In the Aftermath of the Storm: Administrative Burden in Disaster Recovery

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ABSTRACT As climate change intensifies, analyzing the barriers to disaster recovery faced by marginalized communities is increasingly important. Using in-depth interviews from the Understanding Communities of Deep Disadvantage project, a community-level investigation of disadvantage in the United States, this study examines participant experiences with the federal disaster recovery system in the wake of Hurricanes Matthew and Florence. Our analysis reveals how administrative burden, high rejection rates for key disaster recovery programs, and the slow pace of aid ignited a feedback loop that depressed application rates for disaster aid in a community with extreme need.

INTRODUCTION

In the future, the social and economic effects of climate change will only intensify, exacerbating social inequalities within the United States (Reidmiller et al. 2018). According to the US Global Change Research Program, rural, lower-income, and otherwise marginalized communities are likely to face greater hardship from climate change (Reidmiller et al. 2018). In this article, we examine the challenges of disaster recovery in a community at the nexus of these climate change vulnerabilities.

Marion County is a rural, majority-Black community in South Carolina that has experienced high poverty for decades (US Census Bureau 2020). Between 2015 and 2018, the county weathered an extreme flood, Hurricane Matthew, and Hurricane Florence. Although the Federal Emergency

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Management Agency (FEMA) allotted millions of dollars for disaster victims in Marion to repair and replace their homes through the Individuals and Households Program (IHP), many affected residents had not received any aid by summer 2019. In this descriptive study, we examine the experience and consequences of administrative burden associated with individual disaster recovery assistance. Combined with other negative attributes of the disaster recovery system, we found that administrative burden triggered a feedback cycle—a self-reinforcing system that dissuaded potential applicants from completing the application process. For a family seeking help, initial interactions with the federal disaster recovery system often revealed a slow, burdensome process that yielded frequent rejections. We refer to these initial impressions as "primary factors." Our interview respondents also described how a wave of secondary factors, including distrust in FEMA, a perception of procedural injustice, and the spread of misinformation, began to take hold among community members at large. We found that these primary and secondary factors led to a broadly held perception that few families, if any, were able to navigate the programs successfully, which in turn inhibited new applications, creating a self-reinforcing cycle.

This study contributes to the literature on administrative burden and its consequences in three ways. First, we introduce the conceptual frame of administrative burden to the examination of postdisaster individual assistance in the United States. Recent disaster victims are at risk of falling through the cracks when seeking governmental assistance after displacement, trauma, and physical harm, so disaster recovery represents an urgent area of research. Second, scholarship to date has revealed the inequitable distribution of administrative burden. We advance the field's understanding of the interaction between administrative burden and systemic oppression through a discussion of heir's property, a phenomenon that has made it more difficult for Black families in the South to receive individual disaster recovery assistance. Finally, we strengthen the connection between administrative burden and policy feedback theory by presenting a case in which administrative burden triggered feedback effects on a local scale.

BACKGROUND

MARION COUNTY

Marion County sits between highway I-95 and Myrtle Beach in the Pee Dee region of South Carolina. The majority of the county's 31,000 residents are

Black (56.8 percent), just 9.8 percent of residents over 25 have a bachelor's degree, and roughly a quarter of residents and one-third of all children live in poverty (US Census Bureau 2022a, 2022b, 2022c).

Two generations ago, Marion County residents could find agricultural employment on one of the area's many farms. As agricultural employment declined, local factories took over as the largest employers. For example, a Russell Stover factory referred to locally as "the candy plant" provided stable, union jobs for many area residents. When this factory closed in 2000, the local economy was devastated. During the Great Recession (December 2007–June 2009), unemployment in Marion County reached 21 percent, more than double the national average (US Bureau of Labor Statistics 2022). As late as 2018, the county's unemployment rate remained more than 10 percent—and 13.8 percent among African American residents (US Census Bureau 2022*d*).

Marion citizens saw their troubles deepen when three extreme weather events hit the county between 2015 and 2018. In October 2015, a flood killed 19 people across South Carolina (National Weather Service 2016). The flood caused an estimated \$1.5 billion in damage and was declared a major disaster by President Barack Obama (FEMA 2020b). In October 2016, Hurricane Matthew made landfall (Stewart 2017). This misfortune was followed by Hurricane Florence in September 2018, which caused \$607 million in damage across South Carolina and harmed more than 2,000 homes (Kinnard 2018).

The South Carolina Hurricane Matthew Action Plan, a document submitted to the Department of Housing and Urban Development (HUD), labeled Marion the "most impacted and distressed area" (South Carolina Disaster Recovery Office 2018). One of the four South Carolina fatalities from Hurricane Matthew was a 40-year-old Marion County man who drowned in his home. Following Hurricane Florence, one small Marion County town was entirely covered with 4–6 feet of water for days (Hawes 2018). Other parts of the county saw flooding as deep as 8 feet (Brown 2018).

