

**ENSURING THE SUCCESS AND
WELLBEING OF THE “MARIA GENERATION”:
A Public Policy Guide**



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ABOUT THE INSTITUTE FOR THE DEVELOPMENT OF YOUTH

The Youth Development Institute of Puerto Rico (YDI) is a nonprofit organization dedicated to promoting public policies, both at the federal and state levels, to improve the lives and development of children and youth in Puerto Rico. Our work includes research, compilation and dissemination of data, public policy recommendations; and advocacy efforts based on both data and the voice of youth and their families. We are the only organization focused exclusively on public policy and advocacy on issues of children and youth in Puerto Rico. For more information, you can visit our portal www.juventudpr.org, call 787-728-3939 or you can find us through social media at www.facebook.com/idj.pr and / or at www.twitter.com/idj_pr or under the "hashtag": #JuventudPrimero.



INTRODUCTION

An estimated 175 million children will be impacted by natural disasters every year around the world for the 2010-2020 decade.¹ In the case of Puerto Rico and hurricane Maria, similar to other disasters around the world, children and youth were one of the groups most vulnerable to the impact of the natural disaster. According to the study on the impact of hurricane Maria on children accompanying these recommendations, many aspects of children's lives were affected by the hurricane:

- Mental Health- Twenty-three percent (23%) of children experienced anxiety post hurricane Maria.
- Education- Students 5 to 17 years old averaged 78 days without attending school.
- Nutrition- Fifty percent (50%) of families with children earning \$15,000 or less reported having difficulties accessing food.
- Economic Security- Twenty-two percent (22%) of families with children with earnings of less than \$15,000 a year reported a reduction in their work hours, while another twenty-three percent (23%) lost their employment. For the lowest-income families, this resulted in difficulties paying for groceries, rent, medicine, and educational materials.
- Poverty- Thirty-one percent (31%) of families with children reported that their socioeconomic situation deteriorated as a result of hurricane Maria.
- Housing- Eighty-two percent (82%) of households with children reported damages to their house and five (5%) lost their home.
- Migration- Thirty-one percent (31%) of families with children are considering moving out of their actual residence due to hurricane Maria, and out of those fifty-one percent (51%) are looking into moving to the continental US.

How do we ensure that the lives of children and youth, especially those who were already living in poverty, are not severely destabilized in the face of another disaster? This policy playbook attempts to answer this question by providing a set of practical recommendations that could be implemented by government, philanthropy and the private sector.

Puerto Rican children deserve more and cannot afford to lag further behind children in other jurisdictions in the US. The majority of Puerto Rico's children and youth- fifty-eight (58%)- were living in poverty the day before Hurricane Maria

ravaged the island.² This is a stark contrast to the continental United States child poverty rate of twenty percent (20%).³ Beyond the issue of poverty, other outcome areas have also been dire. The Youth Development Institute of Puerto Rico's Child and Youth Well-Being Index, an in-depth snapshot of the living conditions of children and young adults between 0 to 21 years of age in Puerto Rico, since 2013 has consistently rated the wellbeing of children in the island with a "D" grade, due to not only the high levels of child poverty, but high levels of adolescent childbearing, poor health outcomes and low levels of academic achievement, among other factors.⁴

Simply put, the recovery process for children in Puerto Rico should not only hope to restore recover to pre- Maria conditions, but strive to use this process as an opportunity to improve child outcomes in the island. Maria brings an opportunity to transform systems, rethink recovery strategies and build resiliency. This is not only a moral obligation; it is an economic development issue for the island. By the end of the proposed 10-year recovery process, most of the children and youth in Puerto Rico that endured the storm will be adults. We need to guarantee that the Maria generation, has a successful transition into adulthood in a prosperous Puerto Rico with a strong labor market, competitive education opportunities and pathways for economic mobility.



POLICY PLAYBOOK FRAMEWORK



As part of the work the Youth Development Institute is doing in response to the recovery and resiliency process after hurricane Irma and Maria, we commissioned a study of the impact of hurricane Maria on children in Puerto Rico. The study collects information through an island- wide survey with a representative sample and focus groups to identify key challenges that children and their families faced in the aftermath of this natural disaster.

This playbook offers ten recommendations which address different phases of the aftermath of the hurricane, including response, recovery and preparedness. Each recommendation is further developed in three sections. The first section attempts to provide important contextual information from the literature and the studies that supports the recommendation, this section we call “Why”. Second, the “How” section provides sub-recommendations and concrete steps, and invites important stakeholders to take action towards achieving the recommendations. Lastly, in a third section, examples are provided to offer guidance in executing the recommendations.

The recommendations in this playbook are derived from three primary sources. First, a literature review on what other jurisdictions, states and countries consider best practices for children in the recovery process, including important federal and local recovery plans. Second, interviews from field experts and academics that have worked or researched the topic of children and natural disasters both at the federal and local level. Lastly, the analysis of quantitative and qualitative data from the study commissioned by the Youth Development Institute that provided important context to the challenges faced by children in Puerto Rico

after the disaster. The study is called: Study on the Impact of Hurricane Maria on Children. All of this work is contextualize to the current policy gaps in the public discourse around the recovery and preparedness strategies in Puerto Rico after hurricane Maria.

RECOMMENDATION 1:

Develop a comprehensive government preparedness plan for children and Youth in Puerto Rico.

WHY?

A comprehensive government disaster plan that uses a disaster risk reduction framework will ensure that the needs of children and youth are a priority in planning and response processes, and that the government’s response- at the central, regional and municipal level- is optimal. According to the literature, one of the most important elements of preparedness is planning. Preparedness planning aims to establish a standing capacity to respond to a range of different situations that may affect a country or region by putting in place a broad set of preparedness measures.⁵

Experts that worked in the aftermath of hurricane Katrina and other disasters strongly support the importance of having a clearly articulated disaster plan for children and families.⁶ Having a plan that clearly articulates what to do with children and other vulnerable populations can mitigate the adverse effects caused by a natural disaster.

However, the study of the impact of Hurricane Maria on children, revealed that there was a lack of planning at regional and municipal institutional level planning. A municipal staff that participated in the study highlighted: “It’s curious you know; we are required to have a plan to deal with animals during disasters but no one asks us about a plan for kids.”

Moreover, data from the Homeland Security Operational Analysis Center (HSOAC) showed that only eighty-five (85%) of municipalities had a plan in place and only fifty-seven (57%) of those that had a plan specified how to protect children, seniors, and individuals with disabilities.⁷ While disaster preparedness plans focused on certain aspects of children’s lives are being developed, such as plans for schools, foster homes and other institutions, these are usually developed in isolation. The plans

would benefit from a clear, cross-sector comprehensive strategy for Puerto Rico's children during the recovery process, that account for the necessity of these plans, and different levels of government to interphase appropriately in response to a natural disaster.

One recommendation to tackle this policy issue is to develop a coherent Government Disaster Plan for Children and Youth. This plan should synthesize all plans from individual agencies, as well as regional and municipal plans, to ensure there are no gaps or duplication, and should ensure that areas that are crucial for children are tended to.

HOW?

While this recommendation proposes the creation of a comprehensive government plan that recognizes the diversity of children and their needs, it does not substitute the necessity for each agency to develop their own in-house plan. The objective of this comprehensive Government Disaster Plan for Children and Youth is to interphase with other disaster plans, define clear roles and responsibilities, and serve as a general guidance for government as it relates to children in disasters.

Many government offices could be tasked with developing this plan. The Central Office of Recovery, Reconstruction, and Resilience (COR3) under the Public Private Partnerships Office (P3) of Puerto Rico created by executive order Num. 65 in 2017,⁸ could be a potential convener for the creation of this plan given its important role throughout the recovery process and its vision to build a more resilient Puerto Rico. Another potential government entity could be the Emergency Management and Disaster Administration Office (Negociado para el Manejo de Emergencias y Administración de Desastres) given its role in the response, recovery, preparedness and mitigation process in the event of a natural disasters.

