

PUERTO RICO

DISASTER RECOVERY ACTION PLAN

FOR THE USE OF CDBG-DR FUNDS IN RESPONSE TO 2017 HURRICANES IRMA AND MARIA

DRAFT FOR PUBLIC COMMENT - MAY 10, 2018



Puerto Rico se levanta



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EXECUTIVE SUMMARY

In response to Hurricane Maria and Irma, Puerto Rico has developed a storm recovery plan to define how Puerto Rico will address the urgent humanitarian needs of island residents while also developing and implementing a transformative recovery. This recovery is based on the available funding to recover and rebuild, and just as importantly, to stimulate economic growth in every affected community. This Action Plan is based on a thoughtful, coordinated approach as the next step in the rebirth of the island.

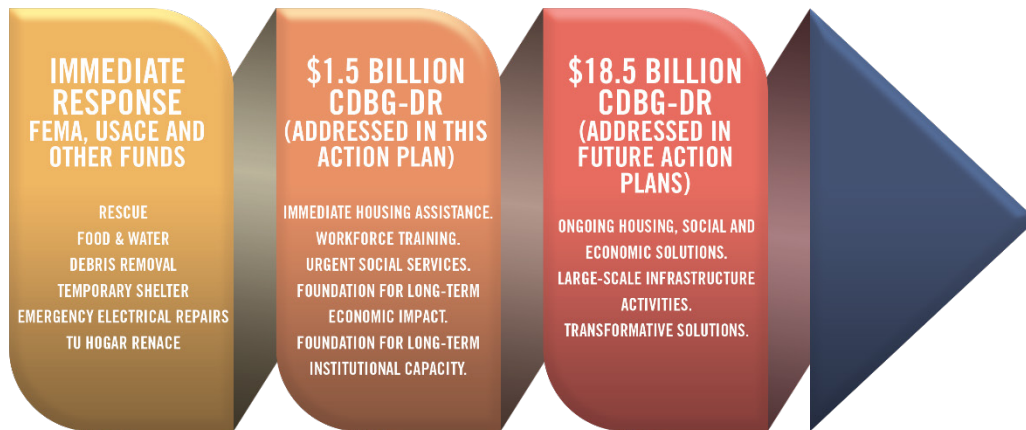
More so than any other United States (US) recovery in modern times, Puerto Rico cannot simply rebuild damaged homes, or repave damaged roads. Every program implemented, every dollar spent, must rebuild families and communities, and must also generate a long-term investment in social capital, fortify the economy, and set the stage for stability and continuity in government modernization and efficiency for decades to come.

The true impact of these hurricanes will not be known for generations. As humanitarian aid continues and structural rebuilding increases, delivering a truly resilient recovery will take time and significant resources. Two (2) months after the storms, in November 2017, Governor Ricardo Roselló commissioned an initial damage assessment, the Build Back Better report, that identified an estimated \$94 billion in recovery need from fourteen (14) possible funding sources.¹ The Action Plan outlined in the following pages includes further analysis of early damage estimates and informs an initial program design to address these needs with the first \$1.5 billion authorized by Public Law 115-56 and Public Law 115-72, and announced through Federal Register 83 FR 5844. The U.S. Department of Housing and Urban Development (HUD) is the federal oversight agency for these funds, which are administered through the Community Development Block Grant – Disaster Recovery (CDBG-DR) framework overseen by HUD.

This first Action Plan outlines the uses for the approximately \$1.5 billion in CDBG-DR made available by Congress on February 1, 2018. On April 10, 2018, Congress made available an additional \$18.5 billion in recovery funds, including funds targeted to the electric grid and mitigation activities. The parameters within which the \$18.5 billion may be spent will be outlined in forthcoming federal guidelines, and its proposed uses determined in subsequent action plans.

The unmet needs profiled in this Action Plan are based on current available data gathered from federal government sources, the Government of Puerto Rico, and the public. Public comments are incorporated as part of this professional analysis and report; a testament to the voice of the Puerto Rican people in the mission to rebuild the Island.

¹ Build Back Better Puerto Rico, Request for Federal Assistance for Disaster Recovery, November 2017 A damage assessment completed November 13, 2017 under the direction of Governor Ricardo Roselló and funded by three major foundations dedicated to a sustainable and equitable recovery effort in Puerto Rico: Ford Foundation, Open Society, and Rockefeller. The Build Back Better report is a first estimate of recovery need across all sectors and a request for federal resources from 14 identified entities.