FEDERAL DISASTER RECOVERY SYSTEM

The federal disaster recovery system is meant to support the recovery of households and communities following natural disasters. It consists of a web of federal programs made available to states, municipalities, and individuals in the form of dozens of loans and grants. These funds are earmarked for

purposes ranging from home replacement to supplementary financial assistance for beekeepers (FSA 2014). We focus on the IHP, a subset of the FEMA Individual Assistance Program. The IHP provides financial assistance and direct services to eligible homeowners and renters following a disaster and is available to US citizens residing in areas within a presidential disaster declaration (FEMA 2019). FEMA distributes IHP funding in two forms: housing assistance and home repair aid or "other needs assistance." Housing assistance covers housing costs incurred during a period of displacement, home repair, and replacement; other needs assistance covers a range of other serious needs, such as child care. IHP housing assistance related to repair and replacement is not designed to compensate for all losses from a disaster, only to repair or replace a primary residence damaged by the natural disaster and not covered by insurance.

Applying to the FEMA IHP is a complex process, forcing disaster victims to run a gauntlet for financial relief. The first step in the IHP application process is to register with FEMA, which an applicant can do online, over the phone, at a disaster recovery center, or with FEMA staff on a disaster survivor assistance team. After registration, FEMA establishes program eligibility by verifying the applicant's citizenship, identity, occupancy, and, for homeowners, proof of ownership—requiring the applicant to produce a variety of documents and detailed information. After establishing eligibility, FEMA verifies the damage to the property using either an on-site inspection, a geospatial inspection, or documentation. Of these methods, an on-site inspection is the most common. After completion of an inspection, the application is sent to one of FEMA's three national processing service centers, where most applications are reviewed automatically by software at the National Emergency Management Information System (Jaffe 2015).

LITERATURE REVIEW

The concept of administrative burden, defined originally in Burden and colleagues (2012, 741) as "an individual's experience of policy implementation as onerous," has been studied across nations including Pakistan, the United States, and South Africa and in policy arenas ranging from health care to emergency shelter use (Moynihan, Herd, and Harvey 2014; Heinrich 2016; Nisar 2018; Connolly, Klofstad, and Uscinski 2020; Masood and Nisar 2021). Administrative burdens can serve a legitimate purpose—for

example, to verify recipient eligibility. However, burdens that are exceedingly onerous or inequitably distributed across populations can disconnect people from policy benefits (Edin and Shaefer 2015). Examination of administrative burden can clarify how policies succeed or fail, expand gaps in outcomes or close them, and build trust in government or prevent it.

Heinrich (2016) and Moynihan and colleagues (2014) provide two typologies for administrative burden analysis. Heinrich applies the conceptual framework from Kahn, Katz, and Gutek (1976) to divide experiences of administrative burden into four categories: intraorganizational (i.e., organizational behavior), bureaucratic encounters initiated by the citizen, bureaucratic encounters initiated by the state, and citizen-citizen interactions outside of the state. Alternately, Moynihan and colleagues (2014) present three costs of administrative burden: learning, psychological, and compliance. Learning costs include the effort to learn about a program and understand how to access benefits. Psychological costs represent the stigma and stress of program participation. Compliance costs are the actions required to acquire and maintain benefits (e.g., waiting in lines, completing applications, providing documentation). In our analysis, we draw on both frameworks to describe our participants' experiences.

Burdens are distributed inequitably, and the experience of burden can be exacerbated by other forms of oppression (Herd and Moynihan 2018). Evidence suggests that burden can have varied impacts based on education and poverty level (Brodkin and Majmundar 2010), health (Cherlin et al. 2002), age (Herd 2015), and gender (Nisar 2018). Three recent papers—Christensen and colleagues (2020); Ray, Herd, and Moynihan (2022); and Heinrich and colleagues (2021)—introduce theories that partially explain the variation. Christensen and colleagues (2020) advance the idea of a human capital catch-22, in which people who are more likely to need governmental services as a result of scarcity, health problems, or age-related cognitive decline are also those that are most likely to have difficulty obtaining them. Ray and colleagues (2022) apply racialized organization theory to argue that the state applies administrative burden as a tool to reinforce racial inequality through rules that may be "color-blind" but nonetheless erect greater barriers for non-White families. Heinrich and colleagues (2021) describe how contextual and environmental factors, such as place-based resource deficits, can exacerbate the experience of administrative burden. Through multiple mechanisms, administrative burden can fortify existing structures of social inequity.

Administrative burden can have adverse effects beyond direct access to services. Research on policy feedback has found that the resources and meaning conveyed by a policy can alter constituent political engagement (Pierson 1993). For example, Bruch, Ferree, and Soss (2010) found that social welfare programs that are designed to encourage participant feedback and participation (like Head Start) are associated with high levels of civic participation, whereas more paternalistic programs (like Temporary Assistance for Needy Families) are associated with lower levels of civic participation. These findings show the importance of policy design and implementation choices, suggesting that negative experiences with program participation can reduce engagement in other ways. Herd and Moynihan (2018, 29) argue that administrative burden can affect both the resources and meaning conveyed by policies by making "resources more or less difficult to attain, and structur[ing] state rules and procedures to engender more or less negative interpretations among mass publics, or specific subgroups."

METHOD

The Understanding Communities of Deep Disadvantage project is an iterative, mixed-methods, community-level study that seeks to broaden our conception of poverty beyond income-based measures to other dimensions of disadvantage, such as health and economic mobility. An interdisciplinary team of researchers conducts the study from the University of Michigan and Princeton University, with funding from the Robert Wood Johnson Foundation, the team combines big data with systematic, indepth qualitative interviews and ethnographic observations to improve our understanding of the history and contemporary dynamics in a subset of communities of deep disadvantage, with the goal of painting a vivid portrait of the lived experiences of poor individuals and families in these places. From these in-depth conversations, as well as observations of community events, the project seeks to uncover community factors that may drive disparities in income, health, and social mobility.¹

1. The Health Sciences and Behavioral Sciences Institutional Review Board at the University of Michigan exempted this study. All interviewers completed research ethics training through the Program for Education and Evaluation in Responsible Research and Scholarship at the University of Michigan or the Collaborative Institutional Training Initiative at Princeton University.