Regardless of which agency is tasked with this, the plan should include various layers. First, a multi-sector perspective be key. Hurricane Maria exposed vulnerabilities in many sectors that impact children's lives, beyond the educational system. While focusing on the education sector is of the essence, other sectors such as health, nutrition, shelter and housing, need to also be taken into consideration. Hence, the government office tasked with creating this plan should consider using a sector approach in developing this plan that includes guidance in areas such as: community response, physical health, nutrition, mental health, early childhood and child care, k-12 education, economic security, transportation, shelters and housing. The plan should also advise government on how to use the available funding streams to address the specific needs of families with children and youth.

Second, the plan must take into account regional and geographical diversity, and the specific challenges these present in the event of a disaster. Planning must address the limitations of high-poverty mountainous regions, island municipalities, and flood prone areas.

Third, it must take into account special populations, such as children with disabilities, youth in the juvenile justice system, children with mental health conditions or in mental health institutions, foster youth and children with parents with disabilities.

A comprehensive Government Disaster Plan for Children and Youth should improve communication across key stakeholders for children and their families before during and after a disaster in order to move quickly throughout the response phase. Moreover, it should enable the delivery of services to children, youth and their families in a collaborative manner capturing lessons learned from what happened with hurricane Maria and other natural disasters in Puerto Rico. This should help to build a culture around reviewing and updating emergency plans regularly which will lead to a swifter response and prevent duplication and dilution of institutional capacity among stakeholders.

The first step would be to create an interagency working group that can analyze existing disaster preparedness plans, and identify gaps and duplication, and eventually create a comprehensive Government Disaster Plan for Children and Youth. This group should validate the plan with civil society groups, front line workers, parents, children and youth.

Given the challenges identified by the study on the impact of hurricane Maria on children, we recommend specific attention to these areas:

- A strategy to swiftly re-establish education and child care services after a natural disaster.
- Coordination with relevant agencies to ensure that roles and responsibilities are clear before a disaster is imminent. This will increase the likelihood that the needs of the most vulnerable children: those with disabilities and in the foster care system are taken into account at all levels of the response.
- Identifying how children from different regions will have their health needs met in the event of a disaster. This includes special health needs that require electricity, emergency health situations, proper deployment of medication, as well as plans to properly respond to health outbreaks following the natural disaster.
- Account for the special nutritional needs of children, especially infants. There should be clear plans to ensure

optimal functioning of WIC, community-based organizations and others that will be key in the deployment of nutrition after a disaster.

- The various logistical options through which food, health services and water will be made available to families with children, specifically in high poverty municipalities that have geographical limitations (such as the mountainous areas and the island municipalities of Vieques and Culebra).
- Addressing the needs of teachers, social workers, and other front-line staff as a group of special interest for the recovery.
- The deployment of safety nets and further cash assistance in the event of a disaster.
- Investments in shelters and evacuation plans that include kid friendly spaces and procedures, and reduce the use of schools whenever possible.
- Mental health first aid for children, youth and their families.

EXAMPLES, RESOURCES AND TOOLS:

Attempting to create a comprehensive plan for children and disasters that includes all sectors is ambitious. Nonetheless, there is an abundance of literature on standards and guidelines that already exists and could be used to inform the creation of the comprehensive government plan for Puerto Rico. Some examples include:

- For the health sector-The American Academy of Pediatrics (AAP) Tool kit for Preparedness and Resource Kit.
<https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Pediatric-Preparedness-Resource-Kit.aspx>
- For the Education Sector-The International Network for Education in Emergencies (INEE) Minimum Standards for Education in Emergencies.
[https://toolkit.ineesite.org/resources/ineecms/uploads/1012/INEE_Minimum_Standards_Handbook_2010\(HSP\)-English_LoRes.pdf](https://toolkit.ineesite.org/resources/ineecms/uploads/1012/INEE_Minimum_Standards_Handbook_2010(HSP)-English_LoRes.pdf)
- For Early Childhood Sector - The Administration for Children and Families Emergency Preparedness Manual for Early Childhood Programs.
<https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/emergency-preparedness-manual-early-childhood-programs.pdf>
- For Child Care Sector-The Emergency Preparedness Planning Guide for Child Care Centers & Child Care Homes from Illinois Emergency Medical Services for Children.

[https://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/disasterpreparedness/organizationalresources/childcarecenters/Emergence%20Preparedness%20Planning%20Guide%20for%20Child%20Care%20Centers%202016\(2\).pdf](https://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/disasterpreparedness/organizationalresources/childcarecenters/Emergence%20Preparedness%20Planning%20Guide%20for%20Child%20Care%20Centers%202016(2).pdf)

- For Shelter Sector-Mega-Shelter Planning Guide: A Resource and Best Practices Reference Guide from the International Association of Venue Managers, Inc.
<https://www.fema.gov/pdf/emergency/disasterhousing/mspg.pdf>
- For the Mental Health Sector-The Inter-Agency Standing Committee (IASC) Guidelines on Mental Health and Psychosocial Support in Emergency Settings Emergency Preparedness
https://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf
- For the Transportation Sector-The Global Facility for Disaster Reduction and Recovery (GFDRR) Disaster Recovery Guidance Series Transport Sector Recovery: Opportunities to Build Resilience
<https://www.gfdrr.org/sites/default/files/publication/transport-sector-recovery.pdf>
- For the Economic Sector- Disaster Technical Assistance Center Supplemental Research Bulletin Greater Impact: How Disasters Affect People of Low Socioeconomic Status Commitment to Improving Outcomes for People of Low SES in Disasters
https://www.samhsa.gov/sites/default/files/programs_campaigns/dtac/srb-low-ses.pdf
- For Disaster Planning - Disaster Preparedness for Effective Response: Guidance and Indicators Package for Implementing Priority Five of the Hyogo Framework.
https://www.unisdr.org/files/2909_Disasterpreparednessforeffectiveresponse.pdf

RECOMMENDATION 2:

Strengthen the capacity of communities to respond, recover and prepare for the needs of children and youth after a natural disaster.

WHY?

Communities are the actors that face the consequences of disasters directly, as well as the first responders, so it is important to make them part of disaster risk reduction processes.⁹ They are also key stakeholders in developing preparedness plans and solutions. It is community members

themselves who can provide accurate and effective first-hand information about their vulnerabilities and both personal and community risks, as well as possible solutions, to the institutional processes, risk assessments, and policies.¹⁰ Moreover, quantitative and qualitative results of the study on the impact of hurricane Maria on children indicated that central government agencies were not as responsive as local community groups and municipalities. Sixty-six (66%) of households with children expressed that government response was “not important” in the response process, and the qualitative data denoted the protagonist role that community-based and neighbors played in the response period. It is clear that Puerto Rico’s community-based institutions played a key role in disaster response, and as such, should be equipped with adequate tools and resources to manage a next disaster, particularly, when it comes to addressing the needs that the children and youth of a community may have.

HOW?

RECOMMENDATION 2A:

Municipal and central government agencies must facilitate the participation of community institutions, children, youth and parents in the planning and development of preparedness and recovery policies.

For this to be done successfully the usual mechanisms of open commentary periods and accessible transparency tools through websites, although important and necessary, are not going to be enough. Other strategies can include, community surveys, town halls with adequate planning and participation, and the integration of community members, especially those that have children in the household, are part of the planning processes. The outreach can be done through phone calls, email, social media, and letters and in person visits to maximize participation. Integrating the youth voice is also of the essence, hence, meeting guidelines should enable the participation of youth and children.

RECOMMENDATION 2B:

Municipal and central government agencies must facilitate the participation of community institutions, children, youth and parents in the planning and development of preparedness and recovery policies.

These programs could pair the provision of essential resources (water, canned food, baby formula, diapers, etc.) with technical assistance and support to community organizations, community leaders, and neighborhood associations.

The partners should be given a modest stipend for their training time, as well as access to provisions in the event of a disaster. In turn, partners would be required to have a census of all families with children in their community, and their needs; as well as provide information in the community about their role in the event of a disaster.