Through the available data and input from multiple stakeholders, Puerto Rico has structured comprehensive programs eligible under CDBG-DR rules and guidelines to align with unmet need. The Federal Register requires: “... *each grantee to primarily consider and address its unmet housing recovery needs.*” Therefore, as stipulated by HUD and supported by federal data, programs under the \$1.5 billion primarily focus on housing activities and how other activities support housing recovery. These programs represent just the beginning of the recovery process, meeting a fraction of the island’s need. They must continue to be built upon over the coming years.

The Puerto Rico Department of Housing (PRDOH) has been appointed by the Governor of Puerto Rico as the responsible agency to administer the CDBG-DR grant program in close collaboration with the Central Office of Recovery, Reconstruction and Resilience (COR3). PRDOH is committed to the responsible, efficient, and transparent administration of the CDBG-DR funds allocated to the island. PRDOH has the financial management systems, policies, procedures, and practices necessary to uphold fiscal responsibility as demonstrated to HUD. PRDOH will use procedures, systems, and monitoring strategies that encompass cross-cutting regulatory requirements including HUD regulations, civil rights, environmental regulations, labor standards, fair housing law, citizen participation, and recordkeeping. PRDOH will use these procedures to ensure compliance with Public Law 115-56 and corresponding Federal Registers.



SUMMARY OF STORM IMPACT

The 2017 hurricane season brought insurmountable devastation to Puerto Rico when in the month of September, the island experienced category four and five storms, Hurricane Irma and Hurricane Maria. Hurricane Maria was the most devastating natural disaster to hit Puerto Rico since San Felipe made landfall nine decades ago in 1928. Since that time, the population has doubled in size from 1.5 million residents compared to today's population of 3.4 million.

Hurricane Irma made landfall on September 6, 2017 as a Category 5 storm with winds up to 100 miles per hour. The storm cut power to an estimated two-thirds of the main island, leaving communities ravaged. Just two (2) weeks later, Hurricane Maria made landfall on September 20, 2017 as a Category 4 storm measuring 35 miles in width, making direct impact with the 35-mile wide island. Hurricane Maria impacted the entirety of Puerto Rico with recorded winds up to 155 miles an hour, river surges up to 47 feet, massive mudslides, and localized catastrophic flooding reaching up to 38 inches. An estimated 64 lives were immediately lost in the storm with hundreds more lost to secondary conditions caused by lack of power, contaminated water sources, and limited to no access to healthcare services. Today over 90% of the island's power has been restored, however recurring outages continue to affect the still-fragile grid.

Inundated by back-to-back storms, Puerto Rico experienced 100% impact from Hurricane Maria just two weeks after surviving regional impact from Hurricane Irma. The subsequent impact of these storms compounded damage to the island leaving extremely vulnerable housing structures extensively damaged or completely leveled in almost every municipio.²

As a US territory located 1,000 miles from the mainland states, the Puerto Rican archipelago is isolated from the continental US and depends heavily on maritime commerce for major resources.

² From the U.S. Census, "The primary legal divisions of Puerto Rico are termed 'municipios.' For data presentation purposes, the Census Bureau treats a municipio as the equivalent of a county in the United States." https://www.census.gov/geo/reference/gtc/gtc_pr.html The term "municipio" is used throughout this plan so as not to confuse readers who may infer that a municipality is an incorporated place equivalent to a city.

Hurricane warnings were issued 37 hours³ before landfall, but due to the severity of Hurricane Maria and the trajectory of the storm, first responders were unable to preposition relief resources. Relief efforts and immediate aid were further delayed by up to three days due to the shutdown of significantly damaged seaports and airports.

The geography of the island further complicated relief efforts. Stretching 100 miles across and 35 miles top to bottom, the island is covered with vastly different terrain: rain forest, deserts, beaches, caves, and rivers. Puerto Rico has three main physiographic regions: the mountainous interior which covers approximately 60% of the island, the coastal lowlands, and the karst area characterized by underground drainage systems with sinkholes and caves. There are over 50 rivers and 60 watersheds that surged with flood waters when Maria hit.



According to data gathered by the FEMA Individual Assistance Program, hurricanes Irma and Maria caused damage to an estimated 1,067,618⁴ homes, the collapse or severe obstruction of numerous roads, and loss of power across the entire island. Post-storm conditions have only complicated relief efforts as residents had been left without essential services including power and clean water.

The National Oceanic and Atmospheric Administration (NOAA) recorded Hurricane Maria winds that reached up to 155 mph in the City of San Juan. Early estimates accurately captured extreme wind and rain threats, and a storm trajectory to impact the island head-on before proceeding northwest to the mainland US. Puerto Rico sustained hurricane force winds sweeping at maximum strength first through the islands of Vieques and Culebra then the northeast coast before sweeping westward across the main island.