The first phase of this study entailed a principal component analysis of deep disadvantage in the United States. Using American Community Survey data on county- and city-level poverty and deep poverty rates, in combination with administrative data on health (life expectancy, low birth weight) and social mobility, the study team developed a multidimensional index of deep disadvantage (Edin, Shaefer, and Nelson 2019). This analysis revealed clusters of deep disadvantage in the Cotton Belt region of the South, the Pee Dee region of the coastal Carolinas, Appalachia, South Texas, and western Native American lands. The second phase of this study seeks to describe life in these pockets of deep disadvantage using participant observation and in-depth interviews. At the time of this writing, researchers had spent time embedded in Clay County, Kentucky; Marion County, South Carolina; Leflore County, Mississippi; and Brooks and Zavala Counties in Texas.

For this analysis, our team reviewed interview transcripts from the Marion County field site from June 2019 and July 2019. In that period, our team conducted 45 semistructured interviews. This sample includes both community leaders (e.g., social service providers, faith leaders, elected officials) and heads of low-income households. Interview topics for heads of households included life history, family, neighborhood, residential history, community, social issues, income, expenses, religion, health, emotional well-being, and daily routine. Interview topics for community leaders included community change over time; local attitudes toward local, state, and national government; and major challenges and triumphs in the community. We recruited heads of households using a snowball sampling method that we initiated with flyers at Pee Dee Community Action Agency, an organization that provides financial assistance to low-income county residents. In addition to interviews, two researchers conducted participant observation in Marion County, traveling across the county, attending community meetings, participating in community events, and volunteering at community agencies. Researchers recorded and stored interviews on a secure server until sent to Rev, an external transcription service. Project staff reviewed the resulting transcripts for accuracy.

Staff thematically analyzed these interviews three times: first with an inductive approach (using codes such as displacement, distrust, and misinformation), second using deductive codes developed from the interview guide, and third with additional deductive codes. When all project transcripts were coded using a deductive method, these codes matched the

TABLE 1. Sample Description

		Gender Distribution		Racial Distribution	
	Participants	Female (%)	Male (%)	Black (%)	White (%)
Heads of households Community leaders	15 22	13 (87) 7 (32)	2 (13) 15 (68)	15 (100) 13 (59)	0 (0) 9 (41)
Total	37	20 (54)	17 (46)	28 (76)	9 (24)

Note.—No respondents were identified as Hispanic.

categories of interview sections. For the community leader interviews, these codes included state government, federal government, crime, drugs, development, health, change over time, challenges, disadvantages, benefits, distrust, and hot-button issues. Deductive codes for the head-of-household interviews included health, religion, living costs, social issues, residential history, neighborhood, family, and life history.

After reviewing the literature, we learned that many of the problems described by our participants could be considered administrative burdens. We coded our transcripts a third time to understand how the three types of administrative burden (learning, psychological, compliance) arose in our conversations. This article uses pseudonyms for low-income respondents to protect their anonymity.

Although the formal interview guide did not include questions about recent natural disasters, Hurricanes Florence and Matthew had caused recent, catastrophic damage in Marion County, so these storms emerged as a major topic in most interviews. We have excluded interviews that did not include discussion of the recent hurricanes or disaster recovery from this analysis, leaving a sample of 37 (82 percent of an available 45) respondents. This sample consisted of 15 heads of households and 22 community experts. Table 1 presents the demographic breakdown of this sample.

RESULTS

HIGH REJECTION RATES

During fieldwork, our team heard from a community leader that FEMA rejected "almost every other person" who applied for aid through the agency following Hurricanes Matthew and Florence. When we spoke to members of the Marion County Long Term Recovery Group (Marion LTRG), a local organization that connects local flood victims with federal programs and donated goods, they described how many of their recent

Natural Disaster	Valid Registrations	Total Inspected	Approved for FEMA Housing Assistance	% Inspected Homes Denied Assistance	% Valid Registrants Denied Assistance
2015 flood 2016 Hurricane	808	713	163	77	80
Matthew 2018 Hurricane	2,998	2,387	1,173	51	61
Florence	1,568	1,380	646	53	59

TABLE 2. Individuals and Households Program Housing Assistance Acceptance Rates for Homeowners, 2015–18 (Marion County)

Source.-FEMA (2020a).

clients had filed paperwork with FEMA and been denied. Dianna Owens, a Marion LTRG volunteer, described how "a lot of the recent clients that came in that had filed paperwork with the FEMA and FEMA denied. And they came in later and said, 'Well, FEMA, they're not going to help you.'" Willena Rembert, a grant writer in the county administrative office, described how denials increased distrust in FEMA, saying, "I think [FEMA] increased [distrust] because . . . people were traumatized from these storms. Traumatized. And FEMA came in riding on these white horses like they're going to save the world and almost every other person that went to them were denied. And [in] a small place like this, news travel like wildfire. And so, from the denials, people [were] talking, [saying,] 'They don't care about us.'" A disaster recovery volunteer with another local nonprofit described how the rejections seemed to be "automatic denials" from a faulty algorithm. That a software program reviews most applications instead of individual evaluators increased perceptions of procedural injustice.