- Support with planning for the needs of children after a disaster (feeding for infants, medications, education, safe spaces, child care), including diverse needs and disabilities.
- Support distribution of printed community plans and provide organizing capacity for emergency community plan rehearsals that involve children.

They should be given a modest stipend for their training time, as well as access to provisions in the event of a disaster. In turn, these Partners would be required to have a census of all families with children in their community, and their needs; as well as provide information in the community about their role in the event of a disaster.

EXAMPLES, RESOURCES AND TOOLS:

The National Center for Disaster Preparedness at Columbia University created a preparedness toolkit that could be accessed by any community. They are currently testing a Community Preparedness Index that could help track how prepared are communities to manage a natural disaster emergency. The Puerto Rico Children and Youth Task Force will be working with this framework.

[-https://ncdp.columbia.edu/microsite-page/resilient-children-resilient-communities/rcrc-home/](https://ncdp.columbia.edu/microsite-page/resilient-children-resilient-communities/rcrc-home/)

The benefits of including children and guidelines on how to include them in the planning process are further discussed in this article Involving Children in Disaster Risk Reduction: The Importance of Participation.¹¹

[-https://www.researchgate.net/publication/322941213_Involving_children_in_disaster_risk_reduction_the_importance_of_participation](https://www.researchgate.net/publication/322941213_Involving_children_in_disaster_risk_reduction_the_importance_of_participation)

RECOMMENDATION 3:

Promote a culture of family preparedness and safety.

WHY?

Planning at the household level can reduce the impact of disasters, or sometimes completely eliminate the danger. Furthermore, research shows that preparing children before a

disaster helps them better respond during the event and cope with the aftermath, because it builds a child's sense of understanding and control.¹² However, the study on the impact of the hurricane Maria on children found that only forty-eight percent (48%) of households with children had an emergency disaster plan. In families with children where the head of the household had less than a high school diploma this increases to fifty-nine percent (59%). The main resource used to gather knowledge on an emergency disaster plan among respondents was TV with twenty-nine percent (29%), followed by radio with seventeen percent (17%) and lastly social media with fifteen percent (15%).

HOW?

RECOMMENDATION 3A:

Develop a public campaign through community institutions and media outlets to encourage families with children to formulate their emergency preparedness plans.

This campaign can be developed by The Disaster Emergency Management Administration (Negociado para el Manejo de Emergencias y Administración de Desastres), in collaboration with third sector entities, such as the Red Cross. Alternatively, this campaign could be funded by philanthropic entities interested in disaster preparedness and children. Given that the majority of families obtained their information from TV, radio and social media, these should be the main forms of media used for this campaign. The campaign should:

- Encourage families with children to not only have a plan, but one that considers the needs of their children (formula, diapers, understanding the natural phenomenon, medication, etc), and also consider their needs in short and long term evacuation plans.
- Educate caregivers about how to discuss their disaster plan and its various contingencies with children in a sensitive and age-appropriate manner.

RECOMMENDATION 3B:

Provide disaster preparedness kits for low-income families with children.

Living in poverty limits the resources available to adequately prepare for a hurricane. Given that families living in poverty are more likely to interface with government agencies and social workers, those front line workers should be provided with resources and tools so they can have a key role in ensuring that families with children are adequately prepared in the event of a

disaster. This can include ensuring that families have an adequate supply of prescription medication, food, water, first aid items, and other essential basic needs through preparedness kits.

RECOMMENDATION 3C:

Build the capacity of social workers and other front line staff to carefully consider situations involving possible domestic violence and child abuse when monitoring family disaster response plans.

Families going through a domestic violence situation or child abuse are at a special disadvantage when planning for disaster.

Lack of shelter or resources can make these families more vulnerable to having to depend in some extent with the abuser. For this, government should provide social workers and other front line staff with specific guidelines for supporting these families in their disaster preparedness. Government should consider making these guidelines available for other non-profit and community organizations that serve children and families.

RECOMMENDATION 3D:

The Department of Education and other government agencies that serve children should incorporate emergency preparedness and resiliency planning into curriculum, alternative education spaces and other child serving programs to help children participate in their individual family planning.

When children learn and practice disaster planning from a young age they build knowledge that accompanies them into their adult lives. By embedding disaster planning and risk reduction behavior early enough it can be passed on to subsequent generations. Hence, investment in child/youth centered curricula may yield higher benefits and future savings than when adults acquire the same skills.¹³ The Department of Education should draw from existing curriculum examples and create a culturally compatible curriculum that can be accessed by teachers and other programs through online tools.

EXAMPLES, RESOURCES AND TOOLS:

Some good templates for Family Emergency Disaster Plans are:

- The American Red Cross -https://www.redcross.org/content/dam/redcross/atg/PDF_s/Preparedness____Disaster_Recovery/General_Preparedness____Recovery-/Home/ARC_Family_Disaster_Plan_Template_r083012.pdf

- Dane County, Wisconsin- Emergency Management Office -<https://pdf.countyofdane.com/EMS/HouseholdEmergencyPlanTemplate.pdf>
- Washington Military Department- Emergency Management Division -<https://mil.wa.gov/uploads/pdf/Publications/english%20family%20emergency%20plan.pdf>

FEMA has some examples for disaster planning curriculum developed for kids and Youth:

- Youth Emergency Preparedness Curriculum-Ready Kids <https://www.fema.gov/media-library/assets/documents/3441>

RECOMMENDATION 4:

Ensure that private sector providers for family and child services have viable disaster and business continuity plans.

WHY?

In general, children are helped by returning to their routine, such as child care, school, organized activities, and sports, as soon as practical after a disaster.¹⁴ The private sector provides a host of these essential services for children and youth. This includes private health facilities, daycares, special education services, socio-emotional supports, and after school programs. According to a study by the Federal Emergency Management Agency (FEMA), there is a wide gap between companies' awareness of the potential for disruption of services and the amount of planning they have done for disaster.¹⁵ As an example, the study on the impact of hurricane Maria on children showed that on average children 5 years or younger spent an average 92 days without attending pre-school and early childhood services and 71% percent experienced an interruption in their special education services. Moreover, a study commissioned by the Philanthropy Network (Red de Fundaciones) of Puerto Rico found that only 43% of non-profit providers had an emergency disaster plan.¹⁶

HOW?

RECOMMENDATION 4A:

Commonwealth and municipal government should develop and enforce regulations that require all private sector contractors that work with children, whether for or nonprofit, to have a disaster and business continuity plan in place.

This requirement could be operationalized as a required document for contracts, and it should include action steps that outline how the provider's services will continue to operate after

an emergency or disaster that is severe enough to threaten or affect the operation. More specifically, literature suggests that these plans should:^{17 18}

- Include strategies to cover repair expenses and staff salary and how to continue operations.
- Providers should take into account for lack of income from families and prepare flexible payment schemes to further assist through the recovery process.
- Ensure sensitive participant data is well stored and uploaded into a secured server with back up computers.
- These disaster and continuity plans should be widely shared with the population served through meetings, printed and or digital copies and feedback is collected from the children and families served.

RECOMMENDATION 4B:

Private sector coalitions and associations, at the local and federal level, should provide or seek technical assistance to develop viable disaster plans for their membership.

Coalitions and associations can play an important role in building the capacity of their membership to prepare and respond in an event of a natural disaster. Preparing trainings, creating a resource development strategy and applying for grants from philanthropy and government, are some examples of things these organizations can do to help their membership develop viable disaster plans.

EXAMPLES, RESOURCES AND TOOLS:

The Small Business Administration has resources for developing disaster and continuity plans.

- Disaster Preparedness and Recovery Plan -<https://www.sba.gov/sites/default/files/files/FINAL-2017-SBA-Disaster-Preparedness-Plan-signed.pdf>
- The US Small Business Administration –Blog -<https://www.sba.gov/blogs/seven-ways-start-your-business-continuity-plan>

RECOMMENDATION 5:

Develop public policies to strengthen the safety net of families with children before and after a disaster.

WHY?

