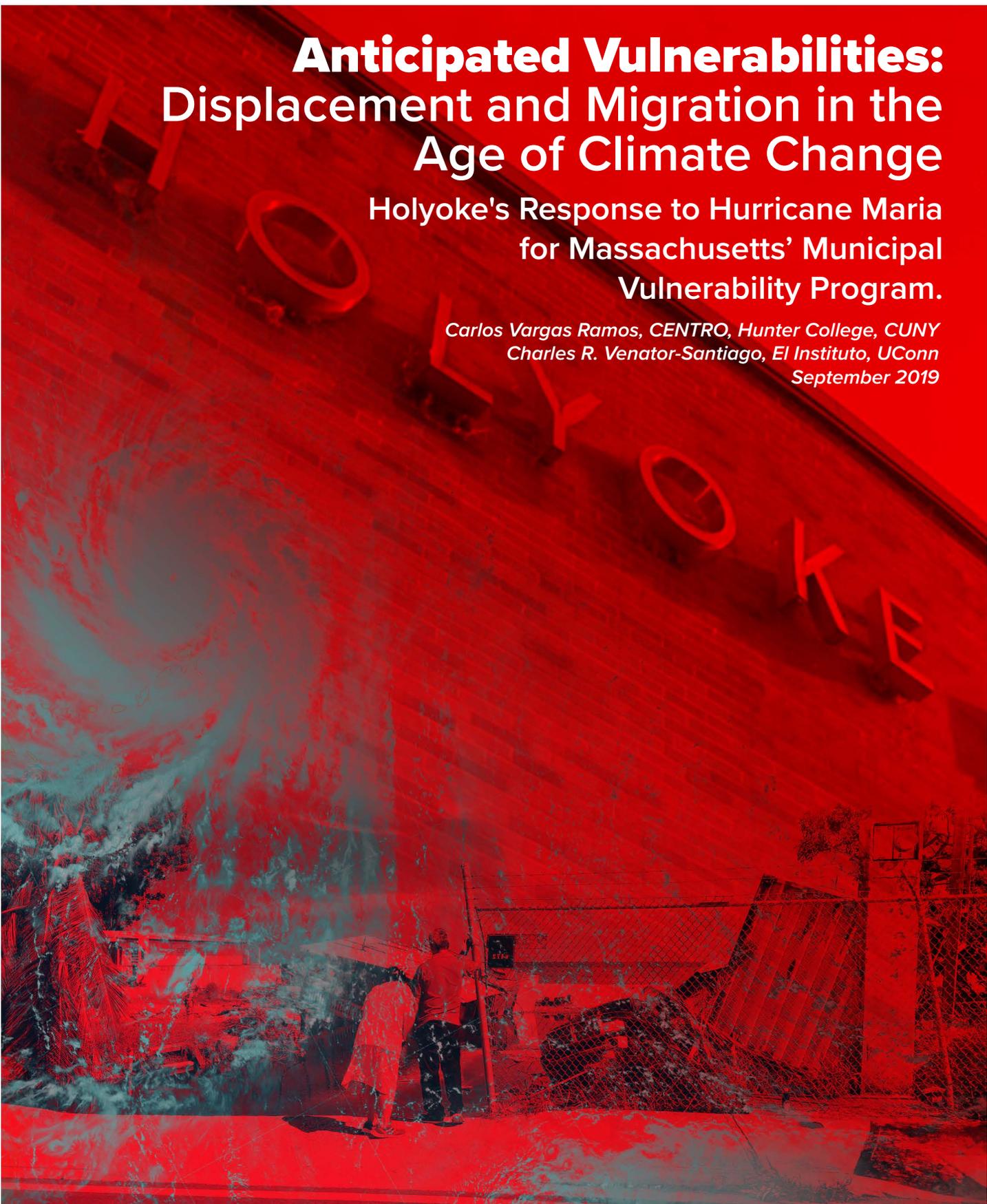


Anticipated Vulnerabilities: Displacement and Migration in the Age of Climate Change

Holyoke's Response to Hurricane Maria
for Massachusetts' Municipal
Vulnerability Program.

Carlos Vargas Ramos, CENTRO, Hunter College, CUNY
Charles R. Venator-Santiago, El Instituto, UConn
September 2019



HUNTER
The City University of New York

 **Centro**
CENTER FOR
PUERTO RICAN
STUDIES
HUNTER 

 **El Instituto**
Institute of Latino, Caribbean, and Latin American Studies

UConn
UNIVERSITY OF CONNECTICUT

TABLE OF CONTENT

Executive summary

p.6 Part I. Introduction

p.6 Puerto Ricans in the City of Holyoke, Massachusetts

p.13 Part II. In the Eye of the Storm

p.14 Before the Storm

p.12 » Storm Awareness

p.15 » The Storm's Toll

p.15 » Response to the Storm: Self-Reliance and Kin Networks

p.17 » Response to the Storm: Filling the Gap created by the Failures of Government

p.17 » Puerto Rican Municipal Government Response

p.20 » Coping: Collective Responses to the Toll of the Storm

p.21 » External Sources of Support: The Limits of Self-Sufficiency and Self-Reliance

p.21 » Information Sharing

p.21 Out-Migration of Displaced Puerto Ricans

p.22 » Leaving Puerto Rico: Making Decisions

p.22 » The City of Holyoke: A Resource for Displaced Puerto Ricans Arriving in Western Massachusetts

p.24 » Arriving in Massachusetts: The Needs

p.24 » Sources of Support: Assessments

p.27 » On-Going Needs

p.28 A Closer Look at Support Networks: Kin

p.28 » Anticipating and Witnessing a Disaster

p.29 » Mobilized into Action: Initial Response

p.30 » Mobilized into Action: Collective Responses

p.31 » Hosting Displaced Persons

p.33 » Stress and Fraying Relationships

p.34 » Looking for Help to Meet New Needs

p.34 » Information Sharing: Word of Mouth

p.34 » Assistance Provision Assessment

p.34 A Closer Look at Support Networks: Non-For-Profit Organizations

p.35 » Anticipating Displacement

p.36 » Storm's Surge

p.36 » Addressing the Needs of the Displaced

p.38 » Managing the Overwhelming Demand: One-Stop Shop

p.38 » Having Your Act Together!

p.39 » Necessary, But Not Sufficient

p.40 » Federal Inattention

p.40 Looking into the Future

p.41 » Hurricane Maria and Displacement: Not a Singular Event

p.42 » Federal Neglect

p.43 Part III. Nature of the Challenge Addressed by the Study

p.43 » Key Strengths Identified in Holyoke Hurricane Maria Response

p.45 » Weaknesses

p.46 » Opportunities

p.46 » Threats

p.48 Part IV. City Governance in the United States

p.50 » Issue-Based Coalitions

p.51 » Scheme of Cooperation

p.52 » Puerto Ricans in Holyoke's Civic and Political Life

p.54 Part V. Conclusion

p.54 » Findings

p.56 » Recommendations

p.56 » Acknowledgments

p.57 Endnotes

p.58 Methodology and Limitations of the Study

EXECUTIVE SUMMARY

Anticipated Vulnerabilities: Displacement and Migration in the Age of Climate Change—Lessons from Holyoke's Response to Hurricane Maria for Massachusetts' Municipal Vulnerability Program.

Carlos Vargas-Ramos, PhD (Center for Puerto Rican Studies, Hunter College-CUNY)
Charles R. Venator-Santiago, PhD (Institute of Latino/a, Latin American and Caribbean Studies,
University of Connecticut-Storrs)

In 2017, the Massachusetts Executive Office of Energy and Environmental Affairs unveiled the Municipal Vulnerability Preparedness (MVP) program, in an effort to move forward the Commonwealth's initiative to assist its municipalities in their efforts to assess, anticipate and plan for hazards associated with changes in climate and their vulnerability to those hazards. The City of Holyoke, MA successfully applied for a grant from the MVP program to assess the city's capability to respond to an influx of migrants driven by a climate change event. This project sought to address the city's concerns through a multipronged analysis of the experience of the post-hurricane Maria displacement/migration of Puerto Ricans to the City of Holyoke. Below are some of the key findings and recommendations contained in the study.

Findings

The majority of displaced Puerto Ricans arriving to the City of Holyoke relied on kin networks, that is family and friends who provided support in addressing their needs. Given the socio-economic standing of Puerto Ricans residing in Holyoke, we conclude that working-class and Puerto Ricans living in or near poverty assumed a disproportionate burden in support of displaced Puerto Ricans migrating to the city of Holyoke.

Communal solidarity and standing issue-based coalitions were a key dimensions of the positive responses to the disaster in Puerto Rico and in the City of Holyoke. A sense of solidarity among Puerto Ricans is a resource for future responses to a crisis. A sense of commitment also exists among the not-for-profit organizations and other civic sector associations provides a similar resource. However, these sources of capital may be of limited duration, and dependent on the existing stock of material resources.

Displaced Puerto Ricans residing in the Holyoke and in Western Massachusetts view the City of Holyoke as a resource.

Access to affordable housing became the key to stabilizing displaced Puerto Ricans.

Displaced Puerto Ricans overwhelmingly indicated that Holyoke's Family Resource Center—*Enlace de Familias*—provided the most effective support to their address their needs. Central to the success of the response to the sudden and large arrival of persons displaced by Hurricane Maria was the creation of a central hub or resource center that provided access to various federal, state and local agencies and resources for an extended period of time. This “one-stop-shopping” approach was effective and efficient.

Regular meetings (i.e., conference calls) among responding entities to share information, coordinate response and request resources were also seen as instrumental in facilitating the delivery of services under circumstances of great uncertainty and limited surplus of resources.

Central to the success of the response to the post-Maria migration of Puerto Ricans to the City of Holyoke was the solidarity, collaboration and synergy of culturally-competent civic leaders and leaders of agencies who were committed to offering a collective response. Extant patterns of cooperation, coordination and communication paved the way for a focused response once the arrival of displaced persons reached unmanageable proportions for any single entity. Insufficient resources before and during the response to the arrival of displaced persons hampered the effective response and assistance of entities recruited or volunteered to provide assistance.

The City of Holyoke lacks the necessary financial resources to respond to the needs of a large influx of migrants who may arrive as a result of a climate-driven event.

Recommendations

1. Create a “one-stop-shop” location, with well-publicized and ongoing availability for a determined period of time, is a central feature of any successful response to address large migrations caused by a climate change displacement. This location should provide access to the key federal, state, and local agencies as well as to local civic organizations that will enable migrants to incorporate or join the community;
2. Local city officials and civic leaders charged with responding to the influx of migrants should have clear and unconstrained access to information and relevant data about the needs of displaced or arriving migrants;
3. Federal and inter-agency agreements provide key resources to address the challenges posed by displaced migrants arriving to any community;
4. More attention needs to be paid to the ability and flexibility of social services agencies response to an influx of new residents and arrivals;
5. The creation of a fungible and shareable form and case management follow up services that may allow a coordinating governmental entity the ability to track case management across several service agencies and services rendered.

PART I. INTRODUCTION

Persons forced to abandon their homes and migrate as a result of catastrophes such as hurricanes will largely rely on relatives and friends—kin—for support. Massachusetts is a long-standing destination for Puerto Rican migrants.

- The City of Holyoke has one of the highest concentrations of Puerto Ricans—46 percent—in the United States. Consequently, Holyoke was expected to be and became a destination for persons displaced by a catastrophic climate-driven event.
- Puerto Ricans in Holyoke, prior to hurricane Maria, were relatively and comparatively younger (median age, 26 years), with lower educational attainment at the college level, lower rates of labor force participation, higher rates of unemployment and higher rates of poverty.
- The overwhelming majority of displaced persons—nine in ten—left the island in the three months after the storm’s landfall. Most made the decision to leave the island on their own, but often spurred by relatives and friends as well as governmental authorities. The majority arrived in Holyoke because they had relatives there or because they had previously resided in the City.

In 2017, the Massachusetts Executive Office of Energy and Environmental Affairs unveiled the Municipal Vulnerability Preparedness program, in an effort to move forward the Commonwealth’s initiative to assist its municipalities in their efforts to assess, anticipate and plan for hazards associated with changes in climate and their vulnerability to those hazards. This initiative is captured in Commonwealth Governor’s Executive Order Number 569 (September 16, 2016) to establish an integrated climate change strategy for Massachusetts. The executive order called for the drafting of a Climate Adaptation Plan and establishing a framework for municipalities in the state to assess their vulnerability “to climate change and extreme weather events, and to identify adaptation options for its assets.” It also directed designated state agencies to provide technical assistance to municipalities “to complete vulnerability assessments, identify adaptation strategies, and begin implementation of these strategies.”

The Municipal Vulnerability Preparedness (MVP) program is conceived as a technical assistance and project funding program offered by the state to its municipalities. The Municipal Vulnerability Preparedness program is a planning tool. Its purpose is to provide funding to municipalities within the Commonwealth “to plan for resiliency to respond to and mitigate the impacts of climate change, and to implement key climate change adaptation actions,” according to the Massachusetts State Haz-

ard Mitigation and Climate Adaptation Plan. The grants are awarded to municipalities that want to “prepare for climate change impacts, build community resilience, and receive designation from the Executive Office of Energy and Environmental Affairs (EOEEA) as a Climate MVP Community. This designation leads to increase standing in other state grant programs, and eligibility to apply for MVP Action grants that support implementation of key priorities identified through the planning process.” The Massachusetts State Hazard Mitigation and Climate Adaptation Plan indicates that the program helps communities to: understand extreme weather and natural and climate-related hazards; understand how their communities may be impacted by climate change with a Massachusetts-specific Climate Change Clearinghouse (resilientMA.org); identify existing and future vulnerabilities and strengths; develop and prioritize actions for the community; identify opportunities to take action and reduce risk and build resilience; and implement key actions identified through the planning process.

The City of Holyoke applied to the Municipal Vulnerability Preparedness program, and in May 2018 it held a Community Resilience Building Workshop with the goal of becoming designated as a Climate MVP Community to then begin the process of identifying areas the City may be vulnerable to climate change. The Commonwealth’s Executive Office of Energy and Environmental Af-

fairs has given Holyoke such designation. During the resilience building workshops, the displacement of people from Puerto Rico as a result of hurricane Maria became a subject of discussion and needed additional study, so that it was recommended that a two-way education event be held “to learn from the experiences of people that fled Hurricane Maria and now live in Holyoke.” The City of Holyoke followed this recommendation with a request to the state for funds to study the issue further. This funding request was awarded, after which the City then issued a request for qualifications in order to collect “information and wisdom from Hurricane Maria survivors and responders to allow Holyoke to lead in developing an understanding for what climate adaptation will mean in an era of climate-driven human migration.” The City of Holyoke was specifically interested in establishing the needs of people in Holyoke displaced from Puerto Rico by hurricane Maria and whether they were met; the needs of residents of Holyoke who hosted people displaced from Puerto Rico by Hurricane Maria and whether those needs were met; the needs and capacities of non-for-profit organizations assisting displaced persons and families as well as persons and families that hosted them in Holyoke; the extent of services provided by the local government and whether they

met the demand; and the types and extent of services provided in Puerto Rico in the aftermath of the hurricane. The expectation was that the experience in Holyoke would help communities in Massachusetts prepare for municipal vulnerability to climate change through related migrations.

The present study—the Holyoke Hurricane Maria Response Study—is the outcome of a collaborative effort between El Instituto: Institute of Latina/o, Caribbean, and Latin American Studies (University of Connecticut—Storrs) and the Center for Puerto Rican Studies (Hunter College of the City University of New York) to provide the answers sought by the City of Holyoke. The study team, led by Dr. Charles Venator-Santiago (University of Connecticut) and Dr. Carlos Vargas-Ramos (Hunter College-CUNY), proposed a multi-pronged study that would elicit information useful for preparedness planning purposes stemming from contact with individuals who have themselves had to migrate as a direct result of catastrophic climate events (such as Puerto Ricans displaced by Hurricanes Irma and Maria), families and households in the city of Holyoke that opened their homes to those displaced by catastrophic climate events, the organizations and agencies that assisted both the displaced as well as

PUERTO RICANS IN THE U.S. AND MASSACHUSETTS

Why are there Puerto Ricans in Holyoke? The answer involves multiple factors. First, there is a political relationship between Puerto Rico and the United States that dates back to 1898. Because Puerto Rico is a territory of the United States—a possession of the U.S.—Puerto Ricans have been able to travel freely between Puerto Rico and the United States since 1904 (i.e., *Gonzales v. Williams*), when they were identified as U.S. nationals, and then as U.S. citizens after 1917 (i.e., Jones Act). But while this ability to travel unimpeded between Puerto Rico and the United States led a few dozen thousands to migrate to the U.S.—to places like New York, Hawaii, California—the bulk of the Puerto Rican population began to move to the United States after the Second World War.

Structural conditions of Puerto Rico’s political status also drive the migration of Puerto Ricans to the City of Holyoke and other parts of the United States. Following the island’s annexation under the terms of the *Treaty of Paris of 1898*, Congress and the Supreme Court invented a new insular or territorial law and policy to govern Puerto Rico and the other annexed territories between 1900 and 1922. Central to the new territorial law and policy were at least two basic principles that have since shaped the relationship between Puerto Rico and the United States. First, Puerto Rico was ascribed an unincorporated territorial status establishing that the island could be selectively ruled as a foreign possession for domestic or constitutional purposes. Second, because Puerto Rico was an unincorporated territory, the Supreme Court determined that it could choose which constitutional provisions were applicable and which were not. This also meant that Congress could enact discriminatory legislation for Puerto Rico. The United States has since governed the island as an unincorporated territory under the ensuing doctrine of “separate and unequal” or the doctrine of territorial incorporation.¹

PUERTO RICANS IN THE U.S. AND MASSACHUSETTS

There are two main reasons, political and economic, for why the bulk of the Puerto Rican migration took place after the Second World War. First, after 1924, the United States severely restricted immigration from Europe. (It had already forbidden immigration from Asia previously in the 1880s and 1900s.) To make up for the reduced number of low-wage workers this immigration restrictions caused, U.S. manufacturing companies and farms, particularly in the Northeast and in the mid-West, began to recruit Puerto Ricans (as well as African Americans who lived in the South, and some other workers from the Caribbean region and Mexico). These demands for workers sped up after the Second World War. At the same time, in Puerto Rico, the government decided to restructure its economy, turning it from an agriculture-based economy to one based on manufacturing. Because agriculture employed many more workers than all the manufacturing companies combined could, there was a lot of unemployment in this transition. The government of Puerto Rico, therefore, began to encourage the migration of Puerto Ricans to the United States, which was looking for low-wage workers. It is for these broad reasons that between 1950 and 1960 nearly half a million Puerto Ricans left the island for the United States.

Puerto Ricans began to settle in Massachusetts and New England, first by arriving as migrant farm workers in the tobacco fields of Connecticut, then moving into the urban centers of southern New England, and, secondly, by moving from large urban centers in the mid-Atlantic region, most notably New York City. Puerto Rican settlement in southern New England, and Massachusetts specifically, began slowly after the Second World War. The biggest proportional growth of Puerto Ricans in Massachusetts and in Hampden county took place between 1960 and 1970, when the population grew four-fold, and then again between 1970 and 1980, when Puerto Ricans grew twice over. Therefore, statewide, Puerto Ricans went from more than 5,000 people to more than 24,000, between 1960 and 1970; and from 24,000 to more than 76,000 between 1970 and 1980. In Hampden county, Puerto Ricans increased from 1,200 to 6,600 to more than 19,000 over the same period of time. Numerically, however, the biggest increase in the Puerto Rican population in the state took place between 1980 and 1990, when they increased by more than 74,000. The same thing holds for Puerto Rican growth in Hampden county, when they grew by more than 20,000 between 1980 and 1990. Since that time the Puerto Rican population in the state and in the county has continued to grow as they have grown throughout the country. However, this growth has taken place at a slower rate. (Puerto Ricans in Hampden county have represented between 20 and 30 percent of the state's Puerto Rican population since the 1950s; a substantial proportion.)

The Census Bureau begins to report figures for Puerto Ricans in Holyoke in 1970. Since that time, the Puerto Rican population in the city has increased tremendously; from less than 1,500 in that year to more than 18,000 presently. As with Hampden County, the most rapid growth of Puerto Ricans in Holyoke took place between 1970 and 1980, when Puerto Ricans increased more than three times over, and also between 1980 and 1990, when they more than doubled. The rapid increase of Puerto Ricans in Holyoke in those two decades coincided with the steep decline in Holyoke's overall population, which did not abate until the 2000s. (Indeed, Holyoke's population had been in steady decline since its peak in 1920, when there were more than 60 thousand people living in the city.) In fact, the arrival of Puerto Ricans and other Hispanics in Holyoke came to stanch the severe population loss in the city, which did not begin to grow in earnest until this decade.

Puerto Ricans have left the island in droves. The Center for Puerto Rican Studies has estimated that, between August 2017 and August 2018, 159,000 (and upwards of 176,000) people left the island. This large volume of people is actually larger than the number of people that had left the island in the two previous years (2016 and 2015) combined. This is a remarkable fact because the out-migration from the island prior to hurricane Maria was already at its highest levels since the Great Migration of the late 1940s and 1950s, when in a period of ten years half a million persons left Puerto Rico for the United States. The population surge as a result of hurricane was enormous, but the effects of the hurricane only magnified manifold a migratory trend that had already reached historic proportions. Moreover, while presumably a population surge as a result of a natural disaster may peak to then ebb, as people handle and adapt to any catastrophe, the circumstances for an ebbing population from Puerto Rico will be mediated by the reconstruction of the island of Puerto Rico in the context of an economic crisis already twelve years old. Over the past ten years, more than 600,000 people have left the island. Of those, more than 40,000 arrived in Massachusetts, and almost half of those 40,000 arrived in Hampden county, between 2007 and 2017.