Table 2 reports on publicly available data on IHP housing assistance in Marion County following all three weather events under study. Among residents who applied following the 2015 flood, FEMA denied aid to 80 percent of valid registrants and 77 percent of those who received an inspection. Following Hurricane Matthew in 2016, FEMA rejected 61 percent of valid registrants and 51 percent of homes it inspected. Following Hurricane Florence in 2018, FEMA rejected 59 percent of valid registrations and 53 percent

^{2.} Valid registrants are those who live in an individual assistance–declared state, county, and zip code during the FEMA-designated registration period. Some valid registrants then receive a FEMA inspection. By looking at both groups in Marion County, we can see how many potentially eligible applicants were weeded out at each step.

of inspected homes. Registrations decreased by approximately 50 percent between Matthew and Florence.

Comparing the denial rates faced by South Carolina residents across affected counties shows the breadth of problem. Across all three storms, South Carolina counties faced rejection rates between 47 and 89 percent (see figs. A1–A3 [appendix is available online]).

In their Hurricane Matthew Action Plan, the South Carolina Disaster Recovery Office (2018) acknowledges the problem of high denial rates for the FEMA individual assistance programs, including IHP. The office notes that most applicants deemed ineligible across the state have low-to-moderate incomes: "For this event [Hurricane Matthew], just as in the Oct 2015 flooding disaster, an overwhelming majority of ineligible FEMA IA [individual assistance] applicants are of low-to-moderate income (36%—Under 30% LMI and 9% more under 50% LMI), with 20,224 applicants below 50% of the Area Median Family Income." It provides some potential explanations for the high rejection rates, including clerical errors, preexisting insurance to cover the damage, or lack of proof of homeownership or proper identification.

ADMINISTRATIVE BURDEN

When FEMA inspectors arrive to assess property damage, they must establish that the aid applicant is the owner or renter of the home. Moynihan and colleagues (2014) describe this type of process as a "compliance cost," by which the onus of applying, providing documentation, and being responsive to the state is placed on the applicant. These compliance costs proved a barrier for many residents of Marion County. Many homes in this region have been passed down from generation to generation without legal paperwork documenting transfer of ownership. Known as "heir's property," this is particularly common among Black families in the Carolinas (Dyer, Bailey, and Tran 2009). Current owners who experienced damage were left with no proof of ownership, grinding their federal aid applications to a halt. Local hurricane response workers, like the Marion LTRG, worked to inform residents about their options for temporary documentation, but with so many people displaced following the hurricane, word on these alternate systems was slow to get out.

Linda Phillips, a lead volunteer at Marion LTRG, described the problems posed by lack of documentation: "You must be the owner of the deed. And a

lot of times it comes up where they're heir's property." She continued, "We will tell them this property needs to be in your name. We can't help you if it's not in your name." Marion LTRG volunteers learned to work around this requirement by getting a quitclaim deed, known colloquially as a "quick claims deed," through the Marion County Clerk of Court, though they noted this process caused delays and uncertainty.

Beyond proof of residency, FEMA has more than 30 reasons to rule an applicant ineligible for aid. A study from the nonprofit Texas Housers on the experiences of low-income residents in Texas following Hurricane Harvey revealed how the eligibility criteria for FEMA IHP disproportionately exclude low-income applicants (Adams 2018). For example, FEMA may deny a low-income applicant for missing an inspection appointment, a common occurrence when the affected population is temporarily homeless and lacking access to transportation. Indeed, FEMA records revealed that the agency rejects low-income households for federal recovery aid at much higher rates than wealthy households. After Hurricane Harvey, FEMA ruled 46 percent of applicants earning less than \$15,000 annually ineligible to receive aid whereas denying only 10 percent of applicants earning more than \$70,000 (Adams 2018). Between heir's property, displacement, and transportation insecurity, our participants' experiences show the mechanisms by which administrative burden can take a greater toll on low-income and marginalized communities.

Another form of administrative burden, learning costs, limited Marion residents' recovery. Learning costs include the onus of learning about the program—understanding one's own eligibility, the form of benefits, and how to access them (Moynihan et al. 2014). Bishop Michael Blue, a faith leader who became deeply involved in the disaster recovery process, described to us how many Marion residents missed the application window for programs like FEMA IHP because they lacked awareness about the available aid, saying, "So, there's a window of time for people to apply. That window closed, with some people not knowing, others having misinformation. And so, quite naturally, some of them having missed their opportunity."

Beyond learning about the availability of aid, understanding the application process and their own eligibility proved difficult for hurricane victims in Marion. Dom and Miko Pickett, leaders of a local nonprofit called the Pick 42 Foundation (or "Neighbors Helping Neighbors") that distributes free goods and toys within the community, described how their services

expanded when neighbors witnessed their successful navigation of the disaster recovery system. As Miko Pickett told us,

We were flooded, and so were all of my neighbors, and didn't have flood insurance. Didn't think we needed it. So, I went through what all my neighbors went through. Except for we were getting service. We got what we needed to move on, to repair, to rebuild. My neighbors didn't. And one at a time, it was so weird, people just started to come. And they was asking for help, "Can you help me fill out my FEMA claim? What's this mean?" Just people came by. . . . So started in 2016, we just started helping people with paperwork. It was like, the government agencies was talking Chinese, and the people in the community was talking Spanish. And we just kind of became their interpreters.