Although all children in Puerto Rico weathered this natural disaster, Puerto Rican children living in poverty were more likely to suffer disproportionately the effects hurricane Maria.

This is the general conclusion of a study commissioned by the Youth Development Institute of Puerto Rico and which serves as the foundation for this Policy Playbook. The Hurricane's path also happened to ravage areas with pre-existing vulnerabilities. For example, the town of Comerio—one of the focus municipalities in the qualitative study—devastated by the hurricane had a child poverty rate of seventy-three percent (73%) in 2016 and Las Marias—another focus town in the study— a child poverty rate of 78%.¹⁹

Poor households are the most affected after disasters after a natural disaster.²⁰ This makes social protection systems important in the development of resilience and to reduce socioeconomic impacts that disproportionately affect poor households after disasters.²¹ Results from the study of the impact of hurricane Maria on children showed thirty-three percent (33%) of families that already had low incomes (less than \$15,000) reported losing even more income post hurricane Maria. As a result of the loss of income, the lowest-income families reported having difficulties making payment on utilities like water and electricity (40%), purchasing food (38%), clothing and personal effects (29%), school materials (21%) and medication (16%).

It is important to note that in order to address families' economic resiliency and ability to recover after a disaster will require public policies that prioritize the reduction of child poverty and strengthening of economic security of families with children. The Youth Development Institute has made several recommendations to this end in other policy briefs, and will be publishing an extensive policy blueprint to reduce child poverty over the next years.

HOW?

RECOMMENDATION 5A:

Improve emergency response agencies' ability to connect children and families with available disaster recovery funds from both the federal and local government.

Looking forward to the recovery process for Puerto Rico, some important steps can be made to connect families with children to available safety net and emergency stipends programs:

- Increase program outreach and on the ground consultation through existing safety net channels, such as one stop centers and other safety net programs.
- Help remove barriers and bureaucracy that often limits access to safety nets like transportation, documentation requirements and language between federal and local agencies and Puerto Rican residents.

- Make sure that new programs developed through disaster appropriations and funding are shared with the target population.

RECOMMENDATION 5B:

Congress should authorize the extension of the Child Tax Credit for all families with children in Puerto Rico.

The extension of the Children's Tax Credit (CTC) for families with children in Puerto Rico, as part of the disaster recovery process, can help low-income working families recover from the economic losses of the hurricane, supplement unexpected expenses and serve as an incentive to stay on the island. At the federal level, the extension of the CTC has been part of 10 bills in Congress, which shows that the measure has broad support. In addition to this, the Congressional Task Force on Economic Growth in Puerto Rico recommended in its final report to Congress to extend the CTC to all families in Puerto Rico.²² Currently, in Puerto Rico, families with 3 or more children are the only ones that have access to this credit, which represents eleven percent (11%) of all families with children in Puerto Rico.²³

RECOMMENDATION 5C:

Congress should appropriate an additional \$600 million for Puerto Rico's Nutritional Assistance Program (NAP).

Hurricane Maria vastly exacerbated Puerto Rico's food insecurity. Results from the study of the impact of hurricane Maria on children showed that forty-three percent (43%) of families with children reported having difficulties accessing a daily supply of food in the aftermath of the hurricane. This percentage was higher (50%) for families that earned less than \$15,000 a year. Congress appropriated \$1.27 billion for Puerto Rico Nutritional Assistance Program (NAP) for fiscal years 2018 and 2019. The supplemental increase brought the total Puerto Rico NAP grants to \$1.94 billion in FY18 and \$1.91 billion for FY19.²⁴ However, this extension expires in late February 2019 leaving 150,000 low-income individuals without this critical support. An additional appropriation not only strengthens the safety net for families with children, fifty-seven percent (57%) of which indicate that NAP benefits are part of their income, but also helps alleviates the benefit cliff which affects many low-income families. Allowing families to maintain a basic level of economic support for nutrition, while earning a higher income, promotes economic security, and hence strengthens the resiliency of those families.

RECOMMENDATION 5D:

Support families with disaster preparation and mitigation expenses.

One way to support adequate preparation for a natural disaster for low-income families would be to provide preparedness kits, as discussed in Recommendation 2b. Other ways to support low-income working families could include:

- Tax breaks on preparedness items, such as canned food, generators, formula, plywood; and others, during one particular week of the year.
- Social safety net and nutrition programs, such as NAP and WIC, could provide for “Emergency stipends” or “Emergency provisions” in the planning of their programs and budgets, so that these are granted to families with children and other special populations when a disaster is imminent.

RECOMMENDATION 6:

Develop and optimize data tools to ensure that the needs of children and youth are addressed in the recovery.

WHY?

Given the particular vulnerabilities of children and youth in the face of natural disasters,²⁵ it is essential to collect disaggregated data for this population to better understand their particular needs of this population, and special sub-populations. Having the disaggregated data allows for more targeted decision-making in terms of government and philanthropic funding, as well as more precise decision-making to ensure needs of children and youth are accounted for in both preparedness and recovery processes.²⁶

HOW?

RECOMMENDATION 6A:

The government of Puerto Rico should create a data observatory for the “Maria Generation” to monitor the long term outcomes of children and youth in the recovery process.

The Commonwealth government along with philanthropic and civil sector partners should create a “Maria Generation” observatory tool of children and youth indicators that include metrics focused on outcomes from agency/ government plans; for example, mental health outcomes for children, academic achievement of

children post the natural disaster, child welfare outcomes, families with disaster emergency plans, etc.

- Data should be disaggregated and should take into account the particular effect of disasters on different groups, such as different age groups (early childhood vs. older youth), gender, race, family composition, and different socio-economic levels.
- It should look at outcomes that, according to the literature, could be negatively affected in the long-term as a result of the Hurricane. For example: academic achievement, educational attainment, rates of mental health conditions, poverty, employment/ labor market transitions. Puerto Rico’s Children and Youth Task Force²⁷ will be engaged in identifying some of these population-level indicators and creating action plans to address the long-term effects of the hurricane using this framework.
- The observatory should be available to the public and regularly disseminated amongst academia, government agencies, press, Congress and the philanthropic sector.
- The Central Office of Recovery, Reconstruction, and Resilience (CRRO) could be involved in reviewing and utilizing the data through regular meetings using a balanced scorecard approach for outputs and outcomes across agencies that work with children and their families.

EXAMPLES, RESOURCES AND TOOLS:

There are some examples of data observatories around children

- The Youth Development Institute develops an Early Childhood Observatory
-<http://juventudpr.org/datos/ninez-temprana/que-es/>
- World Health Organization Observatory.
-<https://www.who.int/gho/en/>
- The city of Hull in Yorkshire, England has developed an interactive observatory with a range of indicators to look at:
-http://109.228.11.121/IAS_Live/

RECOMMENDATION 7:

Prioritize the restoration of schools, child care, recreational facilities and other child serving facilities.

WHY?

Literature shows that one of the main objectives in the recovery phase for children and youth after a disaster is to normalize their daily routine, especially their return to their schools and learning institutions. This becomes important when considering that schools represent a critical psychosocial support center for

children, youth and their families after a disaster. The reconstruction and improvement of schools should not only be a priority, but also the incorporation of codes that make buildings resilient to new disasters.²⁸ The literature further advises that this becomes important for schools serving poor populations, which is the case for the majority of public schools in Puerto Rico.²⁹ Moreover, according to the study of the impact of hurricane Maria on children, nearly a third of families with children (thirty-two percent 32%) considered that the conditions of schools in their communities were worse in the aftermath of hurricane Maria. According to results from the qualitative study of the impact of Hurricane Maria on children, schools represented the spaces with the greatest impact for children and youth, since in these places children find greater stability and security.

Not only school buildings suffered greatly from hurricane Maria. Child care, youth development and early childhood program facilities were severely damaged as well. Data from the qualitative part from the study of the impact of hurricane Maria on children showed the experience of a Head Start administrator that recounted the day after the impact of the hurricane. He highlighted that the ceiling of the building was destroyed and when a teacher arrived at the facility to clean up the classroom she inquired emotionally “¿What will we do?” and the children showed sadness asking why the hurricane did that to their classrooms.