PUERTO RICANS IN THE U.S. AND MASSACHUSETTS

Congress has also relied on Puerto Rico's constitutional status to legitimate the enactment of discriminatory social services legislation for the island. In both *Califano v. Torres* [435 U.S. 1 (1978)] and *Harris v. Santiago-Rosario* [446 U.S. 651 (1980)], the Supreme Court affirmed Congress' power to choose which social services to apply to the island, as well as how to fund these programs. More importantly, these ruling establish that Congress can discriminate against Puerto Rico's residents, treat the island like a state or better than a state for funding purpose. Congress has decided not to apply federal programs like the Supplemental Social Security Income program and to provide significantly less funding for other social welfare programs in the island (e.g., nutritional assistance program, Medicaid). The effect is that United States citizens residing in the island received significantly fewer social services than citizens residing in the average state. Puerto Ricans living in precarious conditions, at present estimated in the vicinity of 60 percent of the local residents, are likely to migrate to the United States after any climate change disaster.

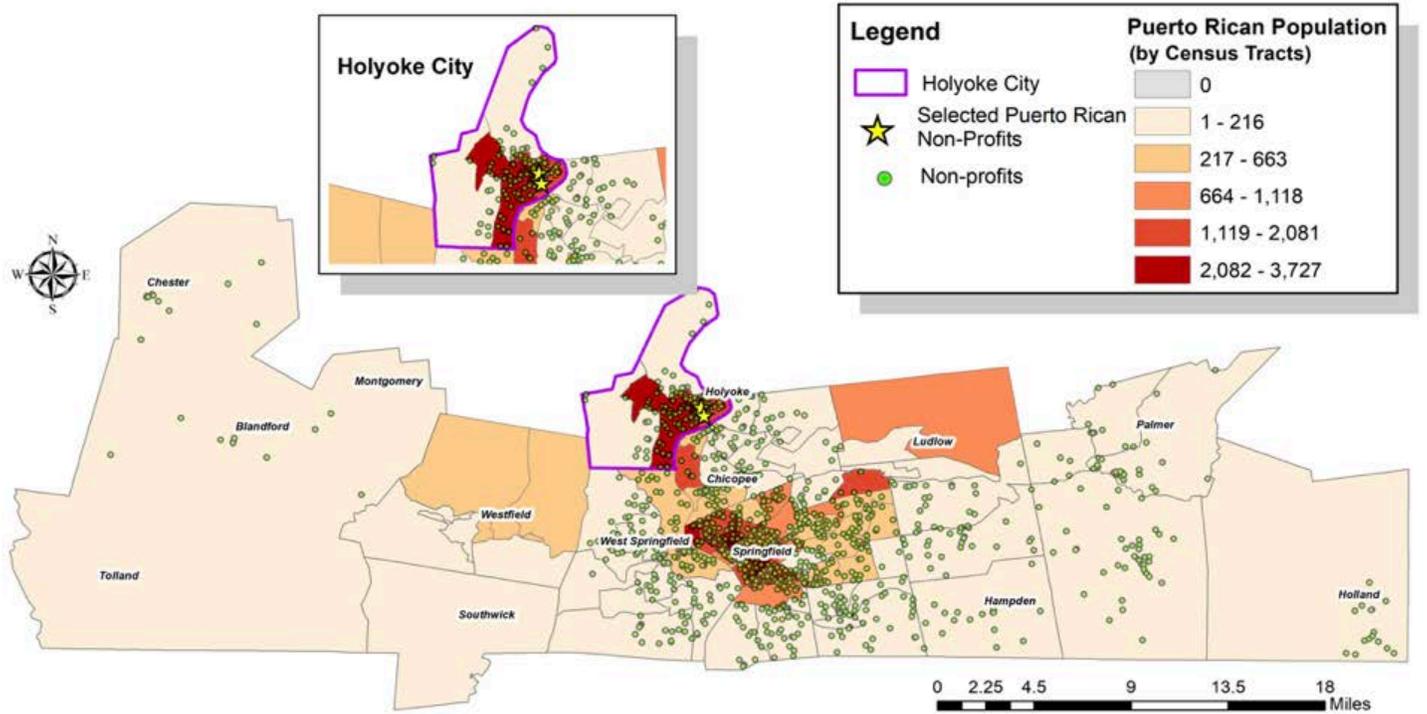
Federal policies for the island have also created a series of social and economic factors that will consistently push Puerto Ricans out of the island. For example, the 2016 PROMESA and its corresponding Fiscal Oversight and Management Board imposed a series of austerity measures that continue to undermine Puerto Rico's economic growth and local job creation. Federal, island, and municipal government corruption has also stalled the ability of Puerto Rico to receive federal funds to enable the development of a local economy and post-Maria reconstruction. The point is that the island's unresolved political status will continue to limit the ability of Puerto Ricans to work and live in the island. Climate change disasters and other events will continue to push the island's residents to migrate to the City of Holyoke and the United States more generally.

The challenges in Puerto Rico are enormous and the political wrangling among political elites, between political elites and the Financial Oversight and Management Board, and between those elites and an administration in Washington that does not see tending to Puerto Rico's problem as a priority, do not bode well for a concerted response to the reconstruction of the island's infrastructure and economy. The level of economic activity in Puerto Rico (equivalent to its gross domestic product) in the last quarter of 2017, showing the full effect of hurricane Maria's aftermath, was the same as if Puerto Rico's economy was back in 1986. In fact, in the last quarter in 2017, Puerto Rico lost the equivalent of seven years of economic activity. Puerto Rico has recovered some of that loss, given the influx of assistance from outside the island and the restart of business activity since the storm. Yet, at the beginning of 2018, Puerto Rico's economic activity was at the same level it was in 1993. This loss of economic activity was the effect of the economic crisis that existed prior to the hurricane, which wiped out 23 years of economic production. The implication of this economic reality in Puerto Rico, insofar as Holyoke and Massachusetts are concerned, is that broad and sustained out-migration from the island will continue in years to come.

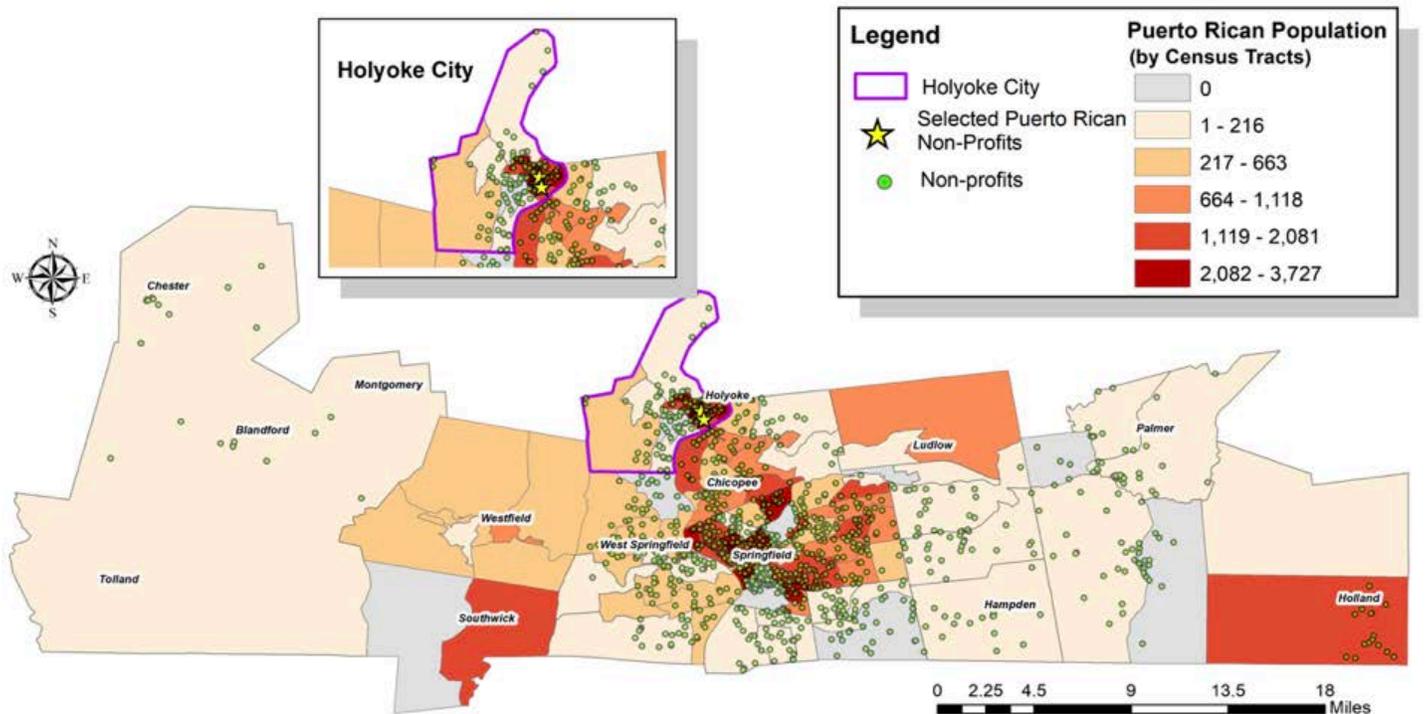
We can expect continuing migration from the island, and we can expect increased settlement in Massachusetts. What we are witnessing, however, is a growing dispersion of the Puerto Rican community not only throughout the United States, but also within the states they have lived in traditionally as well as the different regions within those states. Therefore, we have observed how within Hampden county, the Puerto Rican population has dispersed beyond Holyoke and Springfield to other areas of the county between 2010 and 2017. This is a pattern evident elsewhere in Massachusetts and across the United States. Again, the Puerto Rican population in Holyoke increased by 4 percent between 2010 and 2017, while the Puerto Rican population in Hampden increased by 15 percent during the same period. But the presence of Puerto Ricans throughout the region will continue to grow and expand.

¹ Venator-Santiago, Charles R. 2015. *Puerto Rico and the Origins of U.S. Global Empire: The Disembodied Shade* (London: Routledge).

Hampden County's Puerto Rican Population, 2000



Hampden County's Puerto Rican Population, 2017



those who welcomed them in their homes in the process of arriving and settling in Holyoke as well as the governmental entities and personnel who oversaw and coordinated or managed this process. The study team sought information by means of several tools: the collection and analysis of demographic data; a series of focus groups; targeted interviews of select government officials and other stakeholders; and a survey of the Puerto Rican population of Holyoke. This report is based on the information gathered by these methodological strategies.

Puerto Ricans in the City of Holyoke, Massachusetts

The City of Holyoke, a municipality in Massachusetts' Pioneer Valley first incorporated as a town in 1850, and then as a city in 1873, was home to approximately 40,000 people in 2017. The Puerto Rican population makes up nearly half the population (46%) of the city of Holyoke. Therefore, many characteristics of the city reflect the characteristics of this large segment of the city's population. Consequently, if the city of Holyoke exhibits a lower socioeconomic profile relative to the county it is situated in and the state of Massachusetts overall, the Puerto Rican population exhibits this profile as well, and even to a greater extent. The Puerto Rican population in Holyoke is significantly younger than the city's population as a whole; by 9 years. Whereas the median age for the city was 35.4 years in 2015, the last year for which data for this population was available in detail, for Puerto Ricans, the median age was 26.3 years.¹ While lower than its population peak of about 60,000 in 1920, its present size marks an inflection point after decades of decline. Governed by a mayor and a 13-member city council, the city is a former industrial powerhouse located on the banks of the Connecticut River. Its population has remained stable between 2012 and 2017 (increasing by less than one-tenth of one percent), compared to the growth of the county's and state's population (1.1% and 3.4%, respectively). The city's housing stock has remained similarly stable (17,046 units), in contrast to the growth of the state's housing stock (2.2%).

On the other hand, the composition of the population has been more dynamic, with an increase in the Hispanic population (from 45.1% to 51.2%) and a corresponding decrease in the non-Hispanic population (from 54.9% to 48.8%) between

2012 and 2017. The labor force participation of its population 16 years of age and older remained unchanged at 57.3 percent during this period of time; a lower rate of participation than in Hampden county (62%) and the state at large (67.3%). However, its unemployment rate decreased (from 12.8% to 10.2%) during the same period, though it remains notably higher than that of Hampden county's (8%) and the state's (6%).² Holyoke's median household income increased by 1.3 percent to \$37,954, albeit it remains markedly lower than the measure for the county (\$52,205) and the state (\$74,167). Per capita income in the city (\$22,625) was similarly lower than the county's and the state's measures (\$28,072 and \$39,913, respectively) in 2017. Given the lower rate of labor force participation, the higher unemployment rate and the lower income exhibited by the residents of Holyoke, it is not unexpected to note a higher rate of poverty. The city's rate of people living below the poverty level in 2017 was 28 percent, much higher than the county's (17%) and more than twice the rate for the state (11%). The majority of residents of the city (59%) lived in rental housing, a much higher rate than in the county (38.8%) and the state (37.6%). The vacancy rate in this rental market was 3.6 percent in 2017 (lower than in the county and the state).

Given the youth of the Puerto Rican population, Puerto Ricans correspondingly represented a higher share of the school-age population and a larger proportion of the student body. Whereas 39 percent of the Holyoke population 3 years of age and older was enrolled in elementary school in 2015, almost 44 percent of Puerto Rican children were enrolled at that school level. Similarly, about a quarter of Holyoke's children were enrolled in high school, compared to 29 percent of Holyoke Puerto Rican children. However, Puerto Rican youth were notably underrepresented among those who were enrolled in college (12%) compared to the 21 percent of all Holyoke youth.

Higher education is an area in which Puerto Ricans are notably underrepresented. This is evident in the proportion of adults (25 years or older) who have earned a bachelor's degree. Whereas nearly 15 percent of adults in Holyoke had earned a bachelor's degree, only 6 percent of Puerto Ricans had done so by 2015. The educational disparity is not as large among those who had attended a few years of college, even without earning a bachelor's degree (25% for adults as a whole, compared to 21% for Puerto Ricans); or among those who had earned a high

school diploma (29% for adults overall, compared to 32% for Puerto Ricans). The one area of educational attainment in which Puerto Ricans were notably overrepresented is among those adults who have not earned a high school degree (40%, compared 23% for all adults).

Comparatively lower educational attainment places Puerto Ricans in Holyoke at a disadvantage in the labor market. And this is evident in employment statistics. Puerto Ricans in the city were relatively less likely than the population as a whole to be in the labor market. The rate of labor force participation of the Puerto Rican population in Holyoke in 2015 was 54.8 percent, and its unemployment rate was 21.7 percent. The unemployment rate for Puerto Ricans in Holyoke was twice the rate of unemployment for the entire city, and nearly three times as large as the state's. Their median household income was \$21,430, or just 59 percent that of the city's measure, or less than a third that of the state's. Similarly, their per capita income (\$14,033) was much lower than it was for the city, county or state populations. Consequently, the proportion of Puerto Ricans in Holyoke living below the rate of poverty was markedly higher—43.7 percent—compared to the rates for the city, the county or the state. Given these socioeconomic markers, reliance on social safety net programs is higher for Puerto Ricans in Holyoke: 64 percent participation in SNAP; 11.5 percent in public assistance. [Comparable proportions for the city overall (34.7%; 6%), the county (22.6%; 5.3%) and the state (12.5%; 3%) are considerably lower.]

The overwhelming majority of Puerto Ricans in Holyoke (82%) are renters as opposed to residing in homes they own. This compares to 60 percent of the Holyoke as a whole. Puerto Ricans renters also tend to have more people living in the homes they live (2.86 persons) compared to all renters in Holyoke as a whole (2.49 persons). While overcrowding does not appear to be a problem in Holyoke homes, Puerto Ricans are twice as likely to live in overcrowded home (5%) than all residents overall (2.5%), but only half as likely to live in severely overcrowded homes (0.5%) as Holyoke residents as a whole (0.9%). The cost of rental housing for Puerto Ricans appeared to be lower than for renters overall, with a median gross rent of \$545, compared with \$700. However, there is nevertheless a measure of concern in regards to housing not only for Puerto Ricans, but for all Holyoke renters, and it is the high proportion of renters spending 35 per-

cent or more of their household income in rent: 41 percent of city renters spent that proportion of household income in rent. Puerto Ricans were slightly, but not overwhelmingly overrepresented on this count.

Puerto Ricans in Holyoke exhibit a lower socioeconomic profile than residents of the city, Hampden county and the state. A lesser known fact is that, generally, Puerto Ricans in Massachusetts tend to have a relatively lower socioeconomic profile than Puerto Ricans elsewhere in the United States.³ On the other hand, Puerto Ricans in Massachusetts have a slightly better socioeconomic profile than residents of Puerto Rico. Therefore, while the labor force participation rate for Puerto Ricans in Massachusetts in 2015 was 58 percent and its unemployment rate was 15.9 percent, for Puerto Ricans in the United States as a whole, the proportions, 61.5 percent and 12.9 percent respectively, indicated a slightly better situation. Relative to Puerto Ricans on the island, with a labor force participation rate of 44 percent and unemployment at 18.3 percent, the situation for Massachusetts's Puerto Ricans is markedly better. Similarly, the household income for Puerto Ricans in Massachusetts was \$25,370, while for those in the U.S. overall it was \$39,782, while for those in Puerto Rico it was \$19,217. Correspondingly, the proportion of Puerto Ricans in Massachusetts living below the poverty rate (38.6%) was higher than for Puerto Ricans across the country (25.9%), but lower than for those on the island (45.8%).

A consequence of the lower socioeconomic profile Puerto Ricans in Holyoke exhibit overall relative to other Holyoke residents and relative to other Puerto Ricans in Massachusetts and across the U.S. is that it is a population able to muster fewer community resources to dedicate to community or collective needs. Yet, in spite of those limitations, the community is not without resources, and, as it has occurred elsewhere in New England and the United States, Puerto Ricans in Massachusetts, including Holyoke, opened their homes to family and friends or lent a helping hand to those displaced by the hurricanes. The level of displacement was immense, with estimates of net out-migration from Puerto Rico at more than 159,000 persons during the first twelve months after the very strong category 4 storm struck the island. The resulting level of the hurricane driven migration from Puerto Rico is twice as high as the two previous years combined, levels that were already high by Puerto Rican stan-

dards, as the island has been reeling from a deep and sustained recession since 2006. The economic crisis afflicting the territory reached such magnitude that its government became insolvent, leading to Congress' imposition of a financial oversight and management board (FOMB) charged with managing the island's economy. Available research suggests that after the state of Florida, Massachusetts is the second most common destination for post-Maria migrants leaving Puerto Rico.⁴ It is expected that

out-migration from the island will continue in the immediate future, with New England and Massachusetts continuing to be leading destinations of settlement. In fact, newly released data from the U.S. Census Bureau indicates that Massachusetts ranked sixth among the states receiving Puerto Ricans from the island between 2017 and 2018, with more than 5,600 islanders relocating to the state during the calendar year following hurricane Maria.

PART II. IN THE EYE OF THE STORM

Drawing on a survey, focus groups and in-depth analysis, this project developed a series of instruments to gather information about the experiences of displaced Puerto Ricans who migrated to the City of Holyoke in the aftermath of Hurricane Maria. The study sought to gather information about experiences in Puerto Rico prior to migrating, recollections about experiences upon arrival to the City of Holyoke, and reflections on the incorporation of Puerto Ricans who have since settled in the City and surrounding towns and cities. Some of the core findings include the following:

- The City of Holyoke has a large (46%) Puerto Rican population with culturally competent institutions that were able to respond to the needs of displaced Puerto Ricans;
- A majority of respondents were aware of the impending threat of hurricane Maria and relied on traditional and social media as well friend and family networks for information;
- Respondents indicated that the top three reasons for leaving Puerto Rican were: damage or uninhabitable homes (25.6%), lack of steady income or employment (18.6%) and lack of food (18.6%);
- Most displaced Puerto Ricans were attracted to the City of Holyoke either because they had family or friends residing in the city or because Holyoke provided significant resources to relocate in the state of Massachusetts;
- The majority of respondents indicated that lack of adequate housing and employment were their top challenges in the City of Holyoke;
- The key finding of our study is that the not for profit organizations and the civic sector more generally became the frontline of Holyoke's response to the arrival of displaced Puerto Ricans. Central to this response was the creation of a sustained (6+ months or while the initial migration crisis remained) "one stop-shopping" site (in Enlace de Familias, a family resource center) where displaced Puerto Ricans could seek support and access to various types of resources, including information about public services.
- Central to the non-profit and civic sector's ability to respond was a collective sense of responsibility and trust amongst community leaders. Trust enabled many leaders to collaborate and think outside the box or in ways that could facilitate effective responses to the needs of displaced Puerto Ricans who arrive to the City;
- Displaced Puerto Ricans who were unable to settle in the City of Holyoke, and subsequently settled in other towns and cities in Western Massachusetts, continue to rely on resources available in the City of Holyoke;
- Although the non-profit sector in the City of Holyoke responded in commendable ways to the challenges posed by a rapid influx of new residents, state and local institutions lacked the necessary resources to address the ensuing challenges.

On September 20, 2017, Hurricane Maria barreled through Puerto Rico as a category 4 cyclone, inflicting maximum damage as it followed a diagonal southeast-northwest trajectory across the entire island. Hurricane Maria followed in the wake of Hurricane Irma, a category 5 cyclone which two weeks earlier had swept through the northeast coast of Puerto Rico and its outer islands with tropical storm force winds and torrential rain. The capacity of the government of Puerto Rico and the U.S. gov-

ernment to respond to Hurricane Maria was taxed further given that Puerto Rico had been the staging area, and the main source of relief supplies and shelter for evacuees from the U.S. Virgin Islands, which bore the brunt of Hurricane Irma's direct impact two weeks prior.

In the aftermath of Hurricane Maria's fury, the toll in terms of deaths, injuries and declining health; along with the destruction of physical structures

and its infrastructure; the displacement of people; and the loss of economic activity was enormous. The estimated deaths between September and December 2017 ranged from 2,100 to 4,600, with about one-third resulting from “delayed or interrupted healthcare.”⁵ The National Hurricane Center estimated the damages in Puerto Rico and the U.S. Virgin Islands to be \$90 billion, making Hurricane Maria the third costliest tropical cyclone in U.S. history, after hurricanes Katrina and Harvey.⁶ Roadways were inaccessible to vehicular traffic for weeks or months due to storm debris or landslide; bridges were washed out. The electric power supply was interrupted fully for weeks and 40 percent of the island’s 1.3 million residential consumers did not have steady supply of electric power until January 3, 2018, when the local power authority was able to estimate any level of power delivery.⁷ By early February, 2018, 25 percent of customers still lacked electric service. In an island where about 60 percent of the land area is mountainous, lack of electric supply also entailed lack of running water as pumps supplying highland areas were inoperable.