As interpreters, Dom and Miko Pickett worked to combat both learning and compliance costs associated with disaster recovery.

THE SLOWNESS OF "FEMA"

The national disaster recovery system spans 18 separate federal departments, including the Small Business Administration and the US Department of Agriculture. However, our respondents in Marion County colloquially referred to all disaster recovery aid as "FEMA." Dom Pickett described how "people think all disaster recovery's FEMA. It's not. They call them FEMA. I let them say that because it's easier to say that. FEMA only comes in immediately after the disaster."³

This generalization became important as Marion County residents learned of the millions of dollars that the government had allotted for South Carolina through non-FEMA programs such as HUD Community Development Block Grant Disaster Relief (CDBG-DR). When residents never observed those dollars at work on the local level, the slow pace added to "FEMA's" reputation for sluggishness. After Hurricane Matthew, HUD allotted more than \$95 million to South Carolina through CDBG-DR; after Hurricane Florence, it added and more than \$72 million (HUD 2020, 2022). Despite Hurricane Matthew's landfall in October 2016, HUD did not award CDBG-DR funds to South Carolina until June 2017. Hurricane

Florence hit in September 2018, and HUD had not provided funds to South Carolina as of April 2020.

HUD has acknowledged that the process of distributing disaster relief funds is inefficient. In their FY 2019 Agency Financial Report, HUD described their procedure for CDBG-DR allocation as "cumbersome and confusing," noting that it "delays HUD allocations" and places a great burden on grantees (HUD 2019, 20).

Blue described the slow federal aid disbursement in South Carolina. During an interview in July 2019, Blue said of the disaster recovery system:

It's slow. It's slow. The relief that comes from the federal government is slow. We've not received a [Hurricane] Florence dollar yet. We just learned that Florence money had been allocated, but as far as a dollar from Florence, working on the streets of Marion, I'm not aware of a dollar from Florence having made it here yet. So there have been some allocations, but it's a process. So, I'm not indicting anybody, I'm just saying, that's what makes it problematic. It takes so long for it to happen. Matthew happened in '16. Funds didn't start coming to Marion, I want to say, towards the end of '17 and into '18.

When Mayor Barbara Hopkins of Sellers, a small town in Marion County, talks about the pace of federal aid, she describes how her constituents have waited years to receive home repairs and replacements. She noted that in a community of 200, they "have a total of 40 homes right now that people have not moved back into." She told us, "Some people still staying in [flooded homes], but they are dying because of that mold and stuff." Many residents are elderly, and Mayor Hopkins describes how these seniors have been displaced and even died while waiting for new homes: "When we had the 2015 flood, I think about nine seniors got really messed up. And one person who's 91 years old living in [the town] right now, promised a home, since 2015, and have [sic] not got a home yet [as of July 2019]. We had one lady, Tiffany. She stayed in a molded home and she went to FEMA and they finally passed it for her that she was going to get a home, but never received the home. She died in her home."

Hopkins attributes much of this slowness to relief policies that are poorly designed to meet the needs of her residents. The entire town of Sellers has been designated as a floodplain, so, per a local ordinance, residents must raise their homes before major renovations can be completed.

A local news story estimated the price of such a home elevation to be between \$40,000 and \$60,000 per structure (Brown 2019). Although FEMA provides funding to help raise structures at high risk for flood damage through the Hazard Mitigation Grant Program, the program only provides grant funding to state, local, and tribal governments. Residents must have their application sponsored by a governmental entity (South Carolina Recovery Grants 2020). Even then, this grant program will cover only 75 percent of the costs, leaving the applicant and government sponsor with the remaining 25 percent, still far out of reach for most Sellers residents. Hopkins explains that "most everybody in the community now been trying to do a mitigation grant that will elevate these homes with a 25 percent matching fee, and these people ain't got that. Because they ain't got no job. And then two, . . . if you elevate it, they're going to fall apart anyway because they're so old."

A FEEDBACK LOOP

Thus far, we have described how two negative characteristics of the federal disaster recovery system—slowness and high rejection rates—complicated attempts by disaster victims in Marion County to access FEMA IHP assistance. As seen in figure 1, we argue that these two primary factors fed into a series of secondary factors, which themselves affected program efficacy (e.g., perceptions of procedural injustice, growing distrust in FEMA and the federal government, and spread of misinformation about disaster relief programs). Combined, these factors generated a feedback loop. Many residents who applied were unable to access aid. They shared their experiences with neighbors, who then discussed the outcome with others. With each additional person dissuaded from applying for FEMA IHP, the perception of policy failure became more pervasive and seemed more justified.

Our respondents' described result: a new status quo in which a reduced fraction of potentially eligible disaster victims applied for aid. Our interviews revealed the outcome of depressed application rates in two ways. First, Blue lobbied officials at the state capitol to reopen the application period for FEMA IHP after it had closed because so many affected families

^{4.} Although the Hazard Mitigation Grant Program allows for different levels of cost-sharing in some instances, our respondents only referenced the 75/25 ratio (FEMA 2016).