Also, roughly half of families with children (forty-six percent 46%) mentioned that the condition of recreational facilities in their community were worse in the aftermath of the hurricane. In one of the focus towns almost all recreational facilities were destroyed. This is critical because of the important role that recreational facilities play in all phases of disaster management, from response to recovery and preparedness. According to experts in communities such as Alberta, Canada, the role of the recreation sector in disaster response and recovery efforts evolves over time, growing from the immediate role of providing shelter in recreation facilities and recreation centers, to providing programming for evacuees; supporting individuals, families, and communities through the recovery process; and complementing systems of psychosocial supports that improve individual wellbeing and community resilience.³⁰

HOW?

RECOMMENDATION 7A:

Expedite and strengthen the school recovery process by increasing transparency and community participation.

The federal government through FEMA and the US Department of Education have allocated over \$700 million dollars in funds for reconstruction and recovery efforts in schools.^{31 32} According to reports, this funding will be prioritized for water filtration, mold mitigation, plumbing and repair of facilities that were damaged by the hurricane. The funding has also been used on trailers (vagones) for school, which are being used as transition spaces to continue schools' operations during reconstruction efforts. However, these processes could be strengthened through increased transparency and further integrating the private sector and community.

In December 20th of 2018, the Department of Education uploaded a public dashboard to track each schools' reconstruction progress. The dashboard shows progress indicators for maintenance issues at schools like fumigation and cleaning.³³ However, it is unclear what kind of progress has been done in terms of reconstruction, upgrades, or recovery by school area (i.e. Libraries, classrooms, office, lunch room, etc.) in the current format of the dashboard. The availability of this tool should be expedited, to strengthen accountability and transparency, and to provide a roadmap of needs that could be met by the greater community. This could mean volunteer groups, “adopt-a-school” programs, and the integration of youth and the school community in the reconstruction of their space. Furthermore, it could help effectively target philanthropic resources to those school communities that have yet to be repaired, or that need additional resources to become resilient.

RECOMMENDATION 7B:

The Department of Education and the Department of Housing should use schools as last resort shelters and prepare other public buildings for this purpose.

It is not uncommon to find schools being used as shelters after a disaster in Puerto Rico. A last list for available shelters in response to hurricane Beryl passing through the Caribbean last July, 2018 listed 422 shelters out of which well over half of them were schools.³⁴ This becomes troublesome when attempting to start school operations swiftly after a disaster because of the dual purpose of the school building as a shelter and school. Students attending a school that is being used as a shelter often time spend more days without returning to their daily routines.

Using schools as a last resort for shelters should be a principle incorporated into all aspects of disaster preparedness. Alternatives to this could be to construct new or build the capacity of community centers to serve as shelters. Moreover, in

areas where this is not possible consider interlocking strategies to allow students to start attending schools in other available school buildings that may have excess space or alternative hours. This however, must be done in an organized manner taking into consideration transportation limitation and school communities' cultures.

RECOMMENDATION 7C:

Government agencies that receive funding for recovery should allocate money for the infrastructure development of programs that support adequate child care, youth development and early childhood programs.

It is not uncommon for schools to be used as shelters after a disaster in Puerto Rico. A last list for available shelters in response to hurricane Beryl passing through the Caribbean last July, 2018 listed 422 shelters out of which well over half of them were schools.³⁴ This becomes troublesome when attempting to start school operations swiftly after a disaster because of the dual purpose of the school building as a shelter and school. Students attending a school that is being used as a shelter often time spend more days without returning to their daily routines.

RECOMMENDATION 7D:

The Department of Education, the Department of Recreation and Sports and the Public Buildings Administration should ensure that recreational facilities in schools and low socioeconomic communities and community centers are restored, resilient and child friendly.

The Community Development Block Grant – Disaster Relief (CDBG-DR) funds offer an opportunity to invest in these type of facilities that are mechanism for children and youth to cope with the effects of a major disaster. Making sure that these facilities are restored and kept up to code as child friendly spaces is important because they become more resilient to other natural disasters and yield a better return on investment. Moreover, community organizations can use these facilities to expand their programming as well.

EXAMPLES, RESOURCES AND TOOLS:

After hurricane Katrina impacted the city of New Orleans had a drastic need for a plan to rehabilitate school facilities in New Orleans after the storm, the Recovery School District (RSD), the Orleans Parish School Board (OPSB), and the Louisiana Board of Elementary and Secondary Education (BESE) jointly set out to develop and implement the School Facilities Master Plan.

[-http://opsb.us/wp-content/uploads/2012/10/Master-Plan-Amendment-Presentation-Summer-2011-7.7.11.pdf](http://opsb.us/wp-content/uploads/2012/10/Master-Plan-Amendment-Presentation-Summer-2011-7.7.11.pdf)

The state of Louisiana, serves as an example in this regard. The state gave funding and operational support to pre-K programs, the construction of a new facility that expanded an existing Head Start program and, operational support for AMI Kids, an organization that provides education and support services for youth in low-income families using CDBG-DR funds.

[-http://restore.la.gov/how-we-are-helping/community-planning-and-capacity-building/](http://restore.la.gov/how-we-are-helping/community-planning-and-capacity-building/)

The New York City Department of Parks and Recreation serves as an example for resilient building and planning of recreational facilities and parks. After hurricane Sandy special attention was given to resiliency. Examples of some of these projects can be found here:

[-https://www.nycgovparks.org/planning-and-building/planning/resiliency-plans](https://www.nycgovparks.org/planning-and-building/planning/resiliency-plans)

RECOMMENDATION 8:

Expand the availability of mental health services for children and youth.

WHY?

Exposure to natural disasters can have short-term and long-term effects on the lives of children and youth. The experience of a hurricane, along with its effects, has been shown to lead to post-traumatic stress disorder (PTSD) among children. This PTSD could last for years after the hurricane, affect their academic achievement and, eventually, affect their potential success in their adult lives.³⁵ The situation is further complicated by the fact that hurricane Maria caused the most damage in regions where the majority of children already lived in poverty. This means that, before the hurricane, many children were already dealing with living conditions that threatened their mental health. Studies have shown that living in poverty could lead to chronic stress in children,³⁶ which has adverse effects in learning,³⁷ memory³⁸ and is also linked to health problems,³⁹ among other issues. Results from the study of the impact of hurricane Maria on children showed that twenty-three percent (23%) of children suffered from anxiety post hurricane Maria, while nineteen percent (19%) felt fear. Also, twelve percent (12%) of kids presented a lack of concentration in school. These quantitative results are consistent with the focus group findings, where a youth from Coamo expressed how the hurricane was a traumatic experience. "I felt terrified. Scared, I asked myself what would come next, what would happen to the school... what would happen in someone die." The qualitative study found mental health services to be one

underserved area according to teachers and social workers. These problems are exacerbated when we take into account that according to a mental health scan from the Children and Youth Task Force, mental services for children in mountainous areas and in the western region are limited. In addition, existing programs have little capacity to serve the population in need.

HOW?

RECOMMENDATION 8A:

Expand the availability of mental health resources in schools and other educational settings .

Increasing the capacity of schools to address the ongoing mental health needs of students is a way to mitigate the effects of natural disasters on children. The importance of school psychologists has been recognized through regulation and legislation, however this is often met with challenges related to funding, availability of professional staff and caseloads. An alternative way to increase these resources is to provide multi-tiered interventions.

- Mental health interventions could be delivered by psychologists and social workers, but depending on the level of intervention needed these could also be delivered by interns, paraprofessionals or trained community leaders with support from experts. This could be particularly relevant for schools with large student populations, where community leaders and paraprofessionals could support psychologists and social workers.
- At the basic level, all teachers and schools should be trained in trauma-informed approaches, and mental health first aid. This type of training could also promote a culture of mental and emotional health in the school and hence promote a more supportive environment.
- Philanthropy, universities and nonprofit organizations could play a key role in developing and training community leaders and equipping schools with trauma-informed approaches.
- Funding for additional resources could come from federal sources and philanthropy. To ensure the investments yield the best results, they should be tied to the use of evidence-based practices and be deployed with the highest quality standard possible.
- In situations of disasters mental health services could be directed to the family as a unit.