Given the reality that tropical cyclones have increased in frequency, intensity and duration in the last three decades, the City of Holyoke is interested in learning lessons from the local response to the storm of this magnitude in Puerto Rico so it may anticipate responses to climate driven events as a way to bolster the City and the Commonwealth resiliency planning in the face of a changing climate, particularly as it relates to climate migration. The study team presents insights below based on the experiences of persons displaced by the storm, and collected in a survey of respondents in Holyoke as well as three focus groups. We divide the experience

of these displaced respondents in three sections: one that sought to gauge the level of preparation for the storm prior to its onslaught; another section in which respondents describe the aftermath of the storm and the governmental and social response to the destruction wrought by the storm; and a final section that discusses the decision-making process around leaving a disaster zone.

Before the Storm

Storm Awareness

Long-term residents of Puerto Rico are used to tropical cyclones. By and large, the announcement of a tropical storm or hurricane in the Eastern Caribbean or Atlantic region is not an unusual occurrence. In fact, commercial media weather forecasters often mention the presence of even lower impact weather systems, such as tropical depressions and tropical waves. For the overwhelming majority of respondents to the survey displaced by Hurricane Maria the storm did not come as a surprise. More than three-quarters of respondents had learned of the storm six or more days in advance; and more than ten percent had learned of it with three-to-five day notice (see Table 1). Less than ten percent of respondent indicated just finding out about the storm with one or two day notice. Only one person had indicated they did not know the storm was approaching.

Focus group participants indicated learning of the storm’s approach through the media, as well as a variety of sources (e.g., local TV networks, radio,

TABLE 1

How far in advance did you learn a hurricane was about to hit Puerto Rico?	Freq.	Percent
Didn’t know a storm was approaching	1	2.3
One to two days	4	9.3
Three to five days	5	11.6
Six or more days	33	76.7
Total	43	100

newspapers, relatives and informally through their personal networks). Advisories and warnings on television were common. As one displaced female remarked, “the Government of Puerto Rico always issues warnings and advisories on TV.”⁸ For some, local authorities, often the municipal government, would approach selected neighborhoods, particularly those prone to flooding to alert residents and, depending on the nature of the storm, encourage them to seek shelter elsewhere. But this alert system varies by neighborhood. Some respondents mentioned taking cues from the municipal government’s response. As another displaced male mentioned, “I live in a flood-prone area in Manatí, and the municipal government came to clean up the drainage ditch (in the neighborhood) the day before the storm.” The government also relied on telephone warnings to alert residents of municipalities throughout Puerto Rico; however, this means of alerting the population also caused stress among some of these customers because the mobile phone alerts would sound repeatedly and unexpectedly.

For some focus groups respondents, Hurricane Irma had already made them vigilant; “we were already alert because of Hurricane Irma,” mentioned one. However, the fact that one catastrophic category 5 cyclone—Irma—had skirted Puerto Rico also underscores the experience with tropical weather systems of most residents of Puerto Rico. The fact that a catastrophic hurricane of the magnitude of Hurricane Maria had not swept through the island since 1928 may have lulled many into complacency by erasing the resulting devastation from direct personal memory to cast it into a historical and unrelatable past. A few focus group respondents noted that previous hurricanes and storm had caused damage and affected them personally, but not to the degree Hurricane Maria did.⁹ Respondents had little notion of the magnitude of power and potential destruction that Hurricane Maria represented. Yet, most of these respondents mentioned taking some preparatory measures, in varying degrees; from spending upwards of \$900 in plywood to board up their homes, purchase gasoline for generators and food, to searching for shelters nearby to purchasing water and food and stocking up on needed medication. Several mentioned bracing up tin roofs with wire.

The Storm’s Toll

In the end, however, for these displaced focus groups respondents, those preparations were in-

sufficient to meet the ferocity of the cyclone. Ten of twenty-eight respondents reported their home uninhabitable because it was completely destroyed (3 respondents), the roof had blown off or was exposed and leaking (3 respondents) or had become flooded (4 respondents). But damage to their dwellings was not the only way in which the displaced were affected by the storm. These respondents reported facing moderate to serious health conditions themselves caused or made worse by the storm (4 respondents) or in their children (8 respondents) or in other immediate relatives (2 respondents). Lack of access to food, water and medication also created dire conditions for these persons, made worse by lack of electric power supply. Among parents, their children’s physical well-being and education needs also became pressing concerns.

These needs were also apparent among survey respondents, but with a distribution of needs somewhat distinct. The single most common reason displaced survey respondents indicated they moved to the U.S. after the hurricane was because their home was destroyed, damaged or was uninhabitable (25%). Nearly a fifth of these respondents pointed out they did not have enough food for their families; and close to another fifth of respondents mentioned they did not have a steady source of income (see Table 2). Nearly ten percent indicated they had no access to medical care. Therefore, most displaced respondents were forced to leave Puerto Rico because of direct threats to their survival or limitations to means to face threats to their survival. The precarious situation of those affected by the storm was evident when they were asked to rank the most pressing need they faced in the aftermath of the hurricane, reporting most often their lack of source of steady income or lack of a job (25%), not having enough food for their families (19%) or having their homes destroyed or uninhabitable (19%), having no electricity or running water (20%).

Response to the Storm: Self-Reliance and Kin Networks

To tend to their needs during the months between the storm striking Puerto Rico and when they left the island, displaced persons resorted to a variety of resources. Most commonly they relied the most on their relatives and friends (38%), their own selves (21%), the federal government (17%) and/or their neighbors (14%) to seek assistance in addressing their needs (see Table 3). No respondent who migrated from Puerto Rico mentioned or was able to

TABLE 2

If you moved to the U.S. because of the hurricane that struck Puerto Rico, what was the reason?	Freq.	Percent
Children's school closed	2	4.7
Did not have any source of steady income	8	18.6
Had no access to needed medical treatment	4	9.3
Home destroyed, damaged, and uninhabitable	11	25.6
Hopelessness	1	2.3
My job/place of employment closed	2	2.7
No electricity	2	4.7
No electricity, Little access to fuel	1	2.3
No electricity, No running water	1	2.3
No job prospects	4	9.3
Not enough food for my family	8	18.6
Total	43	100

TABLE 3

Who did you rely on THE MOST to address that need? (Indicate the leading source)	Freq.	Percent
Federal government (FEMA, U.S. Corps)	7	16.7
Local civic groups, including community Organizations	1	2.4
Municipal government	3	7.1
Neighbors	6	14.3
On your own	9	21.4
Relatives/Friends	16	38.1
Total	42	100

identify a local civic group or community-based organization as a source of support in Puerto Rico, although neighbors coming together informally may have played this role.

Response to the Storm: Filling the Gap Created by the Failures of Government

By and large, when displaced survey respondents resorted to these entities who assisted them after the storm, they found them generally helpful (80%). But this assessment varied by resource (see Table 4). Therefore, 85 percent of respondents who turned mostly to relatives or friends for help found them to be helpful, though for 3 percent of those respondents, relatives were either unhelpful or neither helpful nor unhelpful. Those who turned to neighbors found them all to be helpful. The assessment on the usefulness of government was mixed. Of those who relied on the federal government (FEMA, US Corps of Engineers) 85 percent found them helpful, 15 percent mentioned there was no such federal response.

When asked specifically to assess the role of the federal government, the majority of displaced survey respondents (54%) found it to be useful, but nearly a quarter (23%) found the federal government response to be unhelpful. Another eleven percent mentioned there was no response, while nine percent deemed the response neither helpful nor unhelpful (see Table 5). The assessment of local government authorities was not as positive, however; with the Commonwealth government receiving the most negative opinion from survey respondents.

The municipal government response was found to be helpful by 16 percent of displaced survey respondents, but more than one-quarter found it to the unhelpful (see Table 6). Another quarter indicated there was no response from the municipal government to their needs, and yet another quarter deemed the municipal response as neither helpful nor unhelpful. Less than ten percent found the Commonwealth government’s response to their needs to be helpful, compared to 40 percent that found it unhelpful (see Table 7). Thirty percent indicate there was no response from the Commonwealth government to their needs, and 19 percent thought that response was neither helpful nor unhelpful.

The assessment discussed above referred to the responses from those governmental jurisdictions to their individual or family needs. But survey respondents were also asked to assess the response of governmental entities their neighborhood needs. On this count, the assessment from displaced survey respondents was even more negative; nearly half of them thought the government response to their neighborhood needs were unhelpful, with another 16 percent mentioning there was no such governmental response, and 14 percent deeming it neither helpful nor unhelpful (see Table 8). Sixteen percent of respondents indicated the government was helpful in responding to their neighborhood’s needs.

Puerto Rican Municipal Government Response

There are 78 municipalities in Puerto Rico, and residents often turn to the municipal government

TABLE 4

		Who did you rely on the most to address this need?					
		Federal	Local	Municipal	Neighbors	Relatives	Total
How did this resource respond to your needs? Was the response...	Helpful	6	0	1	5	12	24
	Neither	0	1	1	0	1	3
	No Response	1	0	0	0	0	1
	Unhelpful	0	0	1	0	1	2
	Total	7	1	3	5	14	30

TABLE 5

How did the federal government respond to your needs? Was the response...	Freq.	Percent
Helpful	23	53.5
I don't know	1	2.3
Neither helpful nor unhelpful	4	9.3
There was no response from this resource	5	11.6
Unhelpful	10	23.3
Total	43	100

TABLE 6

How did the municipal government respond to your needs?	Freq.	Percent
Helpful	7	16.3
I don't know	2	4.7
Neither helpful nor unhelpful	11	25.6
There was no response from this resource	11	25.6
Unhelpful	12	27.9
Total	43	100

TABLE 7

How did the State/Commonwealth government respond to your needs? Was the response...	Freq.	Percent
Helpful	4	9.3
I don't know	1	2.3
Neither helpful nor unhelpful	8	18.6
There was no response from this resource	13	30.21
Unhelpful	17	39.5
Total	43	100

TABLE 8

How did the government respond to your Neighborhood's needs? Was the Response...	Freq.	Percent
Helpful	7	16.3
I don't know	2	4.7
Neither helpful nor unhelpful	6	14.0
There was no response from this resource	7	16.3
Unhelpful	21	48.8
Total	43	100

for services under normal circumstances, and more so after catastrophes affect them. Residents, particularly those in smaller municipalities are therefore socialized to look to the mayors and the municipal government more broadly for aid and assistance. The response to the needs of soon-to-be-displaced persons by their municipal governments was more varied than the survey responses might indicate. While focus group respondents criticized the role of certain mayors in Puerto Rico, either because they did not respond in any visible or palpable manner, or because of instances of perceived or demonstrated corruption or favoritism in parceling out aid, other mayors were commended for their response to the devastation created by the storm. Instructive in terms of lessons was the response of the mayor of a central highlands municipality. He concentrated municipal assistance in a central location—the local sports and recreation center—which hosted FEMA and other providers of aid on a one-stop hub. Moreover, he created the delivery of aid to the different barrios of his municipality on a rotating basis, scheduled ahead of time and announced to barrio residents for specific days and locations. Focus group respondents found this arrangement useful insofar as it created continuity of service and provided a level of certainty in an uncertain situation.

However, the generalized opinion of displaced focus group respondents about the different governments' response was one of frustration and contempt. The fact that there was not a visible presence of any governmental representative or employee was galling and a sign of abandonment. Particularly affected were rural communities or highland neighborhoods which often were isolated and had to resort to clearing roadways on their own, without governmental assistance ("the mayor... went up the hills once things had already been cleaned up"). Delayed responses were also highly criticized for their impact on effectiveness in the delivery of government assistance. This perception was captured in statements such as: "the government needed to respond faster. It took them three weeks to respond" or "the mayor's staff would collect information, but they would not offer assistance" or "my husband lined up a week after the storm to sign up with FEMA, [but] we got a blue tarp in December" or "FEMA did not get to my neighborhood until December when I was already in Chicopee." There was also disbelief in the governmental obliviousness and rigidity in bureaucratic responses to request for assistance, captured, for instance, in

statements such as "the government response was terrible. Imagine FEMA asking people to file claims online."¹⁰ In assessing the relief effort from a broad perspective, a middle-class displaced man who had lost his home to flooding stated "I will tell you the truth. Listen, we need to be individually responsible for our families and we know how to provide for them. But the government was not able to manage such large chaos. I will tell you more, the government of Puerto Rico and the federal government deserve an F. Both! And the municipal government, too. All of them. I was well prepared."

Some of the relief and recovery efforts by the government were also criticized for being insufficient or ineffective: "every once in a while, the mayor would provide drinking water; but it wasn't always clean" or "the donated food, when it reached us, was spicy. We couldn't eat it."¹¹ The military, whether U.S. Army or Puerto Rico National Guard, was also mentioned as an adequate source of relief and governmental presence.

Coping: Collective Responses to the Toll of the Storm

Considering the uneven, insufficient or non-existent assistance from governmental sources in response to the needs of the population after the hurricane, displaced respondents relied on other sources of support and need provision. These sources of support tended to be mostly relatives, friends, and neighbors. Focus group respondents displaced by the storm emphasized the informal arrangements they resorted to in order to cope with their necessities. These ranged from borrowing mobile phones to communicate with relatives in and outside Puerto Rico to update them about their situation and conditions, and to request assistance;¹² to making use of electricity generated by privately owned portable generators to temporarily power refrigerators and respiratory therapy equipment; to organizing communal meals based on what each contributor could supply to share collectively in a daily meal. Neighbors came together to clear storm debris from roadways. Neighbors would gather in the common areas of a housing project or in the local development's community hall (*centro comunal*) in order to centralize their self-help efforts. Some displaced respondents relied on their personal contacts with governmental employees to obtain supplies for their own families and those in their neighborhoods. (A displaced female related how "my husband worked for the municipal government and had to stay at

work for a month. He'd bring me ice, water." Another respondent explained how municipal employees on potable water distribution details would alert their neighbors when supplying nearby from a cistern truck in order for neighbors to be ready for a quick detour stop to supply them with drinking water. In this sense, personal networks with government agents gave some respondents an advantage in procuring governmental resources.)

External Sources of Support: The Limits of Self-Sufficiency and Self-Reliance

Communities, neighbors, families and individuals in areas ravished by the cyclone were limited in the amount or extent of self-help and self-reliance they could engage in. Respondents in focus groups remarked a variety of formally organized or informally arranged relief efforts they also relied on to satisfy their basic needs. These respondents highlighted the role of faith-based organizations or affiliates, such as the Salvation Army or the Mennonite church as well as other independent churches. The displaced noted how religious missionaries contributed resources such as water, food, sanitary products, medication (insulin, anti-hypertensive) in neighborhoods. This provision of relief resources was very visible but appeared to be under the radar of the news media highlighting the relief effort. Church organizations themselves appeared to be understated in their relief work. But their role appeared to be indispensable. Some respondents, however, noted how some church organizations coordinated with the government in their relief response ("The Mennonite Church coordinated with FEMA" or "A church, after a month and a half, set up a center with FEMA in it. We lined up to apply and created a list of needs. Then, the mayor showed up and he wanted to take charge. With the mayor came some people who wanted to cut in the line. They had to call the police. It was chaos.")

Secular responses were also mentioned by displaced respondents in focus groups. They highlighted the role of celebrities such as Ricky Martin and his foundation, as well as the role of Major League Baseball, who organized relief efforts in selected towns (e.g., Manati). Also mentioned were the efforts of employees from large manufacturing enterprises such as "from the pharmaceutical industry in Guayama." Just as U.S.-based dedicated entrepreneurs responded to the crisis generated by the storm by setting up large scale food preparation

and distribution arrangements, such as those of Chef José Andrés and his World Central Kitchen, so respondents noted similar efforts by local figures, such as Chef Piñeiro, in providing relief resources. The Red Cross was in a FEMA-linked initiative, also mentioned as a resource.

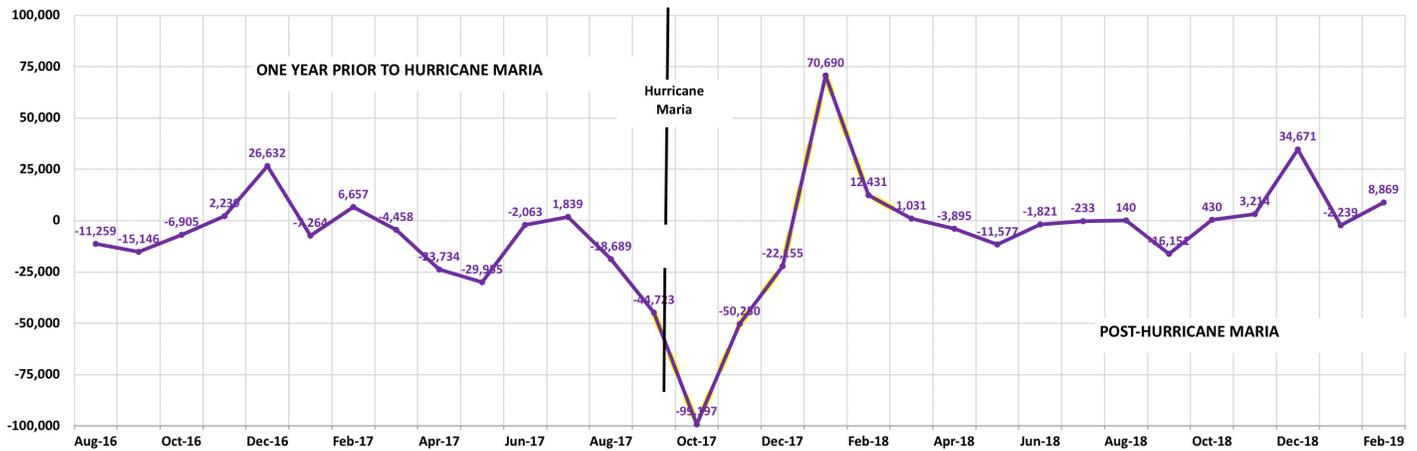
Information Sharing

During the period between the storm striking the island and respondents leaving Puerto Rico, pertinent information tended to be shared mostly by word of mouth, from neighbors, or friends who worked in the municipal government. Communication from the government through normally standard channels such as television were impaired by the lack of electric power over virtually the entire island for periods from several days to many weeks. Those with battery operated radios were able to listen to regular radio broadcasts. Respondents mentioned they would also receive information when travelling to government assistance centers. For those who had or were able to gain wireless connection, they would get news from Facebook or TV.

Out-Migration of Displaced Puerto Ricans

In the end, displaced respondents left Puerto Rico after a period of time of various lengths, but with the bulk arriving in the United States within a three-month period after the storm swept through Puerto Rico. Among focus group participants, more than one-third left in October 2017, one-in-three left in November 2017 and one-fifth departed in December 2017. Therefore, more than nine in ten persons displaced focus group participants left the island in the three months immediately following the hurricane. Among survey respondents, a similar pattern emerges. The bulk of displaced survey respondents (43%) had been forced to move from Puerto Rico eighteen months to two years since the storm hit, corresponding to out-migration within the three months immediately following Hurricane Maria's onslaught. Another third of displaced survey respondents left the island during the 2018 calendar year. Less than 20 percent migrated to Holyoke/Hampden County during the 2019 calendar year. These patterns of out-migration from the island correspond to those reported in official statistics. Figure 1 shows the net movement of passengers between Puerto Rico and other destinations, reported

Figure 1 : Net movement of passengers between Puerto Rico and the United States, before and after Hurricane Maria



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016-2019

on a monthly basis by the Bureau of Transportation Statistics from August 2016 and February 2019. The data show that the net out-migration in Puerto Rico for other destinations (i.e., people leaving minus arriving) was 99,000 in October; 50,000 in November; and 22,000 in December of 2017. The overwhelming majority of respondents to the survey or who participated in focus groups arrived from municipalities in the direct path of the eye of the storm or in municipalities immediately to its northeast orientation. This geographic distribution coincides with the strongest effects of the storm, both in terms of high wind exposure as well as rain volume, indicating that migrants were those affected most by the direct effects of the storm.¹³

Leaving Puerto Rico: Making Decisions

While the majority of survey respondents indicated they had made the decision to leave Puerto Rico by themselves (58%) or jointly with their spouse or partner (28%), the decision-making process was better explained or contextualized by focus group participants. Many Puerto Ricans felt compelled to leave at the urging of a variety of sources such as government officials or relatives: “people would push you to the US. The government, relatives, telling you how much assistance you’d get [here];” “My sister sent out for me. I only took clothes with me and important documents;” or “the mayor was a good mayor, but he recommended that those who had relatives abroad should go abroad because many people were going to die” are illustrating statements to the effect. For others, the surrounding devastation was a compelling push factor: “there was so much destruction around me that I just wanted to

get (to the US) already;” “when we were finally able to get a phone signal and began to get messages, my brother reached out telling me to get out. I didn’t want to leave, but I have two small children. I asked my brother to purchase plane tickets for us.” Relatives were a leading source of resources for traveling from Puerto Rico, with many remarking how it was their relatives who paid for their plane tickets out of the island. The assurance or expectation of assistance on arriving in the U.S. was also a motivating factor to migrate for some respondents. For 12 percent of survey respondents this was a leading reason for choosing Holyoke/Hampden county as a destination. One focus group participant provide additional context on this point; “I had a cousin who supposedly worked for the Red Cross. Supposedly they said that there was assistance in the U.S.”