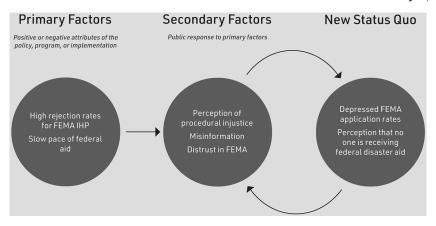


FIGURE 1. Primary and secondary factors create a feedback loop. FEMA = Federal Emergency Management Agency; IHP = Individuals and Households Program.

had yet to apply. Second, at the time of our fieldwork in 2019, the disaster recovery volunteers in our sample were still helping victims of Hurricane Matthew in 2016 who had not yet applied for aid. The following sections detail the emergence of these secondary factors and how they affected program participation.

DISTRUST IN FEMA

The news of frequent rejections and the slowness of aid disbursement dissuaded potential applicants from pursuing aid from the FEMA IHP program. In an effort to lift the depressed application rates, FEMA reached out to local leaders for assistance in contacting potential applicants. Marion LTRG volunteer Phillips explained how these FEMA outreach efforts, even when mediated through local leaders, initially fell short:

FEMA came to us and asked, "How can we reach the people? Can you all help us?" And so, Bishop Blue set up a meeting at the school, at Marion High School. And at that meeting, there were quite a few people in there that was already denied and some that had not even signed up yet. So, what the man from FEMA was saying, "We can build you a brand-new home, we can get you a brand-new trail[er]. We can do this. We could do that." Well, they were sitting there like, "Oh, that ain't going to happen. That'll never happen."

As Phillips notes, even when FEMA representatives presented residents with information firsthand, residents still did not believe that they would receive help. Given the high rejection rates that FEMA IHP applicants faced, these residents were making a logical decision to discount the credibility of information provided by people representing that program. Owens, the Marion LTRG volunteer, and Rembert, the grant writer at the county administration office, described the distrust of outsiders:

OWENS: They trust [us] because we are in the community with them. But when the state [representative] comes in with blue shirts on . . .

REMBERT: There's a fear. Owens: There's a fear.

REMBERT: It's like, "What else do you want from me?" Like with the [community needs assessment] surveys, you didn't have to sign your name, address, telephone number, Social Security number. Just tell us what you think is needed in the area. They wouldn't even do, some of them wouldn't do it. And it's sad.

The distrust and disillusionment described by Phillips, Owens, and Rembert matched the reactions to FEMA we heard from residents living in poverty. Eliza Harrison, a 90-year-old Black woman and lifelong Marion County resident who has been displaced since Hurricane Florence, described being irritated by how many FEMA representatives she talked to without seeing any results. She felt that she constantly received different information about disaster relief from government representatives, and this frustration eventually caused her to walk out on a meeting with a FEMA representative. The next time she heard that FEMA representatives would be at a local event, she did not attend. "I got mad, and I ain't talk to them no more. Then they had another meeting in [town]. I said, 'Who is this here?' They said 'FEMA.' I said, 'I don't want to talk to them because they ain't going to do nothing." Harrison felt not only that the process was frustrating but also that FEMA had broken its promises. At an interview around her daughter's kitchen table, she told us, "They promised me they'd give me a house, but they have never given me one."

The distrust in FEMA described by our respondents is one facet of a more generalized pattern of distrust in government. Blue described this generalized distrust of outsiders, saying, "You see, there was such a distrust among our people of the people who were doing the intake, people who got to write down your information and see your proof that you occupied a place. Rural people maybe in general, and then maybe just people in general tend to be suspicious of governmental officials and all that kind of thing." This distrust of government could be considered a logical response in an area characterized by multigenerational poverty without successful government intervention.

PERCEPTION OF PROCEDURAL INJUSTICE

For residents who had not seen the benefits of federal recovery programs, the knowledge that the government had allotted millions for disaster recovery in South Carolina fed into perceptions that the process of aid distribution was unjust. When residents witnessed other families receiving help from programs the government had denied them access to, it only helped to bolster feelings of injustice. For example, Harrison, the participant who stopped responding to FEMA because she was frustrated with the process, commented, "I can't understand [how] they're building houses for some people and I've been out of my house just as long as they and they got new houses, and I ain't got nothing."

Local leaders, including Pete Mazzaroni, the director of a local foundation, described this injustice. Mazzaroni described how two factors—distrust in government and perception of procedural injustice—resulted from the slow federal aid disbursement:

When I hear people talk in these council meetings, and when you see what this county's gone through with the various floods, and the money that's come in, and where is that money? There's distrust, did the money go where it was supposed to? I suspect if you asked a lot of people they would say, "Where is the money? Where did it go?" . . . because it's a very complex machine to get money from the federal government to the state government, to local government, into the people's hands. There's a lot of red tape involved. But from a citizen's standpoint, they don't really know that. They just know, "I need help to get my house rebuilt, and it's been a year and a half." So that leads to some distrust.

When he says that people ask, "Where is the money? Where did it go?" Mazzaroni is referring to the well-publicized HUD CDBG-DR allotment

that can take months or years to materialize at the local level. In the interim, residents become suspicious that that money is going elsewhere.

This suspicion was reflected in our conversation with Lawson Battle, a 42-year-old White man and lifelong Marion County resident. As the mayor of Nichols, South Carolina, a small town largely destroyed by Hurricanes Matthew and Florence, he is keenly aware of the potential funding sources available to his constituents. He described his suspicion that federal disaster relief money is being misused.