RECOMMENDATION 8B:

Provide mental health first aid training for teachers, social workers, parents and other front line workers that serve children.

The government through its various instrumentalities such as: Department of Education, The Department of Family, ASSMCA, and ASES should incorporate mental health first aid training for staff in educational institutions and other programming. Mental health first aid would allow for those working with children to quickly identify the signs of mental health conditions, and to refer to the proper resources. Moreover, first responders, volunteers from nonprofit, and municipal employees should be receive mental health first aid training before being deployed to the community. Another important step is to include the promotion of community and household based mental health first aid to give tools for parent and community leaders when dealing with a mental health crisis in programming.

RECOMMENDATION 8C:

Increase and protect mental health funding for children and youth.

Investments in programs that directly or indirectly affect the mental health of children and their families have been declining over last five years. For fiscal year 2018-2019, the recommended budget in these programs represents twenty-nine percent (29%) less than that allocated budget in the fiscal year 2013-2014 (-\$28,171,000). Given the importance of these services for children, youth, and families in Puerto Rico, especially after a natural disaster, adequate resources must be ensured and invested in programs based on evidence.

- The Puerto Rico legislature, the private and the philanthropic sector should ensure that mental health for children and young people becomes a priority funding area.
- These funds should aim to increase the capacity of programs to serve more children and youth, and bring services to those regions of the island that are lacking of such services, such as the West of the island the mountainous region.

EXAMPLES, RESOURCES AND TOOLS:

There are examples on physiological first aid deployments and frameworks from the literature that can be used:

- Mental Health and Psychosocial Support in Disaster Situations in the Caribbean Core Knowledge for Emergency Preparedness and Response.

https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=books&alias=1968-mental-health-and-psychosocial-support-in-disaster-situations-in-the-caribbean&Itemid=1179&lang=es

- Psychological First Aid for Children Toolkit and Manual.
-<https://resourcecentre.savethechildren.net/sites/default/files/documents/4633.pdf>
- USA Mental Health First Aid
-<https://www.mentalhealthfirstaid.org/mental-health-resources/>

RECOMMENDATION 9:

Optimize disaster recovery funding to strengthen the economic security of families with children and youth, and reduce child poverty.

WHY?

High levels of child poverty pose a challenge for Puerto Rico's economic development and long-term fiscal viability. Children who experience poverty, especially persistent poverty, are less likely to complete higher education,⁴⁰ and more likely to have health problems⁴¹ and be poor as adults.⁴² Hence, when child poverty is not addressed it can have a long term impact on the workforce, and government costs. As an example, according to an estimate by Harry Holzer, an economist at Georgetown University, child poverty costs the United States over \$500 billion a year on lost capital and government expenses related to crime and health services.⁴³

In addition to posing a challenge for economic development, child poverty poses a challenge to resiliency. According to the Rockefeller Center's Resiliency Framework, a city or jurisdiction "characterized by poverty, social conflict, poor quality infrastructure and weak governance is not resilient.... [and] it harms its ability to recover from a natural disaster."⁴⁴ Poverty compromises the ability to move from relief to recovery, and also challenges families' abilities to adequately prepare for future natural disasters.

In the short term, disasters have a negative impact on output, income, and employment, which could further increase the child poverty rate of the island, especially when we consider the results of the study of the impact of Hurricane Maria on children in Puerto Rico. The study showed twenty-two percent (22%) of families with children earnings less than \$15,000 a year reported a reduction in their hours for work while another twenty-three percent (23%) lost their employment.

Nonetheless, when measured by GDP, recovery spending may lead to higher output and employment after a period of time.⁴⁵ A report for the Puerto Rico Planning Board on Puerto Rico's economic outlook highlights that the unemployment rate was

about eight percent (8.4%) during the month of September 2018, in comparison to about ten percent (10.6%) for September 2017 when hurricane Maria made landfall.⁴⁶ According to a memo prepared by FEMA, there is a demand of 185,000 additional local jobs mostly in construction, administrative services and management. It is important that vulnerable groups, like families with children living in poverty can take advantage of this economic uptick after a disaster like hurricane Maria.⁴⁷

CDBG-DR and other disaster related funds present an opportunity to change the course of the island's economic development, and resiliency through a focus on child poverty. In the short term, efforts aimed at reducing child poverty should increase the workforce participation of parents; and in the long term it ensures a healthy and educated workforce. Furthermore, the increased economic security of families should lead to increased resiliency from future disasters.

HOW?

RECOMMENDATION 9A:

Both central and municipal governments, as well as the philanthropic sector, should purpose disaster funding to create a Rapid Re-Training Workforce Programs that focus on youth and families with children.

Youth and families with children face specific barriers when entering the workforce. These include the lack of previous experience, spells of disconnection from the labor market, and lack of childcare. These challenges can be exacerbated in a post-disaster scenario, where child care might be further disrupted, transportation means might have been lost, and certain industries are severely impacted. Although the central government has some initiatives in place to connect people to the labor market, such as "Construimos"⁴⁸ and the federal government has provided assistance through Workforce Innovation and Opportunity Act (WIOA) dislocated workers grants,⁴⁹ further attention and funding needs to be invested in creating innovative approaches to reach youth and families with children. The investments should take into consideration:

- Improving outreach to youth and families with children
- The provision of holistic services that address specific barriers to employment- such as childcare, transport and mental health supports.
- The use of financial incentives throughout rapid re-training programs.
- Share employment sector information with workforce development programs to align programmatic offers.

RECOMMENDATION 9B:

Provide and/or identify technical assistance for staff and sub-grantees in the area of child poverty reduction strategies.

This recommendation is based on the Central Recovery and Reconstruction Office (CRRO) task “to advise the Governor and provide technical assistance to other entities across the Government related to recovery, as required.”⁵⁰ For a child poverty reduction strategy to be effective there needs to be a deeper understanding of this issue from both the administrative office and the sub-grantees on the areas of highest concentration about challenges and barriers, and best practices. We recommend providing technical assistance and training on:

- The rates of child poverty and underlying causes;
- The research and science about the impacts of poverty on child and youth development;
- What children, youth and parents living in poverty have identified as major barriers to leave poverty;
- Evidence-informed policies and programming to reduce child poverty, including two-generation models.

EXAMPLES, RESOURCES AND TOOLS:

Other jurisdictions have deployed workforce programs.

- In Louisiana, the Office of Community Development -Disaster Recovery Unit (OCD-DRU) implemented a workforce development program by partnering with universities and technical learning institutions. These institutions created workforce training programs for construction related jobs that were in high demand after the natural disaster. The program targeted low – income communities and included childcare and transportation for participants.

[-http://www.lma.org/LMA/Latest_News_Items/Latest_Information_from_Restore_Louisiana.aspx](http://www.lma.org/LMA/Latest_News_Items/Latest_Information_from_Restore_Louisiana.aspx)

- Other workforce programs that seem to be relevant for Puerto Rico already exist and can serve a model to follow like Youth Build. Youth Build provides pre-apprenticeship services that support education, occupational skills training, and employment services to at-risk youth, ages 16 to 24, while performing meaningful work and service to their communities. In addition to construction skills training, Youth Build includes occupational skills training in other in-demand industries.

[-https://www.youthbuild.org/](https://www.youthbuild.org/)

RECOMMENDATION 10:

Develop a public policy agenda in order to address the migration crisis among young people families with children.

WHY?