The City of Holyoke: A Resource for Displaced Puerto Ricans Arriving in Western Massachusetts

The majority of survey respondents (56%) arrived in Holyoke, with more than a third (37%) arriving elsewhere in Hampden County (see Table 9). Holyoke became a destination for these respondents because the vast majority of them (60%) had relatives or friend in Holyoke or had lived in Holyoke previously. For them the most pressing need became, housing, with 44 percent of survey respondents indicating so, and an additional 5 percent mentioning that the rent was too high for their income (see Table 10). This is an unsurprising finding for a population who had been displaced, often as a result of losing their home, but also given the very tight housing market in the city of Holyoke. The vacancy rate for rental units in Holyoke for 2017, was

TABLE 9

After you moved from Puerto Rico, where did you arrive in Massachusetts?	Freq.	Percent
Elsewhere in Hampden County	16	37.2
Elsewhere in Massachusetts	1	2.3
Holyoke	24	55.8
Other	2	4.7
Total	43	100

TABLE 10

After moving from Puerto Rico to Holyoke or elsewhere in Hampden County, what were your needs?	Freq.	Percent
Access to needed medical treatment	4	9.8
Access to needed medication	1	2.4
Furniture	1	2.4
Need housing	18	43.9
Not enough food for my family	3	7.3
Not enough income for my family's needs	4	9.8
Other	1	2.4
Rent/mortgage is too high for my income	2	4.9
Transportation	1	2.4
Unemployment	6	14.6
Total	41	100

3.6 percent, a very low proportion by any measure, but lower compared to that in Hampden county as a whole (4.5%) or the state of Massachusetts as a whole (4%).¹⁴

Arriving in Massachusetts: The Needs

In addition to the need for housing, unemployment was another leading situation 15 percent of displaced persons encountered, along with not having enough income to cover their family's needs (10%) or not having enough food for their families (7%) (see Table 10). Healthcare was another leading need for 12 percent of respondents. Focus group participants echoed these needs at about similar rates. In response to a question on their needs on arriving in Massachusetts, responses invariably led with "housing, housing, housing," almost in unison, with many respondents indicating both housing and work.

Similar as when trying to tend to their needs while in Puerto Rico, respondents turned to relatives or friends. However, the proportion of their reliance on these sources of assistance shifted somewhat while in Massachusetts. If in Puerto Rico these displaced persons relied on their own selves to tend to their needs at a rate of 21 percent, in Hampden county their level of self-reliance plummeted, with less than 5 percent of survey respondents indicating they relied on their own to solve their most pressing needs (see Table 11). Most (33%) were dependent on their relatives or friends to tend to those needs. While their level of reliance on the federal government was similar in Hampden county (14%) as when they were in Puerto Rico, they turned to the Commonwealth of Massachusetts agencies at a notably greater rate (17%) than they did while on the island. On the other hand, fewer displaced persons turned to the municipal government in Holyoke than they did while in Puerto Rico. Another notable difference in their resorting to assistance is evident in the proportion of respondents who turned to charitable organizations (14%), social service agencies (10%), and local civic groups (5%). As newly arrived displaced persons, they were not able to turn to rely on the same social networks available to them in Puerto Rico, including their new neighbors. To be sure, newly arrived Puerto Ricans were not likely to know or had developed bonds with their neighbors.

Sources of Support: Assessments

While not mentioned as a leading resource when trying to solve their most pressing need, persons displaced by the hurricane generally gave a positive assessment to the role the Holyoke municipal government in responding to their needs, with nearly two-thirds of respondents (63%) saying Holyoke was helpful (see Table 12). No respondent found it unhelpful. Alternative responses indicated that displaced persons did not know what level of response there was from the Holyoke municipal government (17%) or stated there were no response from Holyoke (14%) or the response was neither helpful nor unhelpful (5%). The generally positive assessment of the Holyoke municipal government may have resulted from the lack of knowledge migrants had of how governmental functions may be discharged. Most had no knowledge of the civic landscape of the towns they lived in, beyond the organizations they came to know to help with their needs. Therefore, while most focus groups participants learned to know of Enlace de Familias or the Gándara Center in Springfield or Catholic Charities, Wayfinders and Pioneer Valley and Ebenezer Church, none had joined any local group, whether social, neighborhood-based, civic or political, even after living in Hampden county for a number (18-20) months. In fact, in their discussion, at times they conflated the services they received from social service organizations from services from the government. This conflation between private social service agencies and the (state) government may not necessarily be unusual or unexpected as state governments often contract out with private providers safety net services which had previously been under the direct purview of state agencies.

It was even more difficult for both the survey and focus group participants to recognize the differences among city, state and federal governments. Although participants may have been able to identify a particular agency by the services those agencies provided (e.g., the schools, "housing," Social Security, FEMA). Focus group participants had a variety of experiences with government agencies they turned to address their needs. For instance: "In some agencies the assistance was good. Not in others. If I have a paper from FEMA that says that my home was not habitable, then learn to read the document. The person is telling the truth. In "Housing", I'd go every week and the (clerk) would ask, 'here again?! You are gonna have to wait.' If FEMA was helping you, "Housing" wasn't going to

TABLE 11

Who did you turn to in order to solve the most pressing need?	Freq.	Percent
Charitable organizations	6	14.3
Federal government (FEMA, etc.)	6	14.3
Local civic groups, including community	2	4.8
Municipal government	1	2.9
On your own	1	2.9
Relatives/Friends	14	33.3
Schools	1	2.4
Social services agencies	4	9.5
State government	7	16.7
Total	42	100

TABLE 12

How did the Holyoke municipal government respond to your needs? Was the response...	Freq.	Percent
Helpful	26	63.4
I don't know	7	17.1
Neither helpful nor unhelpful	2	4.9
There was no response from this resource	6	14.6
Total	41	100

help you.”¹⁵ Often complaints from displaced focus group respondents centered on the interpersonal exchange between them and agency staff, illustrated in the following statements: “The staff at the schools were not helpful because of my lack of language skills. I had to use my aunt as contact because, when I tried to do things, the staff would respond with attitude.” This sentiment was also expressed by another focus group respondent: [the services received from the government were] “so-so, because sometimes you’d go to an agency and the staff mistreats you.” Such perceived lack of empathy or disdain towards displaced persons from staff also came from people who shared their ethnic background: “In the beginning things were poor. This place is excellent, but even then there are people—our people—who are set [well placed] and they turn their backs on you. Things improved, though. Specially the government here in Holyoke.”¹⁶ Lack of efficiency was also a complaint from some displaced persons: “I didn’t like the experience in Social Security. I would fill out the paperwork and then return to find out they had no record of me.”

The perception that there was a lack of disposition to help displaced persons was not limited to government agencies, but also extended to staff in social service agencies as expressed by a male focus group participant who shared “I went to an agency, ZZZZ [a local social service agency], and the (clerk) would not let me in. She said, ‘we are not helping anybody here. If you think that because you are coming from Puerto Rico you are going to get priority, you are mistaken.’ That’s how she left me at the window... That’s how they treated me.” Yet, other focus group participants indicated satisfaction with the process: “I’m satisfied. I didn’t have the problems she had. I came in; applied. I had my papers; they took care of me the same day and they gave me SNAP and cash for my daughter.” Similarly, another female focus group participant indicated “In my case it’s been good. Wherever I’ve gone I’ve received help.” Also, government agencies in Massachusetts were described in better terms than government agencies in Puerto Rico. “The assistance I’ve received is satisfactory. When I compare it to Puerto Rico’s their assistance is far above. There may be agencies that work as well here as in Puerto Rico, but those cases are few.” One notable bureaucratic obstacle encountered by many respondents is the requirement from state agencies in Massachusetts to present documentation or evidence from governmental entities in Puerto Rico, despite of the fact that the governmental agencies in Puerto Rico were often paralyzed due

to lack of electrical power or some other infrastructural or coordination issues: “In the beginning it was difficult because to request some assistance, the agencies in Massachusetts required that agencies in Puerto Rico verify our status, when the government of Puerto Rico wasn’t working!”

Discrimination appears to have had an impact on the delivery of government services or in the provision of government-contracted services provided by private vendors. A displaced male focus group participant explains: “While I did get assistance (food stamps, other funds), not all cities operated the same way. In [a municipality within Hampden County], the mayor wanted us out of the hotels. Even though the rooms were paid for by FEMA, because FEMA was giving us assistance, he was dying to get us out of the hotels. We befriended the owner of [hotel name], and he told me ‘the mayor called me directly and was asking me to get all those with FEMA out.’ He didn’t want us.”

The dire needs displaced persons were experiencing in the aftermath of the hurricane and their displacement from Puerto Rico certainly informed their attitude towards the provision of services to satisfy their needs. A lot of the dissatisfaction or frustration many displaced persons expressed at the limited provision of some services (housing foremost among them) stemmed from their lack of understanding of the pressure their sudden arrival in Massachusetts placed on its municipalities throughout the state, and their desperation to satisfy their own tremendous needs. A displaced male focus group participant indicated:

“Housing assistance from the city was terrible. It wasn’t until later, at a meeting, that I was able to understand the great demand for housing there was because so many people arrived from Puerto Rico. The city wasn’t ready for a boom of people. I understand why it was, but we suffered it because we needed housing.”

In the end, the state government of Massachusetts received consistently positive reviews, with 88 percent of survey respondents indicating the response they received was helpful (see Table 13). Less than 5 percent indicated that there was no response to their needs from the state government, another 5 percent mentioned they did not know about the response the state government gave, and less than 5 percent

TABLE 13

How did the Massachusetts State government respond to your needs? Was the response...	Freq.	Percent
Helpful	36	87.8
I don't know	2	4.9
Neither helpful nor unhelpful	1	2.4
There was no response from this resource	2	4.9
Total	41	100

thought the state government's response to their needs was neither helpful nor unhelpful.

Social service agencies were consistently seen as the greatest resource displaced persons encountered upon their arrival and settlement in Holyoke and Hampden County. Most focus group participants spoke highly of the social service agencies and the services they received there: "[the non-for-profit agencies] were very good. Excellent!". Some received more praise than others for their level of empathy, efficiency and sustained attentions. "I went to 'Section 8' and I was denied; went to 'Housing' and I was denied. They denied me all sorts of help. But they helped me in YYYY (a local social service agency)," mentioned a displaced female focus group participant. Other social service agencies received mixed reviews and comments: "I turned to many agencies, XXXX (a local social service agency), to a school in [a municipality in Hampden County], but it was only in YYYY (another local social service agency) where we were helped. YYYY would follow up." But no social service agency was singled out for consistently negative service provision.

The criticism of some of the social service agencies centered mostly on the disposition and attitude with which some of the agency staff approached and treated displaced persons seeking assistance, as noted in the quote above in reference to ZZZZ (a local social service agency). Know-how and the effective delivery of services was another critique some of the social service agencies providing relief assistance to displaced persons received, as revealed by the statement from another focus group participant: "I went to XXXX before I went to YYYY, and they were lost. They didn't know what they were

doing." Particularly difficult for displaced persons was navigating the temporary emergency relief assistance they received when their needs were not simply temporary but rather longer term than the short term of assistance. This was the case in regard to temporary housing assistance. The uncertainty created by the short nature of aid, when the circumstances for displaced persons were still tenuous, fragile or tentative (i.e., destitution, unemployment, limited proficiency in English), created great anxiety among them. "We were on an emergency list and we were under constant threat that they were going to take away our assistance," mentioned one displaced female focus group participant. Another displaced female relates the mental and physical distress such uncertainty produced: "We didn't know what to do. After a month of staying in the hotel, they call us and tell us, 'we are going to stop paying for the hotel. You have to vacate.' They called me in the morning. That evening I had a stroke." She continued her story stating: "I found an apartment, because DDDD (a local social service agency) helped me. But they called me again and told me, 'DDDD forgot to pay [the rent] and you have to vacate according to the Sheriff's dispossession letter,' and we didn't have any benefits. I had a second stroke. Ever since I arrived it has been difficult to procure assistance."

On-Going Needs

In general, most survey respondents (56%) stated they were able to address and resolve their needs; although 42 percent indicated their needs were still on-going (see Table 14). Focus group respondents provided further details on this account.

It appears that by now, upwards of two years after the passing of Hurricanes Irma and Maria, displaced Puerto Ricans have stabilized their lives. In the words of a focus group participant, “right now we have stabilized. We have been able to get over the initial crisis. Once we got a home, we were able to stabilize.”

It therefore appears that overcoming the initial trauma and destabilizing transition created by displacement displaced focus group respondents have been able to find a modicum of normalcy. “I’ve stabilized. We are covering our expenses,” stated a displaced focus group participant. However, this normalcy is nevertheless punctuated by on-going or long-term need that may reflect the broader needs of Puerto Ricans in the City of Holyoke, Western Massachusetts and elsewhere in the United States more generally. Housing issues (including access to affordable housing), access to healthcare and ability to find well-paying jobs continue to be issues of concern for these displaced persons: “rent’s too high; I can barely make ends meet.” Moreover, the level of stability that displaced persons describe is characterized by continued assistance from external sources. In the words of a focus group participant, “I could not get by without assistance from someone.” Another displaced person indicated, “I can’t pay a normal rent. I need Section 8.” This was a generalized position for the majority of focus group participants, whether male or female: “If they took away from us the assistance we are getting, we would be in bad shape.” Virtually no displaced focus group respondent would be able to survive without some level of safety net assistance.

A Closer Look at Support Networks: Kin

Displaced respondents indicated that their relatives and friends were the leading resource in the aftermath of the devastation created by hurricanes Irma and Maria. Many kin were located in Puerto Rico, but a great deal were located in the United States, including Hampden County. As part of our study, we interviewed 43 survey respondents who hosted someone (or several persons) who had been displaced from Puerto Rico by the cyclones. In addition, we held a focus group with ten people who also welcomed relatives and/or friends in their homes. These hosts also provided a wealth of information about the generalized response to the hurricane from a unique vantage point. Their assistance took a number of forms both in the immediate aftermath of the storm and upon their kin's arrival in Massachusetts.

Anticipating and Witnessing a Disaster

One of the first things Puerto Rican residents of Hampden County did upon learning of a large storm approaching Puerto Rico was to worry. This initial worry turned to alarm when the weather forecast indicated the cyclone’s trajectory would engulf Puerto Rico. Worry and alarm centered on these ultimate hosts having family on the island, with many of them living either in flood-prone areas or in homes not suitable to sustaining a category 4 hurricane. Others worried that they would lose contact because their relatives in Puerto Rico did not live in the San Juan metropolitan area but in the highlands. Many hosts learned about the storm

TABLE 14

Were you able to address, meet and resolve those pressing needs you had?	Freq.	Percent
No. I gave up	1	2.4
No. They are on-going	17	41.5
Yes	23	56.1
Total	41	100

from local Puerto Rico media (e.g., WAPA-TV) or Spanish language media in the United States (e.g., Telemundo, Univision) or through the Internet, including Facebook. All ten hosts who participated in the focus group had relatives in Puerto Rico, and virtually all of them had themselves come from the island, whether as recently as two or three years before the storm hit or as long as thirty years ago. They all nevertheless maintained close contact with friends and relatives in Puerto Rico. These hosts had arrived in the Holyoke area because they themselves had relatives in Holyoke who encouraged them to settle there or because Holyoke was an attractive location to them as a result of the large Hispanic population.

As the storm approached, many hosts contacted relatives and friends in Puerto Rico to inquire about their status, to urge them to prepare themselves, but also to alert them to the status of the storm. Given the somewhat lackadaisical attitude some might take to tropical storms given the fact that many large storms had missed Puerto Rico for decades, when hurricane Maria was declared a category 5 storm headed towards Puerto Rico many hosts communicated to share with their kin that news outlet in the U.S. were highlight the devastating nature of the storm, which at that particular moment was a contrast with the information their kin were receiving in Puerto Rico.

News of the devastation wrought by the storm caused great consternation among Holyoke residents. “I suffered so very, very much, because my daughter’s neighbor posted a film of my daughter’s house at the beginning of the storm, half-way through the storm and as the storm was hitting dead on, and I could see my daughter’s roof come apart.... the river rose so high I became hysterical... A week later I had a heart attack,” mentioned a female host on witnessing the devastation on a live feed. Similar desperation was felt by other Holyoke residents who were not able to locate relatives of the storm. Lack of communication fed the desperation many U.S. residents felt on seeing the devastation but not knowing the fate of their loved ones on the island.

Mobilized Into Action: Initial Response

After the storm, the first thing friends and relatives did after establishing contact with their kin in Puerto Rico was to send money. They often

pooled money in order to be able to send a substantial amount of money to the island. However, they were often stymied by the dearth of money transfer retail locations on the island, particularly in rural areas. This barrier increased the cost of the money transferred as recipients often had to pay inflated prices to travel to such retail establishments: “In the first place, money, because we had to do a collection among siblings... then we would send the money, but, at the other end, they had to go from Vega Baja to Bayamón because Western Union was only located in Bayamón. So, you had to pay \$25-30 for gas, plus extra money for the driver. On top of that, the money you sent did not stretch enough because they raised prices after the storm,” was one comment from a host focus group participant. People also relied on big box retail stores, such as Walmart to send remittances. However, these stores also placed limitations on the amounts of funds that would be honored: “we tried with Walmart because in the south there was no Western Union. But the [clerk] at Walmart said Walmart had instituted a rule that the maximum allowed remittance was \$50, and only \$50.” Once kin were able to articulate specific needs, relatives in the U.S. began to send specific items: “My mom sent, what do you call it, a generator; and then we sent groceries,” mentioned another female host. “But we would send this directly, because otherwise it would be pilfered.” These hosts complained nevertheless of the pilfering that took place at the U.S. Postal Service. Another complaint was the bottleneck that occurred at the main postal distribution center in San Juan, delaying distribution throughout the island for weeks at a time.

Because of concerns with larceny of shipped items, U.S. residents resorted to designating a family representative to go and make sure deliveries would arrive intact. However, for these emissaries travelling to and throughout the island was not always easy: “The airfare was \$700. It was horrible. I think he paid \$200 to travel from the airport to Comerío because he couldn’t find a car to rent. They were all rented out.”¹⁷

All hosts indicated they themselves had sent out assistance directly to relatives. The overwhelming majority of survey respondents (74%) also mentioned sending aid to kin directly affected by the hurricane. By and large the bulk of survey respondents (36%) mentioned joining relatives in the United States to collectively send aid to kin in Puerto Rico (see Table 15). Another quarter of survey respon-

dents mentioned they sent assistance to kin in Puerto Rico on their own, with another 10 percent sending assistance both on their own and jointly with other relatives in the United States. The balance of survey respondents also mentioned a variety of manners to send assistance to Puerto Rico, such as using existing organizations in Holyoke to do so.

Mobilized Into Action: Collective Responses

Most focus groups participants also mentioned joining collective efforts to send aid to the island: “we in Holyoke also got together and collected 1,500 cases of water to send to Salinas,” mentioned one host in Holyoke. Joining collectively to send aid to Puerto Rico was in response to organizational efforts of local civic or social organizations: “There is a club called *JJJJ* where we gathered and everyone who drove by would bring some items,” stated a host also associated with this club. “Most of the

help was destined for Salinas because in this town most residents are from Salinas.” Other collective efforts were channeled through churches, as described by another host: “we have a main church in Caguas, and the pastor here rented out a warehouse in Springfield, rented two containers to send generators and everything possible. He would send two persons to Puerto Rico to distribute the supplies in Caguas at the church. He would then tell church members to alert their relatives in Puerto Rico of the arriving supplies. But the container was stuck at the port for two weeks. Those two persons almost lost their jobs because they were only supposed to be there for one week. In the end, when they got the container, it was pilfered.”

Another method to send assistance to Puerto Rico was for friends, acquaintances or other people to approach people with relatives in Puerto Rico and ask them, for instance, the clothes sizes of their relatives in order to purchase clothing and ship it to them: “My daughter went to the Post Office one

TABLE 15

And as you took steps to respond to the destruction and needs of people in Puerto Rico...	Freq.	Percent
On my own	15	27.3
On my own, With existing organizations in Holyoke (or Hampden County)	5	9.1
On my own, With other people that I knew beforehand	1	1.8
On my own, With relatives/friends in the United States (Holyoke/Hampden County)	6	10.9
On my own, With relatives/friends in the United States (Holyoke/Hampden County) With existing organizations in Holyoke (or Hampden County)	2	3.6
With existing organizations in Holyoke (or Hampden County)	3	5.5
With other people that I knew beforehand	2	3.6
With relatives/friends in the United States (Holyoke or Hampden County)	20	36.4
With relatives/friends in the United States (Holyoke or Hampden County), With existing organization in Holyoke (or Hampden County)	1	1.8
Total	55	100

day and found three boxes addressed to her, and she asked me, ‘Mom, who sent this?’ and I asked her to read the name on the label, but she said it was only initials with a Springfield return address.” U.S. residents also assisted by connecting persons affected by the storm with their relatives in the U.S., if they happened to travel to Puerto Rico and made contact with them.

Collective assistance efforts appeared to be relatively fleeting (i.e., days or weeks), however, in relation to the length of the recovery and relief period (months and years). Focus group participants summarized these initial collective efforts as follows: “they were neighborhood groups. But many groups that came together before, they are gone. Agencies are gone and they are not around anymore. That union (i.e., joint effort) that existed before is no more. In order to continue in a collective effort, you have to be in a club such as *JJJJ* or in a church.” Some of the local groups mentioned were Los Jibaritos, Cayey, Nueva Esperanza, Casa María or local churches. Some of these efforts lasted for about two months, according to a couple of focus group participant: “until December.” Yet, the emergency created by the storm lasted well in excess of six months.

Hosting displaced persons

Puerto Ricans in the United States helped their kin or the communities they came from at a distance or traveling to Puerto Rico to deliver aid directly, but ultimately, they welcomed in their homes kin displaced by the storm. As with displaced persons themselves, host persons who participated in focus groups mentioned housing as one of their greatest needs. Higher rents were also a common response (17%) when inquiring about their most pressing needs from survey respondents (see Table 16). However, dire material need surfaced as the most common needs for host persons, with nearly one fifth of survey respondents mentioning not having enough food for their families and nearly another fifth of respondents indicating they did not have income for their family’s needs. While for about one-third of survey responses these material needs were caused by having displaced kin staying with them, for the plurality of survey respondents (40%) these needs existed before their kin arrived in their homes, but were exacerbated once relatives and/or friends moved in with them (see Table 17).

