, you may contact our faculty advisor, Professor Andrea Hetling, (cc'ed on this email).

Respectfully,

Jazmyne McNeese
Master of Public Policy Candidate
Bloustein School of Planning and Public Policy
Rutgers University – New Brunswick
XXXXXX@rutgers.edu
XXX-XXX-XXXX

Appendix II

Appendix II

(Sample Generalized Interview Guide and Protocol)

Interview Introduction

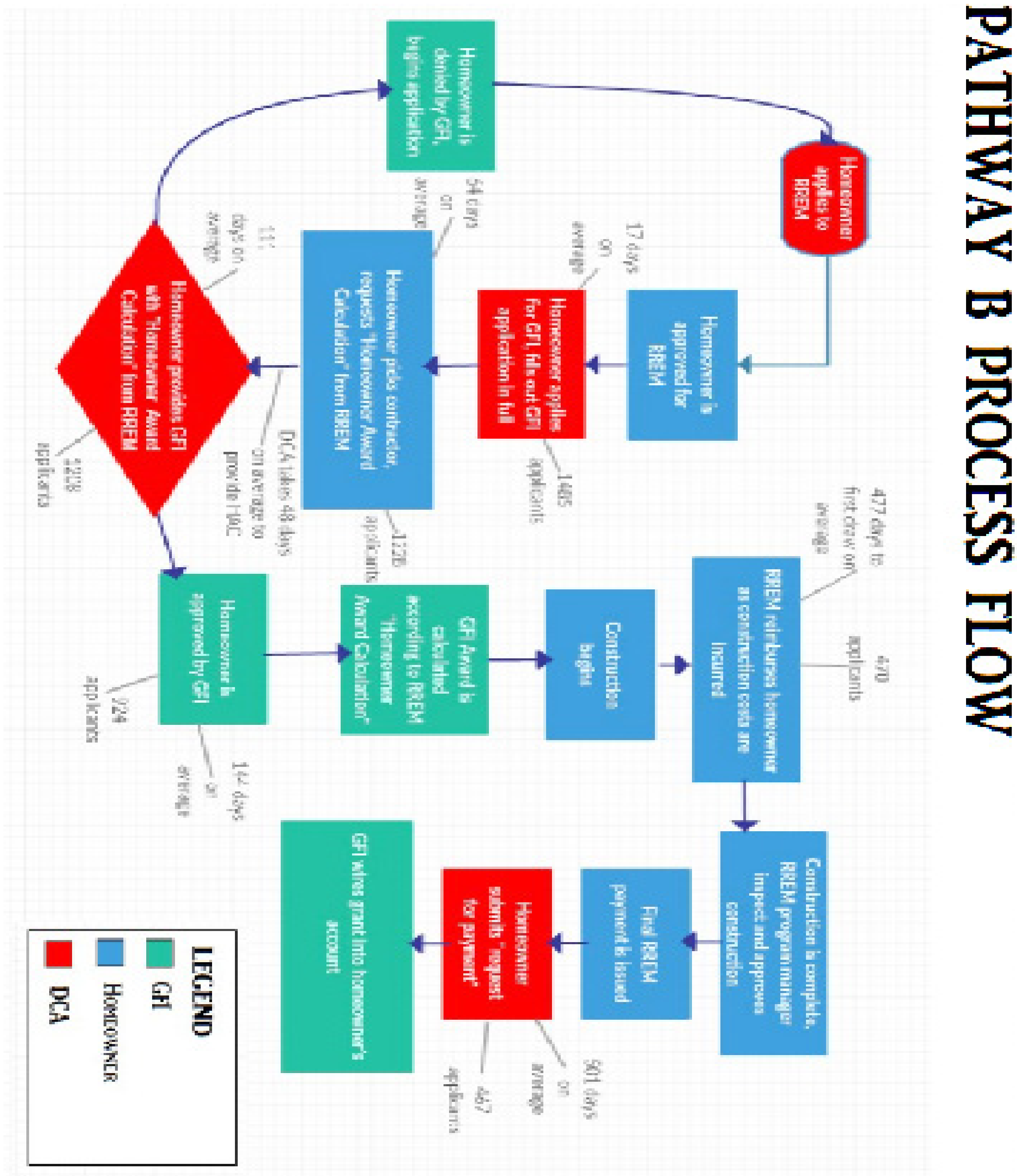
Welcome and thank you for agreeing to speak with us. My name is Jazmyne McNeese and I'm an student at the Bloustein schools. We are conducting a research study to understand the effect GFI had on RREM recipients in rebuilding their homes. The study objective that derives directly from this overall purpose is to fact check GFI as a program in the context of public-private disaster relief grantmaking; the evaluation's aim is to make recommendations for best practices in public-private disaster relief grantmaking going forward. This interview consists of 9 questions and should take no more than one hour. All of your responses will be kept confidential and anonymous.

Your participation in this interview is completely voluntary. If at any time you need to stop or take a break, please let me know. You may also withdraw your participation at any time without consequence. Do you have any questions or concerns before we begin? Then with your permission we will begin the interview.

Interview Questions:

1. What were your responsibilities in response to superstorm sandy?
2. What plan did your team devise to help the survivors of superstorm sandy?
3. How well do you believe your team followed the plan to the best of their ability?
4. Were there any obstacles your team had to overcome during this process?
5. What were the overall challenges in implementing the plan of action for superstorm sandy?
6. What were your overall successes in carrying out your plan for superstorm sandy?
7. What advice would you give an organization creating a program to help hurricane survivors with limited funds?
8. What have you gained out of this process?
9. Do you have anything else you would like to share?

Appendix III: Process Flow Charts



PATHWAY C PROCESS FLOW