MAYOR: And in government, politics and all, it's very slow, and that drives me crazy. Because if there's a problem I want to get out there and try to fix this, soon as possible. And we just . . . I feel like that there's a lot of funding that was misused. Federal funding that's been handed down to the state level for homes, during the first one [Hurricane Matthew], that we haven't seen hardly anything inside the city limits. . . .

INTERVIEWER: Wow, why do you think that is?

MAYOR: I have no idea, but it's ridiculous with the amounts. I'm sure you got the stats and all that, on how much money was. . . . Eighty-something million for Horry and Marion County, started out fifty-two-point-something million, then it went to eighty something. And even went higher than that. And I've seen one roof fixed in the city limit . . . off that money.

Even as the head of local government, Battle is suspicious that federal funding is being misused at the state level.

MISINFORMATION

Amid delays and confusing rejections, information that residents had heard about the risks of applying for federal disaster aid dissuaded some potential applicants. Local volunteers working for the Marion LTRG told us that people were worried that FEMA would take their homes or put a lien on their property if they applied for aid. Speaking about this from his church, Blue commented, "There was misinformation, miscommunication, 'They're trying to take your property,' 'They're going to take your house,' and all that kind of thing. So, a lot of people didn't even respond when they heard about it, and then others didn't hear properly. And so, some people didn't even get their applications in for work repairs." Misinformation proved to be such a

barrier to successful disaster recovery that FEMA (2018) dedicated a page on their website to dispelling rumors following Hurricane Florence.

DEPRESSED APPLICATION RATES

This feedback loop resulted in depressed application rates for housing assistance through FEMA. Although there is no publicly available FEMA data set that shows IHP housing assistance application rates by date, we heard from multiple sources that the initial application period for FEMA housing repair and replacement assistance passed without many eligible residents applying. FEMA acknowledged the problem by asking community groups to help them reach those in need. As Blue said while describing learning costs, "A lot of people didn't even respond when they heard about it, and others didn't hear properly. And so, some people didn't even get their applications in for work repairs."

As the leader of the Marion LTRG, Blue acted when he realized that many people had missed out on the opportunity to receive disaster recovery aid. He described his advocacy:

My advocacy was very simple, is it possible that that window could be opened again now.... Because after a while, when they finally saw houses being restored and so forth, then they realized, "Oh it really does happen, it works," and so forth. And now they want to get on board, but the window is already closed, because that's how things work, you've got to apply.

And I asked about that [at the state level], and I was told no at that time. But we've learned, with the new person in a different position there, who was not in that position at the time, that they are going to reopen, and have reopened the Matthew intake. And I'm so pleased because there's so many people who still have need. They hadn't recovered from Matthew when Florence came. So that was the thrust of the advocacy side of it. . . . It wasn't that big a deal, it was just [to] ask, "Can you give the people another chance?"

DISCUSSION

Administrative burden, the slow pace of aid, and the confusingly high rejection rates for FEMA IHP ignited misinformation, increased distrust, and spread a perception of procedural injustice across Marion County.

Together, these factors created a feedback loop that further depressed applications for disaster recovery assistance. This feedback process was self-reinforcing: each additional person dissuaded from applying contributed to the perception that practically no one was receiving FEMA housing assistance, further perpetuating the loop. This cycle caused families to miss out on the funding to rebuild and recover after a disaster. In this section, we situate this case of administrative burden to the literature and explore possible solutions to the barriers faced by our respondents.

The Kahn and colleagues (1976) framework applied to administrative burden in Heinrich (2016) provides categories for the primary and secondary factors we documented in the feedback loop. The primary factors (high rejection rates, administrative burden, slowness) were all involved in the individual application process for disaster relief experienced in Marion County. The secondary factors (distrust in FEMA, a perception of procedural injustice, misinformation) represent components of citizencitizen interactions that affected the application process.

Regarding citizen-citizen interactions, Heinrich (2016, 405) notes that it can be challenging to find examples of interactions in which persons outside of an organization can contribute to administrative burden but theorizes that under the conditions where "outreach for opportunities to access public services operates largely by word-of-mouth for some programs or groups, and *misinformation* is circulated through those extraorganizational encounters, this can create inadvertent barriers to accessing those services." This prescient observation closely matches the experiences of community leaders like Blue, who observed that the application window for postdisaster home repair and replacement had closed with "some people not knowing, others having misinformation." Volunteers at Marion LTRG echoed this sentiment as they described their work dispelling misinformation while assisting residents through the home repair application process.

Applying the Moynihan and colleagues (2014) framework, our participants primarily experienced burdensome learning and compliance costs when applying for disaster recovery assistance. The learning costs included not only learning that recovery assistance existed but also understanding what the benefits were and what the process was to receive them. As Miko Pickett described the experience, it was as if the government agencies were "talking in Chinese," whereas the residents spoke Spanish. The primary compliance costs described by our participants were related to gathering the required paperwork on a tight timeline—particularly proof

of homeownership, which was complicated by the prevalence of heir's property. Beyond paperwork, the mayor of Sellers noted a second layer of compliance costs: the difficulty of adhering to local ordinances while using federal money to make repairs. Marion County requires that residents living in a floodplain must raise their homes to at least 6 feet above mean sea level before making other renovations. Even if Marion County residents are awarded FEMA IHP assistance, the local floodplain construction requirements and the lack of funding to assist with home raising may perpetuate hardship.