In order to assist kin, these hosts often skipped or withheld other financial obligations in the United

States: “we stopped paying many bills, electricity, and others, we skimmed a bit to send it to them.” Others assisted their kin by driving them around to local social service organizations and helping them navigate the bureaucracy they encountered in procuring assistance in Holyoke. Knowing the lay of the land was an advantage for displaced persons who relied on kin relative to displaced persons who did not have any kin in Hampden County. Those who travelled to Holyoke under FEMA’s aegis were particularly isolated from sources of local knowledge who would assist them in navigating both the assistance procurement process as well as physically transporting them from one location to another. For this segment of displaced persons, learning about local resources and moving around Holyoke represented a steep learning curve, which ultimately became flatter as they were able to insert themselves in different networks of support such as churches, local community-based organizations or social services agencies.

Stress and Fraying Relationships

Hosts in focus groups remarked about the impact the sudden and voluminous arrival of persons displaced by the storm had on the local community and its needs. Given the salient need for housing, it was not unsurprising participants in focus groups would remark the impact of the sudden migration on the local housing market and the level of assistance for housing: “yes, housing; because as many people were arriving from Puerto Rico in need, those of us who were on a waiting list for housing lost our place. We were no longer at the top of the list, but were placed lower, from number one to number 500 or 1,000.” “They were giving priority to those people, even though we were just as needy. I am speaking from personal experience because in Section 8 I was high on the list, and then they told me I had to wait ten years. The world collapsed around me, but it was because they gave those people priority.” The impact on the provision of social services was also impacted by the arrival of displaced persons for Puerto Rico, in a way that Puerto Ricans already in Holyoke noticed. As a focus group participant indicated “before the hurricane you could go to different places and they’d provide you with fast and efficient service. But after the hurricane, after so many people came over, the level of services has declined; there is no funding, or you have to wait a long time because of a shift in priorities.”

TABLE 16

What are the top three needs you and your family have right now?	Freq.	Percent
Access to needed medical treatment	1	2.1
Disabled	2	4.2
Going into debt	1	2.1
Illness	4	8.3
Job does not pay enough for needs	4	8.3
Need housing	1	2.1
None	4	8.3
Not enough food for family	9	18.8
Not enough income for family's needs	9	18.8
Overcrowded home	3	6.3
Rent/mortgage too high for income	8	16.7
Unemployment	2	4.2
Total	48	100

TABLE 17

Are these needs you and your family have because you have relatives and/or friends...	Freq.	Percent
I don't have relatives/friends staying with me	8	17.0
Needs I had before relatives/friends moved in with me	4	8.5
Needs because family is staying with me	16	34.0
Needs existed before but have intensified since relatives/friends moved in with me	19	40.4
Total	47	100

While these statements may indicate a certain level of resentment, the tenor of the comments in the group did not carry overt animosity. There may have been some restraint to whatever resentment host persons may have felt. In fact, focus group participants who hosted kin in their homes emphasized the empathy they felt for their kin: “no, I didn’t [host] out of a sense of obligation. I simply put myself in their situation,” is how one such host presented it. “You could see their desperation.” Others mentioned operating on the basis of mutuality and reciprocity as they welcome kin in their homes: “I have always thought, today I do for you, tomorrow you do for me.” Nevertheless, tension and friction from sharing common spaces and in highly constrained material conditions surfaced among some hosts and their kin. This was mostly evident when the level of familial proximity was not as close, as with aunt-nephews, between cousins, co-godparents, etc. Yet, hosts were coy in describing such frictions: “I helped my sisters. They had never lived together, and being in the same house was chaos,” as described by one female host. Such hesitation was not apparent, however, among displaced persons. Most were conscious of the imposition their presence represented. This was captured in the popular refrain “a dead person starts smelling after the third day,” to indicate that one is bound to overstay their welcome if they remain for an undefined but perceived long period of time in someone’s home. An illustrative statement comes from a displaced male who mentioned, “I stayed with my aunt for two weeks. But after a while nerves become frayed. She would start fighting with her own daughter in order to not fight with my children.” For many focus group host participants their kin remained with them for two or three months, although there were a few instances that the closest of relatives (i.e., parents, children) would remain for more than a year.

Looking for Help to Meet New Needs

Host families also needed to resort to the local community beyond their own immediate circles to tend to their needs that often increased in magnitude as a result of hosting kin in their midst. For one focus group participant, food and warm clothes (i.e., coats) were the biggest need a female host encountered. She mentioned that she tended to those needs “little by little. What helped me a lot was *JJJJ* (a local social club), with clothing, food...” Another host focus group participant mentioned

“here they helped a lot. Here you’d come and they’d give you a box with toothbrush, paste, soap; all the basic necessities. And then you would return and you could find all the agencies gathered here at different tables. You’d see FEMA, Housing, Career Point, Holyoke College...everything.”

Yet another host remarked of the informal efforts among airport workers: “the airport where my brother works at, the employees; they helped a lot, with lots of clothing, appliances, bedding, personal items. They all got together [to help].” A fourth focus group participant described the help for displaced service members who were veterans: “my friend is a veteran, and at the War Center, across the street from McDonald’s they told him to come with a U-Haul truck on a specific day and he came out with beds, furniture, a dining room set. They were able to get an apartment and furnish it all with what they got from the War Center.”

However, hosts also witnessed the difficulties displaced persons encountered in procuring assistance. The Social Security Administration is a case in point. A female host focus group participant related the obstacles in getting healthcare for her siblings: “my half-sisters, they are elderly. They had a lot of problems with Medicare, Social Security. They got sick and it was very difficult to get them healthcare. They were still linked to Puerto Rico’s healthcare insurance and Social Security insisted that we had to contact Social Security in Puerto Rico. But there was no way to get in touch.” Another bureaucratic hurdle described by hosts relates to some of their kin who did not quite fit into any specific category of aid. “The experience with my son was that everywhere I took him they closed their doors on us. Organizations that assisted with food, clothes... and they would just not help us because [my son] did not have any documentation that would specify his address. He didn’t have a letter with an address with his name on it because he had just arrived from Puerto Rico. Even after showing his plane ticket [showing he had just arrived] they would just not help him because he didn’t have any documentation showing where he resided. In the end it was me and my family what helped him as best we could with clothes, shoes, etc.” Another host remarked how her son would not receive assistance because “he was a single young man, 24 years old, with no dependents, so agencies would not provide him with assistance.” This scenario contrasts with the

treatment a family unit would receive; another hosts related how “in my case, a family with two children and three adults... perhaps because they saw a family with children it was why they received assistance.”

Information Sharing: Word of Mouth

Hosts would learn of resources in Holyoke mostly by word of mouth. Once they arrived at a location that provided assistance other people waiting for assistance would share experiences and exchange information of where they might be able to receive specific type aid. That is, waiting rooms in social service agencies or community-based organizations or assistance efforts themselves would become nodes of information communication and transmission. As a host described it, “you’d go to an appointment and you know that everybody starts talking and sharing. They’d say, ‘look, in that place they have a lot of things to give away for people who need them’. You would also come to places like this [local social service agency] and see the staff processing goods to give away. They would take names down with needs, and they would put together care packages to distribute according to needs.” Hosts also indicated they learned about services for displaced persons from a broadcast campaign on the radio, newspapers, the news: “even two months ago there was a [TV] report telling people where to go for which specific type of assistance, ‘Salvation Army here; veterans, there’...”. The local channels (22News, Channel 5 or FM98.1) were highlighted as providing information about assistance.

Assistance Provision Assessment

Host participants of focus groups generally gave a positive assessment of the services they received from governmental agencies, largely because they were effective in meeting the needs of those in need. “They were good; they were good. Because they helped. They were quick; they were fast,” mentioned one such focus group participant. “They move swiftly because they saw the need. In Puerto Rico they were taking too long.” But as with some focus group respondents among displaced persons, hosts also noted that the provision of services to the needy varied according to the staff person providing assistance. For some hosts, the quality of treatment they received “depended on who assisted you. Some would come across as ‘they are children of Maria’ and the way they said things like that showed that they would not go out of their way to provide assistance. We would often have to go back several times before they would help you.”

Perception of discrimination was also noted among hosts to displaced persons. As a female former resident of a municipality in Hampden County described: “in QQQQ they are not given to help Hispanics. You don’t get help. I barely lived there for one year, because, as [another focus group participant] said, they are racist.” Another focus group participant provided a more nuanced description of the same municipality: “Look. What happens is that in QQQQ they have a tight circle and they protect themselves. They don’t allow you to become integrated. That’s why there is discrimination. I lived in QQQQ, and City Hall is not open as it is here [in Holyoke]. Only KKKK was the only place where you can go and they don’t ask you how much [money] you make, how many people live with you. You just go there and are able to get your bag of groceries and go on your way.”

A Closer Look at Support Networks: Non-for-Profit Organizations

Nearly a third of persons displaced from Puerto Rico by Hurricanes Irma and Maria mentioned they turned to social service agencies, charitable organizations or civic groups to address their most pressing needs on arriving in Holyoke (see Table 11). More than one third of hosts to these displaced persons also relied on civic (26%), charitable (4.4%) and/or social service organizations (7%), singly or in combination, to address their most serious needs. As with their displaced kin who responded to the survey, persons in Holyoke who hosted displaced persons in their homes and turned to non-governmental organizations for help gave a generally positive assessment of the assistance they received (see Table 18). Nearly three-quarters of hosts mentioned these resources were helpful in addressing their needs as they assisted their kin. The reasons for this positive assessment ranged variously, but centered on the fact that, first, there were such resources available to provide assistance, that assistance with their pressing needs was actually provided by these resources in the non-government sector (NGO), and that often the assistance was prompt. About a quarter of hosts who responded to the survey gave either a lukewarm or negative assessment, either because they thought the resources provided were either neither helpful nor unhelpful (18%) or outright unhelpful (3%). Another 5 percent of hosts stated the resource they turned to for

TABLE 18

How did these resources respond to your needs? Was the response...	Freq.	Percent
Helpful	29	74.4
Neither helpful nor unhelpful	7	18.0
There was no response from this resource	2	5.1
Unhelpful, There was no response from this resource	1	2.6
Total	39	100

assistance was unresponsive to their requests. Of the quarter of hosts who gave lukewarm or negative assessments of the response they may have received (or not received), nearly a quarter mentioned that NGOs were not able to provide more housing options even when they were needed. Another 15 percent of those who did not give a positive response stated there could have been more information provided about services offered or about navigating the system. Another 10 percent mentioned the need for additional community centers providing assistance. Fifteen percent more suggested a faster response. One respondent, for instance, indicated that the amount of documents requested to receive assistance slowed down receiving assistance.

The Holyoke Hurricane Maria study team also sought the perspective of the non-governmental sector serving Holyoke in a focus group that included a broad spectrum of civic entities, charitable associations and social service agencies. The information that follows draws from that focus group discussion.

Anticipating Displacement

As with residents of Hampden county that ultimately welcomed persons displaced by Hurricane Maria in their homes, representatives of the non-governmental organizations serving the Holyoke area learned of an impending cyclonic strike from members or employees with family in Puerto Rico. Even when the organizations themselves were not uniquely Puerto Rican or serving Puerto Ricans exclusively, NGOs were keenly aware of the impending peril and of the actual devastation be-

fore it percolated through the mainstream media and nationwide or statewide channels. As explained by an NGO manager, “I have several staff people whose families are in Puerto Rico. And so one of them didn’t hear from her family in two weeks. That was a long two weeks for her. Yeah. It was terrible. ... we could see [...] a lot of our staff under a tremendous amount of stress. There was just trauma coming to work, not hearing from loved ones.” This NGO manager added further: “Employees were telling us ‘people are going to come.’ [...] Sections of the media were really downplaying it. And if you were [not] connected to the Puerto Rican community, you didn’t necessarily understand the severity of what was going on down there.” The urgency these NGO decision-makers noted in the calls for action from their employees and associates led them to reach out to other NGOs in the vicinity as well as state agencies they had direct contact with as a result of contractual obligations for rendering services.

Representatives of the NGO sector also witnessed how the desperation and need for action drove people from the community to start collecting and stockpiling items that might be needed in Puerto Rico or in Holyoke. As a member of a local civic organization in Holyoke remarked “people were freaking out ... Yeah, like ‘I’m in Holyoke; I can’t go to the island. What can I do from here?’” [People would say], “we need to help!” Which is exciting but also very overwhelming. We had a whole space full of donations, and people were coming in, dropping like tons: individuals, schools, organizations. [...] The challenge was we got so many donations that eventually we couldn’t send everything

there. To Puerto Rico. You know, we tried to give as much away as possible to people coming. [...] after a while you're like 'what are we going to do with all this hand sanitizer?'" Another NGO representative explained how "... my staff, even just this few, led by the woman whose family she didn't her from for a long time, decided to collect clothing, particularly winter jackets for people who were coming up here."

Storm's Surge

These NGO representatives noted that people began to arrive from Puerto Rico as soon as the airports in Puerto Rico re-opened their operations. In anticipation to the arrival of these displaced persons NGOs attempted to anticipate the needs of those about to arrive. NGOs with contractual obligations or grant commitments from funders began to explore the limits on using those funds to tend to the expected needs. "We tried to look for different funding that would allow us to... give us more leeway from what we could do with the money," mentioned an NGO manager.

Another civic group representative added in reference to anticipating the arrival of evacuees from Puerto Rico, "when Maria came we had already a team here. [We] already had a program for the Irma event." Another described a strategy to prevent the local displacement of persons arrived from Puerto Rico and staying with relatives in rent-regulated housing in Holyoke: We "became also an advocate for members of South Holyoke for housing, to make sure that, because they had their cousins or families and all that, that they don't get the landlords [...] raise their rents or, you know, kick them out." Another NGO representative stated "So, the housing rules are very simple. You can only have a guest with you for fifteen days, and then your tenancy is at risk; your HUD voucher; your section 8 is at risk." This same NGO representative noted further the difference in response between Washington DC and Boston in how to respond to the demand for housing the displaced represented: "There was a few of us in the housing [area] that talked to Boston and Washington. Washington didn't care because it wasn't an emergency. So, it didn't qualify. The Katrina rules would not work at HUD. But Boston, which is the Department of Housing and Community Development, which manages some of it, they quickly gave a Maria variance. So, the housing authorities weren't kicking people out."

In the end, NGOs with a presence on the ground in Holyoke were alerted and anticipating the arrival of large numbers of people affected by the storm in Puerto Rico and sought to prepare for that contingency within their issue areas. However, the volume of people arriving in the short span of time overwhelmed the capacity of local NGOs to respond to the needs presented by these displaced persons. NGO focus group participants provided the following needs people resorting to social service agencies or any other local organization for: "Food, food, food. That became a need right away. I mean you need food every day. So, it's not like you can wait two weeks." Another mentioned, "there was a need for medical help. There was a need for baby formula. There was a need for education. There was a need for a safe place to get their kids out of an overcrowded unit for a period of time during the day. Housing. They needed to get their kids in school." Another participant focused on the mental health needs of the displaced: "Depression. People were having mental breakdowns."

Addressing the Needs of the Displaced

The needs to which NGOs in Holyoke were responding were quantified by the Massachusetts Department of Children and Families, based on information collected at the local Family Resources Centers from families displaced by natural forces. The data show that local NGOs tended to almost one thousand families in Holyoke with approximately 2,150 persons, about a third of whom were minors (see Table 19). The biggest categories of assistance processed were related to food or nutrition (97%), clothing (77%), assorted numbers of bureaucratic issues (assistance with FEMA, elder care services, SSI, health insurance, etc.) (53%), housing issues (24%), and employment (16% of all persons, 26% of adults). The number of persons receiving assistance needs to be placed in context. The Center for Puerto Rican Studies has estimated that 5,400 people migrated from Puerto Rico to Massachusetts in 2017, but with a surge of about 15,200 people (2,550 of whom were school-age children) in the six months after Hurricane Maria.¹⁸

Therefore, the Holyoke community was tending to approximately one-in-seven people in Massachusetts (14%) displaced from Puerto Rico by Hurricane Maria. This proportion is nearly three times the

TABLE 19

Families Displaced by Natural Forces	Totals
Total Families from Intake	982
Total Family Members from Intake	2,295
Unduplicated Number of Family Members Who Received Services	2,153
Total Children Served (0-17)	750
Total Adults Served (18+)	1,372
Total Age Unknown	31
Total Services Provided	7,186
Food/Nutrition (Pantry, Meals, WIC, Food Stamps, etc.)	2,244
Clothing	1,770
Other (e.g., Assistance with FEMA, Elder Care Services, Health Insurance, WIC, SSI, Continuing Education)	1,209
Rental Assistance	361
Employment/Job search (Job Application)	358
Health Care (Screenings, insurance, immunizations, etc.)	273
Housing / Shelter Assistance (Housing Applications)	181
Furniture	156
Mental Health Services	137
Income/Transitional Assistance	135
SSI / SSDI	108
School Support / School Liaison	59
Educational/Recreational Activities	34
Adult Education	32
Transportation	20
Legal Assistance	18
Diapers	16
Financial Literacy	15
Translation Services	11
Fuel Assistance / Utilities	6
Baby Formula	5
Baby Items	5
Car Seats	4
Child Care	4
Undefined	4
Computer Literacy Education	3
Behavior Management	2
Child Development Information	2
Early Intervention/Development Screening	2
Household Management	2
Immigration	2
Services for Children with Special Needs	2
Be Proud! Be Protective	1
Citizenship Information	1
Cooking Events / Potluck	1
Family Outings	1
Family Planning, Pregnancy, and Breastfeeding Support	1
Involvement with Child Protective Services	1

Source: Department of Children and Families

proportions of Massachusetts' Puerto Rican population (5%).

Managing the Overwhelming Demand: One-Stop Shop

The demand on local resources to meet the needs posed by displaced persons exceeded any established capacity. The creation of a one-stop service center alleviated and contributed to manage the strain on NGOs and relevant government agencies. Perhaps the one single action that appeared to galvanize the active and coordinated response from these NGOs was the call to action from the head of the social service agency in Holyoke that ultimately became the central hub of assistance coordination and delivery in the area. As a focus group NGO participant described, “so we got a call from LLLL, and she said, ‘I’ve got hundreds of people coming in my door every day. I need help.’ And so, you know, through further conversations with her, we figured out...we had to be a little bit creative on how we could get [in-kind resources] to her because she is not a member agency. So technically we’re not allowed to give her [in-kind resources]. But we were able to partner with another agency and get [in-kind resources] into her place and keep doing that... week after week after week until she eventually said, ‘I think we are good. I don’t think we need it anymore.’”

The creation of a centralized assistance coordination and delivery hub at the local Family Resource Center—consistently recognized by virtually all interlocutors as the most effective strategy to address the demand for assistance from persons displaced by the hurricane—therefore evolved as a response to the inability of anyone entity to address the multitude of needs those displaced persons presented the non-governmental as well as government sectors.

The centralization of information gathering, information dissemination, service delivery coordination and case management was described by an NGO focus group participant as “we sent staff to [her] event, which she did every day, like an orientation kind of for new people who came in. And so

a lot of organizations went into that big room that they had there and just provided services right then and there.”

A focus group participant provided the following description of the arrangement created in Holyoke: “[her] thing was a model. No one else in Massachusetts was doing it. I was on statewide calls and I heard that there were people from [a municipality in western Massachusetts] coming here [to Holyoke] because [that other municipality] was disorganized... A little bit splintered on who thought they should run lead on it.” Another participant contributed to contrasting the response in Holyoke with that of nearby municipalities adding, “The mayor [...] didn’t help that situation. No. It became political and a mess. And people were divided. They didn’t know where to go to get what different service. [...] So, if you got to go to two places in [that other municipality in Hampden County] or one shop in Holyoke, everybody was coming to Holyoke.” Yet another participant added, “word got out at the state level that Holyoke had its act together and most other cities didn’t.”

Having Your Act Together!

In response to the question on how Holyoke had its act together, a participant mentioned, “Because LLLL brought everybody together every day. And there as a network of people who in an emergency find the time to do it. [...] and Holyoke had its act together because you all had contact at some level with [LLLL’s social service agency].” Therefore, prior contact and a standing working relationships facilitated the ability for one organization to request assistance from other NGOs and for other organizations to answer the call for help. An example provided was the relationship forged immediately prior among Hispanic NGOs in Holyoke in response to Hurricane Irma [“And the relationship between them was very close from Irma already.”]

The ethnic composition of Holyoke and the political and civic representation that the city’s ethnic diversity exhibits were mentioned as contextual, institutional and attitudinal factors that contributed to the more cohesive response from the civic and political sectors in Holyoke relative to the response in other municipalities in its environs. One non-Hispanic focus group participant remarked, “This was a big partnership and I think the City itself was very helpful. [...] I can tell you it’s because Holyoke is much more culturally diverse than [another munic-

ipality in Hampden County] is in leadership positions. [...] the City [of Holyoke] understood how important [the situation] was.”

In response to the question of how the response could be institutionalized and replicated elsewhere, focus group participants indicated “I think one of the most important things that happened in Holyoke that did not happen in [another municipality in Hampden County] is that everybody agreed that this one organization was the hub... At this one address, at noon every day, like people knew. Service providers knew where to go. State government went; MassHealth. People who needed help. Everybody convened in this one place every day.”

One participant highlighted that the organization which became the one-stop hub for services to the evacuees in Holyoke was already in the type of service provision most displaced persons needed: “Because the infrastructure was already there. They did all the work already. They are a community center that people go already for services, so they’ve been doing that work. [...] She had the space. She had the state grant so it wasn’t a big stretch for the state government to come to her; which was the hardest thing to move, to have them do a remote site somewhere.”

On follow up to why designating one agency as hub had not happened elsewhere, participants highlighted the political aspect of such convergence: “In [a city in Hampden County], the mayor said everyone should go here [to one specific agency]. But [another social service agency] was starting to claim it [the designation as centralized service delivery hub], and then the mayor come out and said, ‘no, no. You should go here for these things. [...] and then it sort of stuck these two organizations against each other.”