It is of the utmost importance that measures be taken to actively address the exodus of families with children. Puerto Rico's child population has declined by thirty-five percent (35%) between 2007 and 2017.⁵¹ Prior to Hurricane Maria, there was a high rate of outmigration in Puerto Rico. This reduction in the child population is fueled by low birth rates and migration. Between 2006 and 2016, an average of 54,000 people migrated annually to the United States.⁵² After hurricane Maria this number tripled. According to the Center for Puerto Rican Studies (CENTRO) estimated that the number of migrants ranges from 159,415 up to 176,603.⁵³ This should be an urgent concern for the government given the implication of population loss, particularly of school aged children, on economic growth. According to experts, an ageing population will tend to lower both labor-force participation and thereby raising concerns about a future slowing of economic growth.⁵⁴ Not addressing this would limit any economic development strategy for Puerto Rico. Results from the study of the impact of hurricane Maria on children showed that almost after a year from the impact of hurricane Maria, 31% of respondents would likely move out of Puerto Rico as a consequence of hurricane Maria. From this group, fifty-one (51%) were looking into moving to continental US. Moreover, recent data from the Puerto Rico Department of Education showed an 11% percent decrease in enrollment of students between the 2017-2018 and 2018-2019 academic years, this represents 38,814 students. This becomes –twenty-eight (28%) when compared to the 2013-2014 academic year.⁵⁵

HOW?

An executive order could create a commission or working group to develop a public policy agenda on migration:

- Include experts on migration, demography and others with representation of government, civil sector, private institutions, the academia and local Puerto Rican families.
- The working group can meet for 6 months and focus on analyzing the problem of migrating families with children.
- Provide data, policy analysis and political commitment to the efforts of the working group.

- The working group should focus on key aspects that impact families with children like: economic security, labor market opportunities, support systems like child care, special populations like: single mother households, working poor, children and families living in extreme poverty.
- Adopt recommendation from the Working Group on the Migration of Puerto Rican Families to develop a public policy agenda that can address this phenomenon.

EXAMPLES, RESOURCES AND TOOLS:

Working groups have been convened in the past to address other pressing issues through executive order or legislation. Examples are:

- Consejo Multisectorial del Sistema de Salud en Puerto Rico
-<http://www2.pr.gov/ogp/Bvirtual/LeyesOrganicas/PDF/235-2015.pdf>
- Consejo Multisectorial para la Niñez Temprana en Puerto Rico
-<http://www.lexjuris.com/lexle/eyes2008/lexl2008093.htm>
- Comité Multisectorial para el Aumento del Salario Mínimo
-<https://noticiasmicrojuris.files.wordpress.com/2017/03/2017oe27.pdf>



CONCLUSION

Ensuring that children, youth and their families have an equitable recovery process and are better prepared to cope with future natural disasters should be a priority for all those interested in a resilient Puerto Rico. Children and their families are key to the prosperity and progress of Puerto Rico, especially at a time when Puerto Rico faces the demographic challenge of an aging and declining population. However, children and youth were one of the most vulnerable groups in Puerto Rico due to the high levels of poverty and faced aggravating circumstances in the wake of the disaster. Although the recommendations contained herein provide a map to meet the needs of children and young people in the recovery process, it is important to continue exploring public policies that support children, youth and their families after the recovery.

To ensure that in a future disaster our children and youth, together with their families, can have better aid and less instability, the Youth Development Institute will continue to promote research and recommend policies. In this way, we do not seek to return to the day before Maria, but we move towards a Puerto Rico where each child can develop to its full potential. Let us turn this crisis into an opportunity for development and growth for Puerto Rico and its most valuable resource: childhood and youth.



REFERENCES

- ¹Back, E., Cameron, C., & Tanner, T. (2009) Children and Disaster Risk Reduction: Taking stock and moving forward. Retrieved from: https://www.preventionweb.net/files/15093_12085ChildLedDRRTakingStock1.pdf
- ²The Annie E. Casey Foundation (2018) Kids Count Data Book. Retrieved from: <http://juventudpr.org/sobre-nosotros/biblioteca/?libroId=42809>
- ³Poverty status in the past 12 months of families by number of related children under 18 years (2017) American Community Survey 1-Year Estimates. Retrieved from: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_1YR_C17012&prodType=table
- ⁴Instituto del Desarrollo de la Juventud (2018) Índice de Bienestar de la Niñez y la Juventud. Retrieved from: juventudpr.org/datos/indice-de-bienestar/tabla-comparativa-con-eeuu/
- ⁵Ycare International (2010) Disaster Preparedness Planning Guide. Retrieved from: <http://1c8puy1yIrov7ssf1oz3o22-wpengine.netdna-ssl.com/wp-content/uploads/2014/10/Disaster-Preparedness-Planning-Guide.pdf>
- ⁶Osofsky, J., Osofsky H. and Harris, W. (2007) Katrina's Children: Social Policy Considerations for Children in Disasters. Social Policy Report Giving Child and Youth Development Knowledge Away. Retrieved from: <https://eric.ed.gov/?id=ED521702>
- ⁷Homeland Security Operational Analysis Center (2018) Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico. Retrieved from: <http://www.p3.pr.gov/assets/pr-draft-recovery-plan-for-comment-july-9-2018.pdf>
- ⁸Puerto Rico Department of State - https://estado.pr.gov/apex/f?p=118:15:10262516878324::NO::P15_ANO:2017. Note: This executive order was amended by Executive Order 69 last November 3, 2017.
- ⁹Shaw, J. (2016) Community-Based Disaster Risk Reduction. Oxford Research Encyclopedia of Natural Hazard Science. Retrieved from: <http://oxfordre.com/naturalhazardscience/view/10.1093/acrefore/9780199389407.001.0001/acrefore-9780199389407-e-47?print=pdf>
- ¹⁰World Health Organization (2017) A Strategic Framework for Emergency Preparedness. Retrieved from: <https://extranet.who.int/sph/sites/default/files/document-library/document/Preparedness-9789241511827-eng.pdf>
- ¹¹Pfefferbaum, B., Pfefferbaum, R. & Van Horn, R. (2018) Involving children in disaster risk reduction: the importance of participation. *European Journal of Psychotraumatology*, 9:sup2, 1425577, DOI: 10.1080/20008198.2018.1425577
- ¹²Save the Children (2018) Still at Risk: Children One Year After Hurricane Harvey. Retrieved from: <https://www.savethechildren.org/content/dam/usa/reports/emergency-response/still-at-risk-children-one-year-after-hurricane-harvey-full-report.pdf>
- ¹³Back, E., Cameron, C., & Tanner, T.M. (2009) Children and disaster risk reduction: taking stock and moving forward', Children in a Changing Climate Research Paper, Institute of Development Studies, Brighton. Retrieved from: https://www.preventionweb.net/files/15093_12085ChildLedDRRTakingStock1.pdf
- ¹⁴David J. Schonfeld, Thomas, Demaria (2015) Providing Psychosocial Support to Children and Families in the Aftermath of Disasters and Crises. *American Academy of Pediatrics*. Vol. 136. Retrieved from: <http://pediatrics.aappublications.org/content/136/4/e1120>
- ¹⁵Federal Emergency Management Agency (2011) Business Continuity and Disaster Preparedness Planning Patterns and Findings from Current Research. Retrieved from: <https://www.fema.gov/media-library-data/20130726-1854-25045-6573/businesscpr.pdf>
- ¹⁶Red de Fundaciones (2018) Puerto Rico una Nueva Realidad: La respuesta del Tercer Sector al Paso del Huracán María. Estudios Técnicos Marzo 2018.
- ¹⁷Benavidez, M. (2018) Disaster Recovery Guidance Series Transport Sector Recovery: Opportunities to Build Resilience. Retrieved from: <https://www.gfdrr.org/sites/default/files/publication/transport-sector-recovery.pdf>
- ¹⁸Illinois Emergency Medical Services for Children (2016) Emergency Preparedness Planning Guide for Child Care Centers & Child Care Homes Retrieved from: [https://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/disasterpreparedness/organizationalresources/childcarecenters/Emergence%20Preparedness%20Planning%20Guide%20for%20Child%20Care%20Centers%202016\(2\).pdf](https://ssom.luc.edu/media/stritchschoolofmedicine/emergencymedicine/emsforchildren/documents/disasterpreparedness/organizationalresources/childcarecenters/Emergence%20Preparedness%20Planning%20Guide%20for%20Child%20Care%20Centers%202016(2).pdf)
- ¹⁹Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico. Retrieved from: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>
- ²⁰The World Bank Group (2013) Building Resilience to Disaster and Climate Change through Social Protection. Retrieved from: <http://documents.worldbank.org/curated/en/187211468349778714/pdf/796210WP0Build0Box0377381B00PUBLIC0.pdf>
- ²¹Jha, A. & Stanton-Geddes, Z. Eds. (2013) Strong, Safe, and Resilient: A Strategic Policy Guide for Disaster Risk Management in East Asia and the Pacific. Retrieved from: <http://documents.worldbank.org/curated/en/230651468036883533/pdf/758470PUB0EPI0001300PUBDATE02028013.pdf>
- ²²114th Congress (2016) Congressional Task Force on Economic Growth for Puerto Rico Report. Pág. 30 – 32. Retrieved from: <https://www.finance.senate.gov/imo/media/doc/Bipartisan%20Congressional%20Task%20Force%20on%20Economic%20Growth%20in%20Puerto%20Rico%20Releases%20Final%20Report.pdf>
- ²³Poverty status in the past 12 months of families by number of related children under 18 years (2017) American Community Survey 1-Year Estimates. Retrieved from: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_1YR_C17012&prodType=table
- ²⁴H.R. 2266, Additional Supplemental for the Appropriations for Disaster Relief Requirements Act, 2017, P.L. 115-72. Retrieved from: <https://www.congress.gov/bill/115th-congress/house-bill/2266>
- ²⁵Back, E., Cameron, C., & Tanner, T. (2009) Children and Disaster Risk Reduction: Taking stock and moving forward. Retrieved from: https://www.preventionweb.net/files/15093_12085ChildLedDRRTakingStock1.pdf
- ²⁶Tarazona, M. & Gallegos, J. (2011) Recent Trends in Disaster Impacts on Child Welfare and Development 1999-2009. Retrieved from: https://www.preventionwebnet/english/hyogo/gar/2011/en/bgdocs/Tarazona_&_Gallegos_2010.pdf
- ²⁷The task force is created by the US Department of Health and Human Services (HHS) after a natural disaster to assist in the coordination of the emergency response in relation to children and youth. More information here: <https://www.acf.hhs.gov/ohsepr/preparedness-resiliency/children-youth-task-forces-in-disaster>
- ²⁸USAID from the American People (2014) Guide To Education In Natural Disasters: How USAID Supports Education In Crises. Retrieved from: <https://www.usaid.gov/what-we-do/education/educating-children-and-youth-crisis-and-conflict-situations/Guide-Education-Natural-Disasters>
- ²⁹The Southern Education Foundation (2007) Education after Katrina Time for a New Federal Response. Retrieved from: <http://www.southerneducation.org/getattachment/c1beafca-fe71-4abe-82a2-c9fbdc8fe9e/Education-after-Katrina-Executive-Summary.aspx>
- ³⁰KPMG (2017) Building on the Basics: Lessons learned about recreation's role in emergency response and recovery. Retrieved from: <https://www.alberta.ca/assets/documents/ct-building-basics-report.pdf>