The Marion County case illuminates how apparently color-blind rules, in this case the documentation required to verify homeownership, can reinforce structures of racial inequity. Disaster recovery volunteers at the Marion LTRG group described the additional difficulty that Black families living in heir's property faced when applying for FEMA IHP. As Ray and colleagues (2022) document, the differential impact of administrative burden by race can be a manifestation of long-standing institutionalized racism. Such is the case with heir's property, where the historical exclusion of Black people from legal services has made it challenging to document the transfer of property ownership within Black communities (Breland 2021). FEMA's reliance on strictly defined homeownership documentation obfuscates the locus of discrimination, as racially disproportionate outcomes are a function of program rules set without regard to historical context. Of the tenets of theory of racialized organizations presented in Ray and colleagues (2022), the two most salient to this case are (1) that burdens diminish the agency of racially marginalized groups, and (2) that burdens legitimate unequal distribution of resources. In the case of individual disaster recovery assistance, burdens diminish the agency of racially marginalized groups through the additional loss of time and the stress of proving homeownership. These burdens appear legitimate from an agency perspective, as the specters of waste, fraud, and abuse necessitate close monitoring of program eligibility. The fact that FEMA's documentation requirements do not explicitly preclude Black families from receiving IHP benefits further legitimates the application process. In September 2021, FEMA changed its rules, allowing families living in heir's property to self-certify status. We view this as a positive change, though it does not directly help respondents who were rejected between 2015 and 2019.

Our conversations with community leaders in Marion County affirmed the findings of a 2021 paper by Heinrich and colleagues—particularly the idea that the costs of administrative burdens spill over to community-based organizations. For example, the Picketts were providing for the community by running a free store but shifted to disaster recovery assistance in the aftermath of the storm; the Marion LTRG formed to help residents navigate a complex and challenging process of accessing help. Some or all of the efforts of these community leaders could have been targeted elsewhere if the federal system of disaster relief was more efficacious and equitable.

In their book *Administrative Burden: Policymaking by Other Means*, Herd and Moynihan (2018) dovetail policy feedback theory and administrative burden to explain how the experience of government as burdensome or unfair could dampen political engagement. Although we did not include a measure of political engagement in our study, we did find feedback effects on a micro scale, with poor experiences in the disaster recovery system depressing application rates for disaster recovery aid.

Disaster recovery emerged inductively as a major theme in our South Carolina interview transcripts; we did not explicitly ask about it in the original interviews. Thus, respondents who found their FEMA experience challenging may have been more likely to share details, as opposed to those who successfully accessed aid. However, interviews with community leaders—who interact with a large number of residents—yielded the same themes regarding the experiences and consequences of disaster-related administrative burden, and available administrative data are consistent with the conclusions we drew from our interviews, giving us confidence in our interpretation.

In addition, multiple sources of data suggest that application rates for the FEMA IHP housing assistance programs were depressed. However, FEMA does not have a publicly available data set that includes the date of the application or the universe of eligible households. In the absence of these data, it is impossible to verify that FEMA IHP application rates were depressed at a particular time.

Our work shows the great urgency of disaster recovery reforms. In our 2019 interview with the mayor of Sellers, she could name at least five elders in her small town who had died waiting for disaster recovery assistance. One of our respondents, a 64-year-old flood victim, passed away before she was able to move into her new home, secured for her with the help of the Pick 42 Foundation. When we spoke to her prior to her death, she was mourning her husband, who had died in their flood-damaged home

following Hurricane Matthew. Under the current system, in which those who most require disaster assistance are the least likely to easily access it, suffering and uncertainty are the inevitable result.

RECOMMENDATIONS

Our findings highlight necessary improvements to the federal disaster recovery system. First, agencies must work to reduce administrative burden for disaster recovery assistance programs like FEMA IHP. If administrative burdens are unavoidable—for example, for verification of residency in a disaster-affected county—agencies must provide additional application support. Next, FEMA must investigate the high rejection rates for the FEMA IHP program. High rejection rates would not be an issue if the system were correctly selecting eligible recipients; however, on the basis of our conversations with disaster recovery volunteers, eligible people appear to have been rejected. Third, where possible, federal agencies should reduce the time between the natural disaster and the disbursement of recovery funds.

Our results demonstrate that the effectiveness of disaster recovery programs relies not only on the actions of governmental agencies but also on how those actions are perceived by potential program recipients. If federal agencies made the structural changes listed above, they might still face the secondary factors we documented in Marion County held over from previous interactions with the federal disaster recovery system. However, these structural changes represent a necessary first step toward improving program efficacy.

CONCLUSION

When three natural disasters ripped through Marion County, South Carolina, over the course of four years, they caused substantial hardship in a community that was already economically depressed. Programs like the FEMA IHP are intended to assist uninsured disaster victims as they return to their normal lives, but in this instance, program implementation was so poor that it discouraged participation, setting off a feedback loop pushing potential applicants away from the program. To prevent this process from reoccurring, agencies providing federal disaster recovery aid should address key system flaws such as excessive administrative burden, high rejection rates for programs like FEMA IHP, and bureaucratic slowness.

NOTE

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