The creation of centralized hubs of social service delivery, case management and information distribution was seen as a very positive development and won over the services providers trying to serve the needs of displaced persons: “I think this one stop shop was brilliant! I mean, the fact, however it happened, that everybody agreed on this one place, having everybody know to go to this one place and start to get help there, I think made the new arrival’s

lives easier. And it certainly made service providers’ lives easier.” Another NGO participant added, “and it made host families’ lives easier, too. Because they were driving them around trying to help them get settled.” These participants also believed that political support (or lack of interference) from the municipal government was key for any hub’s successful operation. For example, one participant noted: “I think that having the support from the City was a big plus.

Necessary, But Not Sufficient

The sudden and broad demands for services these NGOs experienced, while attenuated by the ability to centralize the provision of services in a one-stop hub, nevertheless overwhelmed the capacity of NGOs to provide services. As described by a representative from an NGO tending to housing needs “at one point, especially [...] January to February, March, I was getting 70 calls a day and that was like 70 voicemails. People were getting angry at me for not getting back to them.” His organization responded to the demand by opening “up another position for a case manager.” Another provider of safety net services described calling state government agencies in Boston for flexibility and/or waivers in the application of existing rules for recipient qualifications or service delivery, as well as increases in funding:

“you’ve got to live a certain window of time, I think it’s four months, in order to qualify as a resident [in order to receive a service]. We asked for that to be waived. We asked them to have immediate residency so that the family number could increase, which would increase their eligibility [...]. For WIC, we asked for some homeless-related stuff, additional formula. People were coming hungry. Babies were coming really hungry. And [...] your regular allotment of formula wasn’t going to cut it. So, we asked for more so we could give more than what we’re very much prescribed.”

These request from NGOs for additional resources or flexibility from government agencies were granted immediately, but others did not. Housing is a case in point. An NGO representative described how,

“at least from the housing perspective, the policies, they are just not there to be helpful. They are just strict; the current policies.”

Another provider of temporary housing assistance described further the limitations the strict adherence to standing policies affected the level of services they were able to deliver, if at all: “we tried to cater to the need of [evacuees], because of the hurricane. So, like for example, you are working with a COC grant, which is a continuum of care grant, and that was specifically for homeless individuals; that one did not apply for the Puerto Rican evacuees. And that’s because, even though they might have been homeless, they were not homeless from Massachusetts. [...] in order for them to be considered [homeless] ... HUD put a rule of what it means to be homeless. So, there’s four categories of what kind of assistance we can provide for them. [...] except, evacuees will try to get homeless shelter services and would get denied because they were receiving FEMA services.”

Federal Inattention

The federal response in Puerto Rico and the inattention to the displaced climate migrants who had relocated to Massachusetts were highly criticized by these NGO service providers. An NGO manager stated: “I would ask for a better federal response. Any sort of help going to the island might have helped people stay in their homes. I mean, if they got the power turned back on. If emergency supplies were allowed in. I mean, again, it couldn’t have been handled more badly on the island than it was [...]. And if that had been done better, at least some people probably would have been able to stay home.” Another focus group participant, echoing the statement mentioned by both displaced persons and their hosts separately, added “so FEMA made promises that it would not keep! [...] FEMA was sent there and made promises to people who got on a plane and came here expecting promises. [...] So, I’m working with these families and they’re all telling me, ‘they were going to help us with housing this and that,’ [but] where is the funding, you know what I mean? And you’re putting all of these restrictions.”

Looking to the future

Nearly two years after the storm, these NGO providers recognize that while needs exist still among the displaced, that conditions have stabilized. As one NGO representative described, housing “is still an issue. [...] Most are reasonably housing stable. And they are looking at either whether they’re going to go back to the island or whether they are going to make life here. And if they are gonna make a life here, they are talking about English classes. They are talking about those sorts of things; where they can get opportunities; where they can get jobs; where they can make a true life here.”

The overwhelming majority of displaced focus group participants do not plan to return or relocate to Puerto Rico. In fact, many stated their intention is to remain in the United States (and in Massachusetts). A displaced female focus group participant explained, “in all honesty, I came with my mind made up not to return.” This was a sentiment felt by virtually all such displaced focus group participants. Even though many indicated they would return to the island for visits, the overwhelming majority of respondents indicated they would not move back. The reasons were manifold; from distrust of political authorities and the government to provide good governance (“I don’t want to return; I don’t trust any political leader”), to the poor prospect for jobs and economic growth, to the comparatively greater options for assistance to their needs, whether for their children with special needs, medical care, education and safety net provisions. Another perspective from displaced persons is captured by the following statement: “I wanted to return. I would say, ‘I’ll stay over there [the U.S.] while they restore the electric power,’ because my husband doesn’t like it here. But, to this day we are here. It took them more than one year to restore the electric service in my neighborhood. And there are power outages often.”

Yet, evidence shows that a number of displaced persons have already returned to Puerto Rico. As Figure 1 shows, between October 2017 and December 2017, there were 171,000 more people who left Puerto Rico than arrived, but in January and February of 2018 there were 82,000 more people who arrived on the island than left it, suggesting that, after the holiday season, the resumption of electric service supply and the dead of winter in the U.S., many displaced persons who were in a position to return home did so. Enrollment data from the Holyoke school system suggest a similar movement.

Holyoke's public schools saw an influx of 254 students in the 2017-2018 school year and another 101 students in the 2018-2019 school year in a system with about 5,300. Overall this represents an increase in enrollment of 6.5 percent.

However, of the 355 students that enrolled in those two academic years, 246 (69%) remained enrolled, with 78 students (22%) transferring out of state. These data suggest that conditions are in flux; however, there are more persons arriving in Holyoke from Puerto Rico than departing for the island.

Moreover, the vast majority of focus group participants (displaced persons and their hosts alike) indicated they expected more relatives and friends to arrive in from Puerto Rico, with many indicating some of their kin already had firm plans to leave the island. These prospects were also reflected in the survey. Virtually all hosts who responded to the survey (98%) indicated that they had relatives and friends living in Puerto Rico; 45 percent of those hosts indicated that it was somewhat (15%) or very likely (30%) that those kin would leave Puerto Rico for Massachusetts, and just as likely (83%) that they will stay with these host survey respondents. Furthermore, the expectation among these hosts for the length of time those prospective emigrants to remain in the United States was either indeterminate (40%) or for more than one year (40%). As with the impact opening their homes to people displaced from Puerto Rico by Hurricane Maria, these hosts expected the forthcoming arrival of more kin to impact their material conditions, with 40 percent indicating they anticipated not having enough income for their family's needs and another third concerned about housing needs. [Refer to the sidebar for conditions favoring continued out-migration from Puerto Rico.] Curiously, when hosts were asked about their future plans, a few indicated their wish to relocate to Puerto Rico (or Florida).

Among the displaced, aspirations for their settlement in the United States entails securing a home, and the mechanisms to do so (language acquisition or proficiency, education, employment): "I want my own house and a good job," stated a displaced male. "I am already studying language [English] because I want to pass the nursing exam here, in this place," mentioned a displaced female.

Hurricane Maria and Displacement: Not A Singular Event

The magnitude of the destruction of Hurricane Maria and the fact that it caused its greatest destruction in Puerto Rico (and other Eastern Caribbean islands), and that such destruction prompted the evacuation of upwards of 175,000 people, may leave the impression that the effects of Hurricane Maria were unique and singular to Puerto Rico, a sui generis case. But this conclusion, for various reasons, is misleading and, consequently, dangerous. The recent devastating strike of an even more powerful Hurricane Dorian in the Bahamas did not have the same impact in the imagination of the general population and stakeholders in New England and the mid-Atlantic region, even though the devastation was pervasive in Grand Bahama and Abaco islands.

More importantly, unlike Bahamians (or Haitians residents) who do not acquire U.S. citizenship at birth, Puerto Ricans and residents of most of the other U.S. territories can travel or relocate to states such as Massachusetts without immigration and naturalization restrictions or limitations. This, of course, is not to say that in the event of a natural disaster, citizens of other countries (e.g., Dominican Republic, Cape Verde, etc.) would not seek to relocate to the Commonwealth of Massachusetts. But given the increasingly restrictive U.S. immigration and refugee policies, their ability to move from a foreign country into the Commonwealth, to live with a family member or friend, may be more challenging. To this extent, the point we want to emphasize is that the political status of U.S. territories and their inhabitants makes it as easy for Puerto Ricans (and U.S. Virgin Islanders) to relocate to the Commonwealth of Massachusetts or any other states following climate-driven disaster as any other U.S. citizen, regardless of the prevailing legal obstacles imposed by increasingly restrictive immigration and naturalization laws or regulations.

While natural disasters may not be frequent, they are not uncommon. In fact, between 1851 and 2018, the United States was struck by nearly 300 hurricanes, with 91 classified as category 3 and above in the Saffir/Simpson scale, with Florida and Texas representing nearly 90 percent of the struck land areas.¹⁹ And large catastrophes resulting from climate driven events do happen and appear to be intensifying.

According to the Data Center, Hurricane Katrina displaced 1 million people in the Gulf Coast region, with 600,000 households still displaced a month after the storm.²⁰ About 150,000 of these displaced persons were still living in Houston a year after the hurricane hit Louisiana. Climate migration scenarios are not limited to just hurricanes. According to the Insurance Information Institute, more than 24,000 homes were lost in the northern California fires in 2018,²¹ with the corresponding displacement of tens of thousands of people, in addition to the deaths associated with the conflagrations. Therefore, large displacements of people may take place as a result of natural (or man-made) disasters anywhere in the country, impacting regions near and far from the epicenter of the disaster.

Federal Neglect

The Federal government's response to the post-Maria displacement of Puerto Ricans created a number of significant problems for the City of Holyoke's ability to respond to the migration of the island's residents. For example, unlike the Federal response to the disasters created

by Hurricane's Katrina and Sandy, the Trump administration refused to activate interagency agreements between federal agencies such as FEMA and the Department of Housing and Urban Development (HUD). The failure to do so limited the amount of short-, mid- and long-term resources available to Puerto Ricans arriving to Massachusetts.

In addition, FEMA, who managed the Temporary Shelter Assistance (TSA) program, did not provide consistent or, at times, coherent information about the needs of individuals who were using their services. This created a wide array of on-the-ground challenges. Again, it is unrealistic for the Federal government to expect that states and local governments assume the key responsibility for the incorporation of displaced climate migrants without access to the necessary financial and institutional resources. States need to do a better job at demanding a better response from federal agencies like FEMA.

PART III. NATURE OF THE CHALLENGE ADDRESSED BY THE STUDY (WITH THE COLLABORATION OF NÉSTOR M. RÍOS)

The organizational analysis of the City of Holyoke's response to the displacement/migration of Puerto Rican residents identified several key strengths, weaknesses, opportunities and threats. These included the following:

- The creation of a “one-stop-shopping” site or hub where individuals could seek a variety of resources was central to addressing the needs of the majority of displaced Puerto Ricans in the City of Holyoke and the surrounding towns. In the City of Holyoke, the non-profit and civic sectors were the most effective first response institutions;
- The lack of shared federal, state and local information and data became the most important organizational challenge for the City of Holyoke;
- The collective collaboration of agencies, the non-profit sector and civic organizations created new opportunities to respond to local crisis;
- A major threat to future climate change migrations to Holyoke is that staff and public officials lack of experience and training on how to respond to these types of crisis.

The study team faced the challenge of examining the Holyoke's response to the post-hurricane Maria arrival of Puerto Ricans and extracting lessons from the event response that would better prepare the City of Holyoke for future climate crisis events. The City requested an analysis of the organizational capacity to learn from this event and to respond to future migrations driven by climate-change affecting the City. The authors worked with Néstor Ríos to conduct an organizational analysis of the City of Holyoke's relevant response, which drew on his expertise on this subject and relied on in-depth interviews with key City officials and community leaders who were part of the interventions on behalf of displaced Puerto Ricans. This section includes some the relevant key findings of this analysis. The organizational analysis as such appears as a separate addendum to this report.

Key Strengths Identified in Holyoke Hurricane Maria Response

City and non-profit organizations staff were an early harbinger of the impending migration crisis long before the US national media was alerted to the story. Respondents related how the concern and attachment of the Holyoke community to Puerto Rico mobilized action early on with such stories as these:

"It was weighing on me and I would, you know, share the human experience with him [my supervisor] and with the city, a city composed of half Latinos, mostly of Puerto Rican origin. You know, he couldn't look in any direction without seeing Puerto Ricans grieving the fact that they couldn't get a hold of their family."

"Most of my staff [of several hundred] I see are Puerto Rican."

"So, Holyoke had a unique position, the highest percentage of Puerto Ricans of any city outside of Puerto Rico. So, we don't have a lot of other minority groups. It's either Anglo or Latino/Puerto Rican. Little by little, we think other, Central American country populations, you know, migrate in but mostly it's Puerto Rican."

"Florida just declared a state of emergency because a million Puerto Ricans live in Florida. But even though it's only about nineteen thousand here. ...it's like people are going [to] come here because people are going to go where they have family. So, we

immediately called a meeting with stakeholders."

The early identification and assignment of Enlace de Familias to manage the coordinating role for the City of Holyoke's Maria evacuee initiative was met with unanimous agreement and applauded by organizational survey respondents. All respondents had long, strong ties to Enlace. Even organizations with many more staff and financial resources agreed that Enlace was the right choice. One such respondent stated, "We all determined Enlace would be a better place to organize the potential intake process. I think that was a good decision. I think it would have been a different process if it was at [our facility]. We had a lot more resources than Enlace. Enlace did an incredible job though with the little that they had, and we all brought resources to Enlace to help them out".

Betty Medina Lichenstein, Enlace's executive director, was the one individual consistently identified by all survey respondents for her strengths and persistent collaborative efforts in Holyoke's Maria response. One respondent stated "Well, I'll say this, I think too much fell on Betty. And I think what's really remarkable about this is that Betty, like, I sort of shudder to think about what would have happened if she wasn't there or she was ill or had left or what have you." When addressing the prospects of a future Holyoke centered climate event another respondent said, "Our Betty is retiring later this year, though, so I don't know what I would do if it was like next year, right. So that's part of the challenge that some of this was based on personality, and Betty is an institution in and of herself because she's been a pillar of the whole [community] for so long." When addressing external obstacles and challenges another respondent stated, "But I think it all relates to I think at some point my guess, my understanding, is that Betty was talking to people on the phone and making stuff happen."

Another noteworthy strength among the key Holyoke Hurricane Maria Response organization survey responders was the considerable longevity in their leadership and service to the City of Holyoke. Four of the seven responders had from five to 10 years in their current positions and three had between 20-25 years of experience with their organizations. This deep well of knowledge and organizational leadership capacity can be tapped in future climate change planning, response and recovery efforts.

Holyoke benefitted from the tremendous outpouring of empathy and resources that the tragic events surrounding first Hurricane Irma and then Maria set forth. The generosity of the Puerto Rican community, earlier described as in need itself, and the hard work of the community that went into organizing the impressive relief efforts to the island, even before government became involved, were described by a survey respondent. "[Individual]... was immediately engaging with how to provide some relief opportunities. You know what we do? I said tell me what you want me to do and I'll do it. Within a couple of days, we had a private jet arranged to fly down to Puerto Rico and fly and bring some [evacuees] back. So, you know, the networking on the ground took place immediately. It wasn't through the government. It was just through people doing what they could do, connecting to what they could get connected to. Just trying to engage. Just to do something."

Interactions with non-governmental agencies were seen as useful or very useful by survey respondents. When asked about their usefulness one respondent put it this way: "Very, very useful. And, they were really useful because they responded, because they made it their priority, because they saw the importance of it, because they also exercised leadership." And, the initiative of those non-governmental agencies and their providing feedback was described as a factor in their perceived usefulness, "They wouldn't just sit in a corner and wait. Certainly, the city exercised the initial leadership and continued to do so, but they all understood where there were [the] other value add was and maintained communication on their progress or on their execution." Another put it this way, "Like they're not very egocentric, you know, like the fact that they're like, 'Yeah, yeah, Betty what do you need we'll give it to you?' like that's amazing you know."

Despite rigid federal regulations respondents pushed for and maintained flexibility in the face of the greater needs of the displaced. One respondent captured that sentiment and organizational practice in saying, "You know we're here to serve the [clients] and we're gonna have to make adjustments and be flexible and nimble, which are just good practices in general to be as an organization. It forced us to become more adaptable as a... system; overcoming obstacles as they were presented and not allowing them to stop services to clients."

Weaknesses

A general frustration with the lack of data about the Hurricane Maria response itself was expressed by one respondent in this manner, “There wasn't a lot of data sharing in any formalized way. I mean, there was, you know, Betty was providing data, and number of famil[ies] seen, some basic information. But it wasn't a really formalized process of sharing information among agencies.”

The lack of affordable housing options for evacuees frustrated efforts to stabilize Maria migrants and provide other needed supports. One respondent captured the crux of the problem stating, “Housing was a big need that we weren't able to provide.” The respondent went on saying, “The Massachusetts market is already constrained in terms of housing. That's why the number one priority in terms of economic and commuter development for the governor is...his housing bill so that we could have more housing development. The waiting lists for new affordable housing are long.” The frustration with the dearth of inhabitable housing in the city and proposing viable alternatives was evident in the idea to bring an unused facility online, “I actually was trying to free up Holyoke as the City owns a large facility. It used to be a geriatric authority so people would live there, sort of like a large nursing home.... And I said let's open you know, the geriatric authority and make it into housing, temporary housing. It never happened. It's frustrating because we all knew what was happening on the island at that point.”

The lack of access to computers, and on-line services for communications, became a barrier to service provision. One respondent described it this way, “...we thought it was a little stupid that FEMA was asking that all the folks that were displaced respond by computer to get their FEMA. And I'm thinking, we were like, well, you just got displaced.” They continued, “So we set up a computer workstation here and then we trained our folks on how to navigate the FEMA system.”

In addition to frustration with FEMA's intake process requiring computer access, the lack of a uniform intake process to be shared among the various agencies responding to assist in Holyoke's evacuee crisis itself frustrated coordination of services. One respondent put the general frustration with the intake process best in stating, “OK, somebody showed up at Enlace de Familias, because...they were serv-

ing as the repository, but we were still seeing people prior to them going to Enlace, so we were taking some intakes going on here just directly with our staff. And then we were trying to reference them back down to there. But I don't know whether or not that all happened, I'm not sure.” Yet another pointed out that, “[t]he pressure came when the [FEMA] supervisor informed me, the five individuals [FEMA subcontractors] would assist us in seeing evacuees. They bought in their own laptops and their own fax machine since they couldn't use any of our equipment.” FEMA's lack of integration continues to hurt those still in need of support. “At the end, FEMA subcontractors left ...in July 2018 with all the client information and we could not get access to it. As families and individuals return to this office, it's almost like starting over. They claim they gave the paperwork to a FEMA subcontractor or the FEMA subcontractor assisted them on filing a FEMA appeal but there is no paperwork in their file to show such [an] appeal was ever filed.”

Lack of local financial resources to direct to evacuee needs, during and after the Hurricane Maria evacuee effort, stood out as a frustration for respondents. One stated that, “So I think if, you know, if we [were] to say that we were looking at financial resources, that was never discussed. That was never ... discussed at all, so, not in the Council and not necessarily in the halls of City Hall...”. Neither has continued financial support for those evacuees still in need been made available. “Hurricane Maria has become something of the past with no additional services for these families. Many have been ... requesting ongoing housing support since the initial supports have now ended. Its heartbreaking to see families once again go homeless due to the lack of financial support that I believe they are owed.”

FEMA subcontracting staff and lack of integration with local activities on the ground in Holyoke were also seen as a barrier to effective service delivery, “When FEMA sent five of their subcontractor staff ...I was not given the opportunity to interview them to understand what their backgrounds were, what kind of experience they had with disasters, especially with Puerto Rican people. Were they trained in trauma informed practices, etc? Five individuals show up at Enlace [with] their supervisor who wouldn't share information about who the staff was and how were we going to work in relationship to them.” The interviewee later continues, “The five were constantly switching off with other of their colleagues every time they got sick or were going on

break to their homes in Texas. FEMA has a policy of a certain amount of hours on and then hours off. So, it would be about a week break. We would get another person who had not integrated with us in order to cover.”

The lack of reciprocity between Massachusetts and Puerto Rico on drivers and occupational licenses for nurses, teachers and other skilled workers was also a significant barrier to both job search and acquisition, and continues to be so. A respondent states it this way, “I imagine that there may be people who stayed for longer or maybe are still here where they're probably still... facing the challenge of how do I translate my certification as a beautician, electrician, school teacher, nurse, whatever it [may] be.”

Opportunities

The Puerto Rican community of Holyoke was consistently described as resilient but lacking in resources. Developing plans for enhancing housing, jobs and social services to this community will not only help stabilize the community but will improve the absorption capacity of any future climate migration.

Private business resources can be valuable supports in the planning for and mitigation of future climate related events. There was no discussion about the integration of the private business sector into emergency or climate related crisis management vis-à-vis populations served by nonprofit service organizations.

Several innovations for improved collaborations on health matters related to the Hurricane Maria climate impact events were attempted by Holyoke Health Center and deserve follow-up and the support of government agencies and legislators for their potential beneficial import in future climate crisis events. First was, what a local leader called the 20/20 Health Club, a program of mutual assistance and interchange of ideas that would link 20 community health centers serving large numbers of Puerto Rican clients in the US with 20 health centers in Puerto Rico. Second, was the establishment of memorandums of understanding and regulations supporting recognition, reciprocity, and limited liability for “Good Samaritan” health professionals that wished to assist during times of emergency, either in Puerto Rico or other parts of the US. Finally, would be the temporary extension of pharmacy distribution licenses for those that wished to donate or secure medicines on behalf of individuals

and health facilities in areas declared to be under an emergency. During Hurricane Maria the FDA under Secretary Price issued such a waiver, but the information was not well publicized and never filtered down to community health centers.

Threats

Most non-governmental organizational survey respondents had no staff with emergency management experience or policies in place. Those that did had policies that were specific to their area of work whether educational, medical or industrial, as is the case with fire or police emergency management as part of the City. There appears to be no formal or general requirements to incorporate participation from nonprofit service providers or the community at large in any activities or planning regarding responding to future climate events.