³¹Federal Emergency Management Agency (FEMA) Evaluarán daños del huracán María a las escuelas de Puerto Rico. Retrieved from:

<https://www.fema.gov/es/news-release/2018/06/11/evaluaran-danos-del-huracan-maria-las-escuelas-de-puerto-rico>

³²Federal Department of Education- Immediate Aid to Restart School Operations (Restart) Retrieved from: <https://www2.ed.gov/programs/restart/awards.html>

³³Department of Education Master Plan _ December 2018. Retrieved from: http://www.de.gobierno.pr/files/2018/Master_plan_mantenimiento_diciembre_-_enero_2019_xlsx_1.pdf

³⁴Negociado para el Manejo de Emergencias y Desastres Naturales y Administración de Desastres. Temporada de Huracanes 2018 - <http://temporadadehuracanes.pr.gov/>

³⁵Substance Abuse and Mental Health Administration (2018) Disaster Technical Assistance Center Supplemental Research Bulletin Behavioral Health Conditions in Children and Youth Exposed to Natural Disasters. Retrieved from: <https://www.samhsa.gov/sites/default/files/srb-childrenyouth-8-22-18.pdf>

³⁶McLeod, J. & Shanahan, M. (1993) The lifelong effects of early childhood adversity and toxic stress. *American Sociological Review*. Vol. 58, No. 3. pp. 351-366.

³⁷Lupien, S. J., King, S., Meaney, M. J., & McEwen, B. S. (2001). Can poverty get under your skin? Basal cortisol levels and cognitive function in children from low and high socio-economic status. *Developmental Psychopathology*, 13(3), 653-676.

³⁸Erickson, K., Drevets, W., & Schulkin, J. (2003). Glucocorticoid regulation of diverse cognitive functions in normal and pathological emotional states. *Neuroscience and Biobehavioral Reviews*, 27, 233-246.

³⁹Shonkoff JP, Garner AS. The lifelong effects of early childhood adversity and toxic stress. *American Journal of Pediatrics*. 2012;129(1): e232-e4

⁴⁰Ratcliffe, C. (2015). *Child Poverty and Adult Success*. Washington, DC: Urban Institute. Retrieved from: <https://www.urban.org/sites/default/files/publication/65766/2000369-Child-Poverty-and-Adult-Success.pdf>

⁴¹Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371-399.

⁴²Ratcliffe, C. & McKernan, M. (2010) *Childhood Poverty Persistence: Facts and Consequences*. Washington, DC: Urban Institute

⁴³Duncan, G. & Ludwig, J. (2007) *The Economic Costs of Poverty in the United States: Subsequent Effects of Children Growing Up Poor*. Institute for Research on Poverty Discussion Paper no. 1327-07. Retrieved from: <https://irp.wisc.edu/publications/dps/pdfs/dp132707.pdf>

⁴⁴Da Silva, J. (2015) *City Resilience Framework*. Retrieved from: <https://www.rockefellerfoundation.org/report/city-resilience-framework/>

⁴⁵Baily, Martin N. (2011) *Can Natural Disaster Help Stimulate the Economy*. Retrieved from: <https://www.brookings.edu/opinions/can-natural-disasters-help-stimulate-the-economy/>

⁴⁶Planning Board (2018) *Resumen Económico de Puerto Rico*. Retrieved from: <http://jp.pr.gov/Portals/0/Economia/Resumen%20Econ%C3%B3mico/Revista/2018.11%20-%20Resumen%20Econ%C3%B3mico%20-%20Nov%202018%20-%20Volumen%20II%20N%C3%BAmero%2011.pdf?ver=2018-11-29-225208-920>

⁴⁷Federal Emergency Management Agency (2018) *Recovery Job Demand Creation Brief*. FEMA Guaynabo, Puerto Rico Office.

⁴⁸Information retrieved from a Government of Puerto Rico website - <https://www.construimos.pr/>

⁴⁹Information retrieved from FEMA Website. <https://www.fema.gov/news-release/2018/09/10/fact-sheet-obligated-funding-puerto-rico>

⁵⁰Executive Order 2017-65 (Later amended by executive order 2017-69)

⁵¹Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico. Retrieved from: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

⁵²Instituto de Estadística (2018) *Perfil del Migrante 2016*. Retrieved from: https://estadisticas.pr/files/Publicaciones/PM_2016_1.pdf

⁵³Center for Puerto Rican Studies (2018) *Puerto Rico Post Maria*. Retrieved from: <https://centropr.hunter.cuny.edu/events-news/rebuild-puerto-rico/puerto-rico-post-maria-report>

⁵⁴Bloom, D., Canning, D. & Fink, G. (2010) Implications for population ageing for Economic Growth. *Oxford Review of Economic Policy*, Volume 26, Issue 4, 1 December 2010, Pages 583-612,

⁵⁵Information received from the Puerto Rico Department of Education las September 28, 2018.