Another major climate event in Puerto Rico is not a matter of if but a matter of when. While hurricane season in New England runs August through September, the Caribbean’s hurricane season is much more extended, June 1 to Nov 30. And such storms have occurred later in the season in the northeast. Hurricane Sandy hit Massachusetts late in October of 2012 and left hundreds of thousands in Massachusetts without power and caused approximately \$68 Billion in damage nationwide.

Depression, stress, including PTSD, was prevalent among evacuees, organization staff and City residents, more must be done to address this issue in future climate crisis responses. One respondent put it this way, “the other thing I’d say is the stress level for the Puerto Rican community was incredibly high. Whether their family came or not, you can’t diminish the fact that people are really on edge about... wanting to know more information about their family health, safety and really the future of the island.” Another stated it in this manner, “... people were arriving with trauma like [the] mental trauma of loss. So that was very characteristic of it. And, all of us who were [of] Puerto Rican origin and still had either grew up in Puerto Rico or had family from Puerto Rico, we were dealing with our own like stressors around this.”

The current economic, political climate and the still tenuous state of Puerto Rico’s physical infrastructure will likely make the island extremely sensitive to continued climate migrations should a significant tropical storm or hurricane hit the island be-

fore it can fully recover from Hurricane Maria. The government of Puerto Rico estimated to Congress, in August of 2018, that full recovery for the island would take \$139 billion, 15 times its annual general operating budget.²²

The continued low economic profile of Holyoke's Puerto Rican community will continue to limit their long-term capacity to assist relatives who are evacuees and can significantly jeopardize progress underway in the community in the likely event of another climate migration.

PART IV. CITY GOVERNANCE IN THE UNITED STATES

Municipal, city or local governments generally do not possess the necessary resources to conduct all of its responsibilities. In the United States, governments are generally limited and characterized by dispersed authority, particularly municipal governments. Municipalities are constrained institutionally and structurally. They may have received some autonomy in the form of home rule to organize themselves politically and run their own affairs, but they are ultimately subordinate to the governments of the states they are organized in. Municipalities may have home rule, but they lack sovereignty. As a result of institutional controls and bounds that take form in the process of municipal incorporation and the charters they are ruled by, municipalities need to fund local government activities but generally cannot run budget deficits. For some initiatives such as those dealing with physical infrastructure or development projects, particularly those that deal with revenue-raising through the issue of debt in the form of government bonds, municipalities are also subject to the approval of municipal voters. Moreover, public officials are subject to periodic elections, they must therefore conform to the voters' overall policy preferences.

- The City of Holyoke lacked a regime to respond to the crisis created by the hi influx of Puerto Rican migrants arriving to Holyoke in the aftermath of Hurricane Maria. Instead, the civic sector largely organized an effective scheme of cooperation to respond to the needs of the city's new inhabitants;
- The success of Holyoke's response to the needs of displaced/Puerto Rican migrants was in large measure a result of solidarity and effective issue-based collaboration among an array of civic organizations and public agencies.

Municipal, city or local governments generally do not possess the necessary resources to conduct all of their responsibilities. In the United States, governments are generally limited and characterized by dispersed authority, particularly municipal governments. Municipalities are constrained institutionally and structurally. They may have received some autonomy in the form of home rule to organize themselves politically and run their own affairs, but they are ultimately subordinate to the governments of the states they are organized in. Municipalities may have home rule, but they lack sovereignty. As a result of institutional controls and bounds that take form in the process of municipal incorporation and the charters they are ruled by, municipalities need to fund local government activities but generally cannot run budget deficits. For some initiatives such as those dealing with physical infrastructure or development projects, particularly those that deal with revenue-raising through the issue of debt in the form of government bonds, municipalities are also subject to the approval of municipal voters. Moreover, public officials are subject to periodic

elections, they must therefore conform to the voters' overall policy preferences.

In addition, municipalities in the United States, by virtue of their place within a federalist system, are subject to not only state, but also the federal governments as well. They are therefore subject to statutes and mandates from above, and are limited in the taxes they may want to assess and in the expenditures they may want to undertake. Structurally, municipalities exist in a physical and political environment in which there are a multitude of other municipalities, with which they are actually or potentially in competition. Moreover, municipalities have little control or influence over broader economic or monetary policy: they cannot print money or set interest rates. They are more exposed to the vagaries of market forces both regionally, nationally and/or globally.

More generally, municipal government may have many resources in relation to other forms of organization in society, but also generally, municipal governments lack enough resources to discharge all

of the responsibilities they have assumed on behalf of their residents. Due to the scarcity of resources in cities throughout the United States, public officials cannot simply execute decisions on their own. Because these municipal public officials cannot execute decisions in regard to municipal policy on their own, they cannot make decisions on those policies on their own either. In the words of a leading urban politics scholar “(s)tanding alone, government is by itself an inadequate problem solver.”²³ They are dependent on state and federal resources to address a myriad of challenges, including those driven by climate change.

Due to these limitations, elected leadership of municipalities in the United States may need to create informal arrangements or coalitions with groups from outside the governmental institutions and apparatus in order to facilitate effective governance. An example of such extragovernmental arrangements are regimes, which have been defined as “...*the informal arrangements by which public bodies and private interest function together in order to be able to make and carry out governing decisions.*”²⁴ Regimes facilitate effective governance in municipalities that institute them by facilitating cooperation and coordination. Regimes may also contribute to effective governance by defining a coherent and focused agenda for action at the municipal level over the long-term. Regimes also facilitate the resolution of conflicts that may arise within the governing coalition through compromise. Given that one of the hindrances that municipal governments face is the lack of sufficient resources to undertake municipal action, regimes facilitate effective municipal governance by providing resources needed. Key to any successful regime is a *scheme of cooperation*; that is, long-standing patterns of communication that allows members of the governing coalition to understand each other, to calculate the resources each brings to the coalition, to learn how coalition partners may react to policy problems or challenges to the coalition. Members of the governing coalition must be able to establish relationships that enable them to work together; and interactions along a variety of issue-areas over a relatively long period of time nurture these interactions and cements relationships. Long-standing and regular communication among members of a given city allows them “to understand each other, to calculate the resources each commands, and to learn how their partners will react to policy problems.”²⁵ This study drew on regime theory to frame some key contours of our research questions. We also believe that regime theory provides key insights for understanding how

municipalities can respond to both local disasters or external climate-driven events.

Not all cities in the United States have formed regimes or governing coalitions of any stripe. In municipalities where no informal arrangement between public and private institutions to facilitate governance (i.e., regime) has been established and operated over a long period of time, the capacity of different segments of a city to come together and respond smoothly to unexpected events is diminished and the effectiveness of its response is reduced. Such cities may have developed issue-based coalitions or temporary networks of interested stakeholders; but these “temporary governing arrangements [...] prevent stakeholders from either reaching shared understandings of policy problems and solutions, or recognizing and forming a larger, more systemic community agenda.”²⁶

It is beyond the scope of this study to determine whether the City of Holyoke has or has not formed a regime. However, this framework may be useful in understanding how the city responded (and the limits of its response) to the demand for community resources created by the sudden and large influx of people displaced from Puerto Rico by a catastrophic natural disaster. But it is evident from the evidence gathered in this study that there have in fact been temporary networks of stakeholders or issue networks. Whether they rise to the level of long-standing patterns of communication to reach a shared understanding of city problems and appropriate solutions is to be determined.

By and large, the role of the Holyoke municipal government in addressing the demand of services brought about by the influx of displaced residents of Puerto Rico was characterized by the expressive and declaratory support it lent to the relief effort taking place in Holyoke. The mayor was acknowledged as being aware and sympathetic to the nature and extent to the unfolding scramble to assist persons who were arriving at the city’s doorstep. The mayor did call for meetings with the City’s civic sector, including social service agencies, civic groups and other non-for-profits, as well as local elected officials, in an effort to take stock of the situation. In fact, the City of Holyoke organized a group titled PRiMERO with key government officials, members of public agencies and civic leaders, in an effort to exchange information and leverage resources. The sympathetic disposition of the City’s government in Holyoke certainly contrasts with the alternatively obtrusive or inattentive manner with

which neighboring municipalities reacted to the situation of the arriving evacuees, as described by participants in the displaced, host and NGO focus groups.

However, the actual involvement of the Holyoke city government appeared marginal to those engaged in the provision of services to displaced persons. This lack of visibility underscores the limitation of municipalities in the face of overwhelming challenges with limited material resources. What the leadership of city government in Holyoke emphasized they were able to do was to convene service providers and state governmental agencies and call for collaboration, provide the imprimatur of a government-sanctioned effort, and assist in a limited capacity with housing resources. As meaningful as this initiative may have been as events were unfolding, for those displaced by the storm arriving in Holyoke, direct assistance came from state agencies and the non-governmental organizations. In the words of a non-governmental organization representative, “cities didn’t get involved. It was a state initiative.” From the municipal government’s perspective, their initiative in calling attention to the alarming rate with which these climate migrants were arriving and convening the initial meeting of stakeholders and government and elected representatives at all levels served to alert state authorities to the gravity of the situation. As an evolving state initiative, both the Executive Office of Health and Human Services (EOHHS) and the Massachusetts Emergency Management Agency (MEMA) then took the initiative of calling for meetings in the latter’s headquarters, in which those assembled tried to determine which entities would be best suited to respond to the needs of displaced persons. On the basis of these discussions it was decided that Family Resource Centers would be a better fit.²⁷ Family Resource Centers would be the hubs for information sharing and the sites for emergency centers. Every Friday morning there would be a conference call among the resource centers, most of the constituent departments under EOHHS (children and families, transitional assistance, public health, mental health, elder affairs, MassHealth, veterans’ services), MEMA, the department of elementary and secondary education, the Executive Office of Administration and Finance, and the registry of motor vehicles. FEMA would occasionally join these calls. These conference calls became opportunities to share information among the participants about conditions on the ground and for resource centers to request resources to provide assistance. No in-

dividual level cases were the subject of discussion, but rather aggregate patterns, in order to discern trends. Overtime, however, the conference calls became more limited and communication between interlocutors began to take place bilaterally or “off-line”. The reason for the reduction in the number of conference calls and the scope of the agenda is not apparent.

The state also created a form (Form A: Family Intake Form-October 17, 2017) to be used at the Family Resource Centers in order to collect information about the needs presented by displaced persons and the services they were referred to. However, this information was for internal consumption only, as a result of negotiations with FEMA, which restricted severely the flow of information. The apparent lack of a memorandum of understanding between the Commonwealth of Massachusetts and FEMA as to, among other things, the flow of information in centralized hubs hindered to some extent the assistance provided at those hubs. Service providers remarked about FEMA, “the most difficult time came when they were seeing clients but wouldn’t add their notes to our files. They kept the notes of the interaction with the family in their laptops. [...] As families and individual return[ed] to this office, it’s almost like starting over. They claim[ed] they gave the paperwork to a FEMA subcontractor or the FEMA subcontractor assisted them on filing a FEMA appeal, but there is no paperwork in their file to show such appeal was ever filed.” Since a linchpin of the efficiency that resulted from the creation of the one-stop hub was the flow of information and coordination of services, this evident obstacle stymied the efficacy and effectiveness of the arrangement. Therefore, as part of the conversations and negotiations between FEMA and pertinent state authorities, it is recommended that “having a clear agreement of what is yours and what is ours and how do we interact and share” be specified clearly as it is critical for efficient coordination of relief and recovery functions.

Issue-Based Coalitions

While state agencies and non-for-profit organizations were largely responsible for the provision of services, the Holyoke city government did take some initial steps to anticipate the arrival of persons displaced from Puerto Rico and prepare for it. As noted above, PRiMERO (the Puerto Rico Maria Evacuation and Relocation Orientation coalition) was one such initial effort. This self-styled response

coalition was constituted within two weeks of Hurricane Maria sweeping through Puerto Rico, and it included representatives of the municipal government of Holyoke, both executive and legislative, representatives of other municipal entities providing services in Holyoke (e.g., public school system, the housing authority), representatives of state legislators and the governor's office, federal representatives and federal agencies (e.g., Social Security, Veteran's Administration), state agencies (e.g. DCF, DTA, DHCD), and a variety of social service agencies serving the Holyoke area. Their initial efforts, led by the City government's executive branch, were to assess conditions and prepare for the arrival of displaced persons they were already witnessing. For instance, relying on the experience from responding to a tornado a few years earlier, the regional United Way sought to funnel resources (i.e., financial and logistical support) to local social service agencies already providing services to displaced persons. They created a survey to assess the existing organizational capacity and level of readiness in Holyoke to respond to the arrival of displaced persons. They also created a flyer in order to direct displaced persons in need of help to 211 or Enlace de Familias in Holyoke (and New North Citizens' Council in Springfield). Another flyer alerted readers that monetary donations would be accepted for the Western MA Puerto Rico Relief Fund, but that in-kind donations would no longer be accepted. The PRiMERO Coalition also raised a number of policy issues of concern in the areas of residency, income, education, healthcare, and personal identification. Coalitions members were concerned that state/local as well as federal restrictions on housing would affect eligibility and called for the relaxation of income requirements, the relaxation of identification requirements; and anticipated the need for housing aid once those displaced persons left the homes of relatives and friends hosting them. There were also concerns about managing the transfer of SNAP and unemployment benefits from Puerto Rico to Massachusetts, as well as issues of transferring or engaging in reciprocity for specific trades, professions or employment tracts. Around education, the coalition was concerned about needed resources for primary, middle and high school to serve the influx of English Language Learners. Funding for long-term healthcare was another important concern raised by the coalition, along with the ability for quick transfer to Massachusetts Medicaid with as few required documents as possible. In regard to documentation and identification, there were concerns about the transfer of drivers' licenses and obtaining birth certificates.

Despite this initiative and the broad understanding among coalition members and municipal government officials of the nature of the demands placed by evacuees on local services and resources, the capacity to respond at the municipal level was severely circumscribed given the base level of resources the Holyoke government had and would be able to muster and divert, and given the nature of the provision of services displaced persons and families needed, which tended to fall under the purview of the state or federal governments. Whether the municipal government(s) worked as advocate for their local communities before the state and federal government is unclear. Local capacity is hindered by limited institutional capacity. For instance, in Holyoke, whatever municipal response there was emanated from the executive branch, given the part-time nature of municipal legislators or their minimal financial or institutional resources. Some councilors may have responded and indeed responded to the influx of displaced persons, though not necessarily in their capacity as part-time municipal legislators but in their other professional or civic capacities as community leaders, etc. [For councilors, at times, these distinctions may be blurred, however.]

Yet PRiMERO is prima facie evidence that Holyoke does have "issue-based coalitions or temporary networks of interested stakeholders." The resonance of an invitation from the mayor to participate in a meeting to prepare for the arrival of displaced persons, which resulted in the attendance of more than 80 persons from more than 40 entities, showed not simply a level of interest in the subject matter, but a willingness to participate. In fact, many of the persons and organizations present at the PRiMERO meetings were also involved in the one-stop hub emergency center or the network of support for the hub. Many of these same participants responded also to invitations to community meetings in which the present Holyoke Hurricane Maria Response study was laid out.

Scheme of Cooperation

There appears to be a *scheme of cooperation* in Holyoke; again, long-standing patterns of communication that allows members of the governing coalition to understand each other, to calculate the resources each brings to the coalition, to learn how coalition partners may react to policy problems or challenges to the coalition. This is evident from the statements made by representative of NGOs in focus

groups. One such NGO focus group participant described stated, “we collaborate as best we can. We know each other. We’re in the same meetings all the time.” Another NGO manager added, “yes, so, we collaborate a lot. All of our member agencies, for example, are independent organizations that we partner with. But outside of that network, we collaborate with a lot of other organizations to do outreach through them or to conduct distributions. One of the things that we’re really working on now is trying to find a way to solve [HHHH] as a long-term solution. [...] And, so, we’ve got a coalition of organizations that are working together on that.” In response to a question on opportunities to network and exchange information, another NGO representative described how “there is a gathering at the Holyoke Library, and that’s a way to network. A lot of agencies go, and it usually has a guest speaker. So that’s an opportunity.” Another representative added, the opportunities to network “it’s everywhere. It’s a political fundraiser. It’s a cases group. It’s, you know, a network to end homelessness. It’s the community college doing something. It’s everywhere.”

But there are limits to the schemes of cooperation that may exist in the City of Holyoke. These limitations revolve around the compartmentalization of their work (“living in our little silos”) and the limited availability of and competition for funding. Limited availability of funds limits the capacity to carry out the NGO’s mission and prevents them from expanding activities or reach. Competition for funding may engender resentment and mistrust. The potential for collaboration is often present but not always realized as a result of limited funding; networking opportunities “it’s more sharing events or exchanging information and potentially partnering.” But in order to make opportunities crystallize what is often needed is “probably money.” Or “desperation,” added another NGO focus group participant, who explained, “when the evacuation happened after the hurricane, I called people I hadn’t talked to in two years. And it was like we talked yesterday. I mean, no one is upset about it.” However, competition for scarce resource may result in resentment, “when someone comes in and steals a program you’ve had for 35 years, you get bitter.” Competition for funding also stems from funders unwillingness to fund fully and on a consistent basis program that address permanent needs and for funders’ tendency to be attractive to new “innovative” programing: “...unless we make it ne and shiny, nobody’s going to fund it. So, we’re always

sort of pulled in these different directions to come up with new things that aren’t necessarily the most important thing.”

Puerto Ricans in Civic and Political Life

Puerto Ricans appear represented in the issue networks that do exist, perhaps even well represented at the elite level in the non-governmental sector. However, they are not proportionately represented in representative positions of government. Rank and file Puerto Ricans are not fully incorporated in the formal and informal decision-making arenas there may be in Holyoke. Given that Puerto Ricans represented approximately 40 percent of the citizen, voting-eligible population in Holyoke, they might aspire to potentially 5 seats in the city council using proportionality as a standard whereas presently there are 3 Puerto Ricans in the council. Moreover, their level of active electoral involvement can also be low, as evidenced in previous voter turnout. On this count, while 62 percent of survey respondents who hosted displaced persons in their homes reported being registered to vote, only 23 percent reported having voted in the 2018 elections. Moreover, the level of participation in the non-governmental sector, measured by their level of associational involvement, tends to be somewhat limited: 38 percent of host survey respondents indicated they belong to associations or organizations affiliated with a community of faith; 25 percent belongs to a sports or recreational club; 25 percent mentions belonging to a service, charitable or civic association; 18 percent belong to a school group or neighborhood or community association; and 6 percent indicate they belong to a cultural or social club. Yet, 35 percent indicate they had attended the meeting of any group or association in the previous year. Moreover, their mobilizational capacity to advocate for issues that affect them is evident in how displaced persons themselves turned to demonstration and petitioning Washington and Boston for resources in response to organizing efforts by grass-roots organizations. A young displaced mother described, “we went to Washington to speak with legislators, to protest, so they would understand that many of us would be left out [on the street].” Yet, the same structural factors that limited Holyoke’s Puerto Rican community’s ability to respond to the sudden and large influx of displaced persons from the island, also accounts for the episodic nature of their political and civic involvement.

The large proportion of the city's Puerto Rican population and their election to political office has nevertheless provided them with the ability to influence political decisions in Holyoke. The disposition of the municipal government, reflected this growing influence. This is in contrast with how the commu-

nity, including the city council, reacted to the arrival of Somali refugees in 2009. At that time the city council passed a resolution requesting from the federal government they reverse their plans to resettle Somali refugees in Holyoke.⁴³

PART V: CONCLUSION

By way of conclusion, we would like to highlight some of the key findings and recommendations that we believe will be essential to the development of alternative responses by a town, city or municipality in the state of Massachusetts to a climate event migration. It is important to note, however, that our project focused on the experiences of Puerto Ricans arriving to a city with nearly half of the population that is of Puerto Rican origin. To this extent, while some of the findings are limited to the context of displaced Puerto Ricans who migrated to the City of Holyoke in the aftermath of hurricanes Irma and Maria, we believe that some of the findings and most of the recommendations will enable the state of Massachusetts, as well as local governments to better prepare and respond to displacements/migrations driven by climate change events on populations around the world with community links to Massachusetts. Below are some of the key findings and recommendations.

Findings

One of the goals of this project is to understand how the City of Holyoke responded to a climate change event in the displacement of Puerto Ricans and their arrival in the City of Holyoke. The purpose of this goal is to learn what worked in the response to that displacement in order to prepare for future responses that result in the displacement of people from climate change events.

People displaced by catastrophic events that overwhelm their means of self-reliance resort to their networks of support. This study confirms that the City of Holyoke is both a destination site for Puerto Ricans as well as a site where displaced Puerto Ricans residing in Western Massachusetts will seek help addressing their needs, these locations contain large numbers of Puerto Ricans (nearly half of Holyoke is of Puerto Rican origin or descent), who may become resources of support to displaced persons. However, the socioeconomic profile of Puerto Ricans in Holyoke (and Massachusetts more generally) indicates that their capacity to respond as individuals or collectively to the needs of displaced Puerto Ricans is

very limited. Nearly half of Puerto Ricans in Holyoke live at or below the poverty level. Their needs are very similar to those displaced by climate events.

Puerto Ricans will continue to leave the island, and Massachusetts, including Holyoke, will continue to be a leading destination, in both the short- as well as medium-term, as the relationship between Puerto Rico and the United States and the socio-economic conditions in Puerto Rico remain as they are.

Although Puerto Rican residents in the City of Holyoke learned of the impending storms approaching Puerto Rico before the residents of the island, both populations had accessible media resources and information documenting the impending landfall of the hurricanes. The population, however, had little awareness of the magnitude of destruction a storm of Hurricane Maria's caliber could unleash given previous experiences with powerful hurricanes.

The top three reasons for leaving Puerto Rico were: damaged or uninhabitable homes (25.6%); lack of steady income or employment (18.6%); and lack of food (18.6%). Because Puerto Rico's economy is not showing signs of improvement in the short-term, we expect a steady flow of residents from the island seeking better employment opportunities.

The majority of displaced Puerto Ricans arriving to the City of Holyoke relied on kin networks, that is, family and friends who provided support in addressing their needs. Given the socio-economic standing of Puerto Ricans residing in Holyoke, we again conclude that working-class and Puerto Ricans living in or near poverty assumed a disproportionate burden in support of displaced Puerto Ricans migrating to the city of Holyoke.

Overall, our analysis found that the Federal government's response to the disaster created by the displacement of Puerto Ricans was inadequate, and at times exacerbated or created new crisis.

The Puerto Rican local municipal governments were the first line of response to the disaster, but their ability to coordinate beyond their jurisdictions was fairly limited and mired by lack of capacity, lack of efficacy,

corruption, lack of preparation, and lack of resources. Communal solidarity was a key dimension of the positive responses to the disaster in Puerto Rico and in the City of Holyoke. A sense of solidarity among Puerto Ricans is a resource for future responses to a crisis. However, this source of capital may be of limited duration, and dependent on the existing stock of material resources.

Civic, religious and secular organizations provided substantive, albeit limited, support to Puerto Ricans in the island and in the United States.

A fundamental failure in the response to the crisis was the lack of adequate information and data sharing about the needs of displaced/migrant Puerto Ricans. The Federal government's refusal to share substantive information with the local entities about the Puerto Ricans that they were bringing to the City of Holyoke created obstacles for the response to the crisis.

Various levels of government encouraged Puerto Ricans to leave the island and travel to cities like Holyoke. Some Puerto Ricans were persuaded to leave the island and migrate to Holyoke under the belief that resources awaited them, or that the city could provide more opportunities (e.g., work, housing, health care, etc.) for Puerto Ricans to find relief and start a new life. Most Puerto Ricans made an individual decision to leave the island.

Displaced Puerto Ricans residing in the Holyoke and in Western Massachusetts view the City of Holyoke as a resource.

Affordable and accessible housing was the primary need of displaced Puerto Ricans arriving to the City of Holyoke.

Most respondents found the available sources of support, such as civic organizations, government agencies, churches, and other entities, helpful. However, most respondents were unable to distinguish the differences between federal, state, and city agencies as well as civic organizations. In many instances, respondents conflated all agencies and organizations as city agencies. Ultimately, however, the majority of respondents stated that the governments of Massachusetts and the City of Holyoke provided helpful support.

The majority of displaced Puerto Ricans saw social service agencies as a lifeline in the crisis, perhaps the most important lifeline.

The needs of displaced Puerto Ricans who settled in the City of Holyoke or in Western Massachusetts quickly became similar to those already residing in the area.

Access to affordable housing became the key to stabilizing displaced Puerto Ricans.

Displaced Puerto Ricans overwhelmingly indicated that Holyoke's Family Resource Center—*Enlace de Familias*—provided the most effective support to their address their needs. Central to the success of this approach was the creation of a central place or resource center that provided access to various federal, state and local agencies and resources for an extended period of time. This “one-stop-shopping” approach was effective and efficient.

In addition, the staff of the Holyoke Family Resource Center understood the cultural dimensions and nuances of displaced Puerto Ricans arriving in or seeking help in Holyoke.

Regular meetings (i.e., conference calls) among responding entities to share information, coordinate response and request resources were also seen as instrumental in facilitating the delivery of services under circumstances of great uncertainty and limited surplus of resources.

Central to the success of the response to the post-Maria migration of Puerto Ricans to the City of Holyoke was the solidarity, collaboration and synergy of civic leaders and leaders of agencies who were committed to offering a collective response. Extant patterns of cooperation, coordination and communication paved the way for a focused response once the arrival of displaced persons reached unmanageable proportions for any single entity. Insufficient resources before and during the response to the arrival of displaced persons hampered the effective response and assistance of entities recruited or volunteered to provide assistance.

Recommendations

1. Creating a “one-stop-shop” location, staffed with culturally competent individuals well-publicized and ongoing availability for a determined period of time, is a central feature of any successful response to address large migrations caused by a climate change displacement. This location should provide access to

the key federal, state, and local agencies as well as to local civic organizations that will enable migrants to incorporate or join the community;

2. Local city officials and civic leaders charged with responding to the influx of migrants should have clear and unconstrained access to information and relevant data about the needs of displaced or arriving migrants;
3. Federal and inter-agency agreements provide key resources to address the challenges posed by displaced migrants arriving to any community;
4. More attention needs to be paid to the ability and flexibility of social services agencies response to an influx of new residents and arrivals;
5. The creation of a fungible and shareable form and case management follow up services that may allow a coordinating governmental entity the ability to track case management across several service agencies and services rendered;

Acknowledgements

Many community leaders and individuals were instrumental in enabling this study. For many reasons we have decided to acknowledge the organizations and institutions that they labor in. We want to thank the following: the City of Holyoke and the Mayor's Office, City Council of the City of Holyoke, *Enlace de Familias*, MA Department of Children and Family Services, Behavioral Health Network, Inc., MassHire-Holyoke, Holyoke Housing Authority, Foodbank of Western Massachusetts, Wayfinders, Catholic Charities, Holyoke Public Schools, Holyoke Health Center, Holyoke Community College, Valley Opportunity Council, *Nueva Esperanza*, *El Sol Latino*, Hartford Public-Library, Old San Juan Bakery, Holyoke, MA. In addition, we would not have been able to conduct this project without the invaluable support of our colleagues, Kevin Fagundo-Ojeda, Madeleine Chill, Stavros Papadopoulos, Francesca D'Antonio, as well Néstor M. Ríos, Jennifer Hinojosa, Damayra Figueroa-Lazu, Kathya Severino Pietri, Jasmine Cordero, José Camacho, Elizabeth Pérez, Demian García and Stephanie Mercado-Irizarry.

ENDNOTES

¹Data source: U.S. Census Bureau, American Community Survey, 2015 (five-year estimates), Table DP-05: housing and demographic estimates.

²As indicated above, we report socioeconomic and sociodemographic data produced by the U.S. Census Bureau, American Community Survey, five-year estimates for the years 2012 and 2017. The City of Holyoke, however, relies on data produced by the Massachusetts Office of Labor and Workforce Development. Differences in data reported may reflect differences in methodological approaches, including time period.

³Hinojosa, Jennifer and Carlos Vargas-Ramos. 2017. *2016 Almanac of Puerto Ricans in the United States*. New York: Center for Puerto Rican Studies, City University of New York.

⁴Center for Puerto Rican Studies (March 2018) New Estimates: 135,000+ Post-Maria Puerto Ricans Relocated Stateside. DS2018-01 https://centrop.r.hunter.cuny.edu/sites/default/files/data_sheets/PostMaria-NewEstimates-3-15-18.pdf

⁵Kishore, Nishant et al. (2018) Mortality in Puerto Rico after Hurricane Maria. *New England Journal of Medicine* 379: 162-170.
Santos-Burgoa, Carlos et al. (2018). "Ascertainment of the Estimated Excess Mortality from Hurricane Maria in Puerto Rico." Project Report. Milken Institute School of Public Health. George Washington University.

⁶National Hurricane Center. National Oceanic and Atmospheric Administration. "Costliest U.S. Tropical Cyclones Tables Updated." January 26, 2018. <https://www.nhc.noaa.gov/news/UpdatedCostliest.pdf> Accessed September 24, 2019

⁷U.S. Government Accountability Office. Report to Congressional Requesters: 2017 Hurricane Season—Federal Support for Electricity Grid Restoration in the U.S. Virgin Islands and Puerto Rico. GAO-19-296. April 2019.

⁸Focus groups with displaced persons were conducted in Spanish. Quotes have been translated into English by the study team.

⁹"Hurricane George (1998) caused damage, nowhere to the same extent." "Hurricane Hugo (1989) affected us, but for this hurricane the government was not prepared."

¹⁰The subtext for this statement is the fact that electric power supply was not available in many communities for months after the storm and the telecommunications networks needed to operate Internet service were similarly off-line for weeks and months.

¹¹Puerto Rican cuisine, while highly seasoned, does not feature spicy seasoning, and it is mostly not welcomed as an ingredient.

¹²Many indicated there was only one mobile phone provider available during the first few weeks after the storm, limiting the effectiveness of mobile communication and wireless service.

¹³While surmising exposure to storm damage given the geographical provenance of displaced respondents is reasonable, alternatives explanations for this geographical representation include the original provenance of the Puerto Rican population in Hampden county as most displaced persons resorted to kin for their initial arrival in Hampden county, as well as the socioeconomic class of the displaced as those of lower socioeconomic status have greater exposure to climate vulnerability.

¹⁴Data source: U.S. Census Bureau, American Community Survey, 5-year estimates, 2017, Table DP-04: Selected Housing Characteristics.

¹⁵Another focus group participant described how "I went to 'Housing' and the Housing staff told me that the form we filled out didn't matter. 'I don't know why I'm giving you this application. The wait list is 3 to 6 years long.' I said, 'No matter. Leave there (take it).'"

¹⁶"Let me underscore that in *WWWW* (a local social service agency) I was treated very badly and [they were] Puerto Rican. That's what hurt me the most. It was shameful that a Puerto Rican person treated you as if you were worthless."

¹⁷The Puerto Rico Public Service Commission regulates livery and taxi car fares between the airport and municipalities throughout the island. Travel between the San Juan international airport (SJU) and Comerío were set at \$75 in 2019.

¹⁸Center for Puerto Rican Studies (March 2018) New Estimates: 135,000+ Post-Maria Puerto Ricans Relocated Stateside. DS2018-01 https://centrop.r.hunter.cuny.edu/sites/default/files/data_sheets/PostMaria-NewEstimates-3-15-18.pdf

For the 2018 calendar year, the U.S. Census Bureau reports approximately 5,600 migrants from Puerto Rico in Massachusetts. https://centrop.r.hunter.cuny.edu/sites/default/files/data_sheets/2018_ACS_1YR_Data-sheet-DS2019-02_CENTRO.pdf

¹⁹<https://www.aoml.noaa.gov/hrd/tcfaq/E19.html>

²⁰<https://www.datacenterresearch.org/data-resources/katrina/facts-for-impact/>

²¹<https://www.iii.org/fact-statistic/facts-statistics-wildfires>

²²Puerto Rico Estimates It Will Cost \$139 Billion To Fully Recover From Hurricane Maria, National Public Radio, Aug. 9, 2018 at <https://www.npr.org/2018/08/09/637230089/puerto-rico-estimates-it-will-cost-139-billion-to-fully-recover-from-hurricane-m>.

²³Stone, Clarence N. (1989) *Regime Politics: Governing Atlanta, 1946-1988*. Lawrence: University of Kansas Press.

²⁴Stone (1989: 6).

²⁵Burns, Peter and Matthew O. Thomas (2006) The Failure of the Non-regime: How Katrina Exposed New Orleans as a Regimeless City. *Urban Affairs Review* 41(4): 517-527.

²⁶Burns and Thomas (2006: 519).

²⁷Organized since 2015, Family Resource Centers are "community-based, culturally competent programs that provide a variety of services to children and families, including evidence-based parent education, parent and youth mutual self-help support groups, information and referral, grandparent support groups, mentoring, educational support, cultural and arts events, and other services," overseen by the Massachusetts Department of Children and Families. Henry, A. D., Gettens, J., Pratt, C., Miller, K. F., & Tedesco, R. (2019, February). *Massachusetts Family Resource Center Program Evaluation Report: Calendar Year 2018*. Shrewsbury MA: Commonwealth Medicine, University of Massachusetts Medical School.

²⁸Somalis seek Refuge in the U.S. But Some Locales Not Laying Out Welcome Mat. Voice of America. October 26, 2009. <https://www.voanews.com/archive/somalis-seek-refuge-us-some-locales-not-laying-out-welcome-mat-2002-11-25>

Methodology and Limitations of the Study:

To address the questions driving this study, the study team resorted to a mix of methods in order to collect the necessary information within a reasonable timeframe and cost basis. We sought to collect demographic data on Puerto Rican residents as well as publicly available reports on the post-Maria displacement/migration of Puerto Ricans to the City of Holyoke and Western Massachusetts. We therefore resorted to existing data from the U.S. Census Bureau, available through the American Community Survey. Overall population data were publicly available up to 2017 for national, state, county and place level. For Puerto Ricans data at the county- and city-geography were available up until 2015. Data for 2018 will not be available for the population as a whole until December 2019. Moreover, data for Puerto Rico for 2017 is either not available or inconsistent after September 2017 as a result of the interruption in government functions in the aftermath of Hurricane Maria.

The study team was able to obtain de-identified Holyoke public school data, which contributed to contextualize the analysis of migration among displaced persons at the city level. Once the study team became aware of the existence of service provision data from 5,000 intake forms (Form A: Family Intake Form) collected at the Family Resource Centers, the study team began the process of requesting the release of de-identified data from this dataset in order to analyze the needs presented contemporaneously by displaced persons and family. However, restrictions on data sharing imposed by FEMA on state agencies and local providers prevented the release of these data, beyond aggregate results presented in Table 19. It is our hope, however, that these data may become available for analysis in the future as it provides a wealth of information about the needs of displaced persons in Massachusetts (and potentially nationwide).

Throughout the project we held two community meetings and plan to hold one or two additional meetings after the project is completed. We held an initial meeting on March 14, 2019 at the Holyoke Health Center to introduce the research project and to provide a demographic overview or picture of the landscape of Puerto Ricans residing in the City of Holyoke and Western Massachusetts more generally. We held a second community meeting on June 13, 2019 at *Enlace de Familias* under the auspices

of Betty Medina Lichtenstein. The purpose of this meeting was to inform members of the civic sector on the scope of our project and recruit their support during the summer. We intend to hold a third meeting in October 2019 and a fourth meeting either during the late fall 2019 or early spring 2020.

The study team conducted an in-person survey of convenience (i.e., intercept) of 100 individuals in the city of Holyoke with the objective to collect information from persons displaced from Puerto Rico in the aftermath of hurricane Maria, persons who hosted them and others familiar with this process. The goal of the survey was to collect responses in a systematic manner that could be used to collect demographic data, understand a wide range of perspectives around exposure to catastrophic climate events and displacement, and to generate a baseline for understanding these perspectives. The study team interviewed individuals on the streets of the City of Holyoke, parks, small businesses, and public agencies in which the team expected to maximize the likelihood of encountering persons from Puerto Rico with experience with displacement. The survey was provided in both English and Spanish and it consisted of upwards of 50 questions. Depending on the person responding, it took anywhere from twenty-five minutes to an hour and a half to complete the survey. We completed the survey by the third week of July, 2019.

We also conducted five two-hour focus groups during the month of July, 2019 to complement the results of the survey. The goal of these focus groups was to gather detailed information that could supplement the data collected in surveys. We interviewed three groups of (27) displaced residents, one group of (10) hosts, and one group of civic leaders and members of the civic sector. The focus groups were conducted in the facilities of two local non-governmental organizations in Holyoke: *Enlace the Familias* and *Nueva Esperanza*. For the most part, the information elicited from focus groups corresponds with overall findings from the survey.

Finally, we conducted seven in-depth-interviews (IDI) of key government officials and civic leaders during the months of July and August. We identified key individuals in collaboration with the City of Holyoke and using various lists that were given (e.g. PRiMERO) and that we were able to generate on our own. The IDIs were meant to provide a perspective from government officials and other stakeholders on the City's response to the post-Maria displacement/migration of Puerto Ricans.

These multiple methods to gather information to answer the questions sought by the City of Holyoke provide perspective in hindsight, 20 to 22 months after the events. This span of time between the events and our survey, focus groups and in-depth interviews the opportunity to alter their opinion due to the impact of subsequent experiences. As a retrospective study, it is subject to recall bias. Moreover, this information captures the experience of respondents who remain in the vicinity of Holyoke in 2019, not that of those who may have arrived in Holyoke at some point prior to 2019, but

have since departed. In that sense the information from displaced persons contained in this study is from those long-term displaced persons who have remained in Holyoke and its vicinity, not that of all displaced persons who may have arrived in Massachusetts as a result of Hurricane Maria.

For copies of relevant questionnaires, interview schedules and focus group discussion guides, as well as supporting documentation, please, visit: <https://elin.uconn.edu/outreach/city-of-holyoke/>

Family Resource Centers **FORM A**

FAMILY INTAKE FORM

Section 1. Family Member Requesting Services

Last Name: _____ First Name: _____ Middle Initial: _____ Nickname (Preferred name only please): _____ DOB and Age: _____ Gender: Male Transgender Female

Services Needed Yes No Initial Contact Date: _____

Street Address: _____ Apt # _____ Home Phone: _____ Cell Phone: _____

City/Town: _____ State: _____ ZIP Code: _____ Email Address: _____

Family Member Status: (Please check all that apply)
 Birth Parent Youth N/A Single Married Divorced
 Adoptive Parent Stepparent Other Widowed Partnered
 Foster Parent Step-parent Separated Grandparent N/A

Marital Status: (Please check all that apply)
 Single Married Divorced
 Widowed Partnered Separated N/A

Income (Optional): What is your total household income?
 Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$29,999 \$30,000 to \$39,999 \$40,000 to \$49,999 \$50,000 to \$59,999 \$60,000 to \$69,999 \$70,000 to \$79,999 \$80,000 to \$89,999 \$90,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,999 \$200,000 to \$249,999 \$250,000 to \$299,999 \$300,000 to \$399,999 \$400,000 to \$499,999 \$500,000 to \$599,999 \$600,000 to \$699,999 \$700,000 to \$799,999 \$800,000 to \$899,999 \$900,000 to \$999,999 \$1,000,000 or more Did not answer

Health Insurance: Do you have health insurance? Yes No Did not answer

Race/Ethnicity: (What is Family Member's Race/Ethnicity?) (Please check all that apply)
 No, not of Hispanic, Latino, or Spanish origin Did Not Answer
 Yes, Mexican, Mexican American, Chicano
 Yes, Puerto Rican
 Yes, Cuban
 Yes, Another Hispanic, Latino, or Spanish Origin - Write in origin, for example, Argentinian, Colombian, Dominican, Nicaraguan, Salvadorian, Spaniard, and so on.
 White
 Black / African American and African Country
 American Indian or Alaska Native - Write in name of enrolled or principal tribe.
 Asian Indian Japanese Native Hawaiian Chinese Korean
 Chamorro or Chamorro Filipino Vietnamese Samoan
 Other Pacific Islander - Write in race, for examples, Fijian, Tongan, and so on.
 Other Asian - Write in race - For example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.
 Some other race - Write in race

Primary Language: (Please identify one from the list below)
 English Brazilian Portuguese Hmong Russian
 Spanish Vietnamese Other
 Arabic French Moldovan Other
 Armenian Haitian Creole Portuguese

Form A: Family Intake Form 10-17-2017 Page 1 of 3

Military Service: Y N Active National Guard Reserve Veteran Did not answer

Last Deployment: _____ Date: _____

Family Member Information:

First Name	Last Name	School Currently Attending	DOB and Age	Gender	Relationship to Family Member Requesting Services	Services Needed
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> O		<input type="checkbox"/> Y <input type="checkbox"/> N

Household Type: Single Two-Parent Multi-Parent Multi-Generational
Household Size: Total number of children/youth living in household: _____ Total Number of household members: _____

Section 2. Services Requested (What brought you here today?)

Reasons for Visit: (Please check all that apply)
 Child having difficulty following rules Seeking Information on Parenting / Parenting Education Job Issues
 Child missing days at school School Issues / School Info Continuing Education for Caregiver
 How many in last 3 months? _____ Child Care Info Immigration Legal Issues
 Do you know why? _____ Child Care Info Domestic Violence Services
 After-school Info DCY Involvement / Support
 Substance Use Concerns Health / Mental Health Concerns Families Displaced by Natural Forces
 Child ever ran away Y N Family Health / Financial Issues Food/Nutrition
 When was the last time? _____ Housing / Rent Teen/Young Adult Activities
 For how long? _____ Sent by Court Transportation Other: _____
 Sent by School Sent by Other Agency: _____

(Name of agency)

Form A: Family Intake Form 10-17-2017 Page 2 of 3

Section 3. Referral Source (How did you hear about us?)

Referral Source(s): (Please check all that apply)
 Friend / Family CSA (Community Service Agency) DTA (Department of Transitional Assistance)
 Court / Probation Officer Other CBHI (Children's Behavioral Health Initiative) Services / Supports DYS (Department of Youth Services)
 School Church / Faith Based Organization / Minister Self Other Local Agency
 (Early Intervention) Pre-School / Head Start WIC (Women, Infants and Children) Polktronix / Family Doctor Other Healthcare Provider Mental Health Counselor / Clinic DMH (Department of Mental Health)

Section 4. Disposition (For Office Use Only)

Release of Information Signed: Y N _____ Date: _____
 Full Consent Partial Declined

Release of Information Signed: Y N _____ Date: _____
 Full Consent Partial Declined

Release of Information Signed: Y N _____ Date: _____
 Full Consent Partial Declined

Release of Information Signed: Y N _____ Date: _____
 Full Consent Partial Declined

(Please check all that apply)
 Information and Referral External Referral Family Resource Center Services Family Strengths and Needs Assessment (Family CANS) Family Support Plan

Family ID: _____ **Family Member ID:** _____

Completed by: _____ Intake Type: Phone Office In person
 Information Update: Y N _____ Date: _____ Primary Contact: Y N
 Updated by: _____ Date: _____ Secondary Contact: Y N

Preferred Method of Contact:
 Email: Allow Do Not Allow Phone: Allow Do Not Allow Mail: Allow Do Not Allow

Notes:

Form A: Family Intake Form 10-17-2017 Page 3 of 3

First point of Access Hurricane evacuees Service Access Tracking Sheet

Name: _____ Date: _____ Visit # _____

Agency	Services Offered	Recommend	Visit (Initials)
FEMA #			
Social Security			
Dept. of Transitional Assistance			
SNAP (Food Bank)			
Holyoke Health Center			
Mental Health			
Mass. Health			
W. Ma. Elder Care			
WIC			
Career Point			
Holyoke Community College			

Agency	Services Provided	Recommend	Visited (Initials)
Ma. Dept. of Children and Families			
Way Finders			
Health Insurance Companies			
Other - Please fill in organization			