³ National Hurricane Center Tropical Cyclone Report, Hurricane Maria, April 10, 2018 https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf

⁴ FEMA Individual Assistance data, as of April 13, 2018

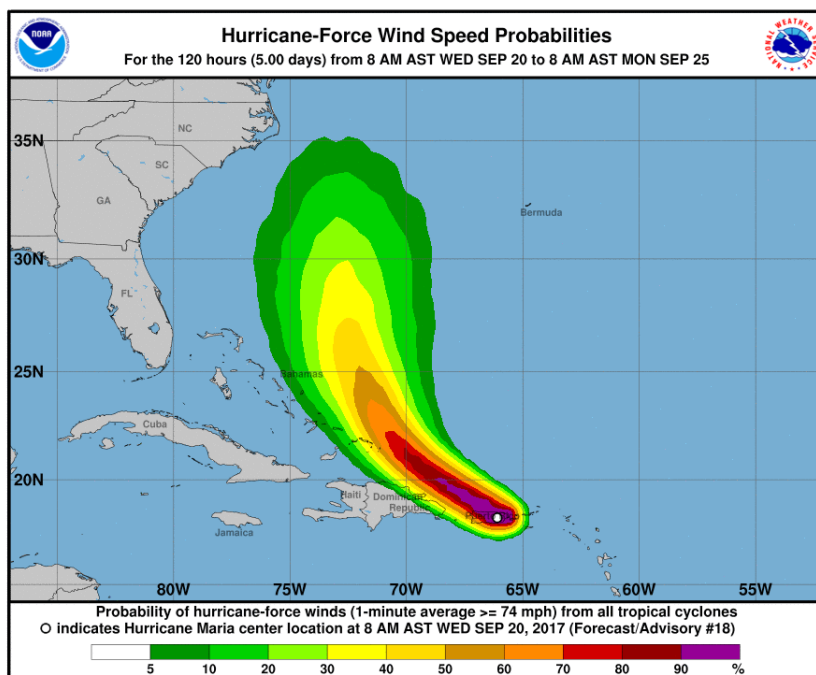


Figure 1. Hurricane Maria Wind Probabilities, image courtesy of NOAA

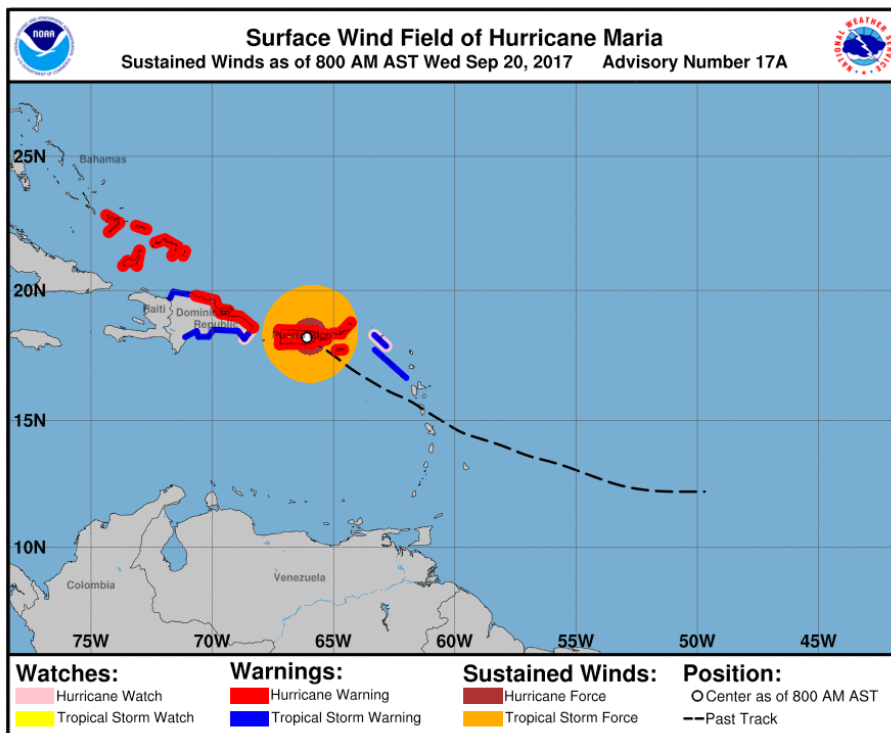


Figure 2. Hurricane Maria Wind Prediction, image courtesy of NOAA

Storm conditions were so extreme, surface observation from NOAA land stations across the island became overburdened and failed during the storm.⁵ Wind and rain collapsed weak homes and buildings, uprooted trees, and lashed fragile power lines in every corner of the island causing a complete blackout.

⁵ National Hurricane Center Tropical Cyclone Report, Hurricane Maria, April 10, 2018 https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf

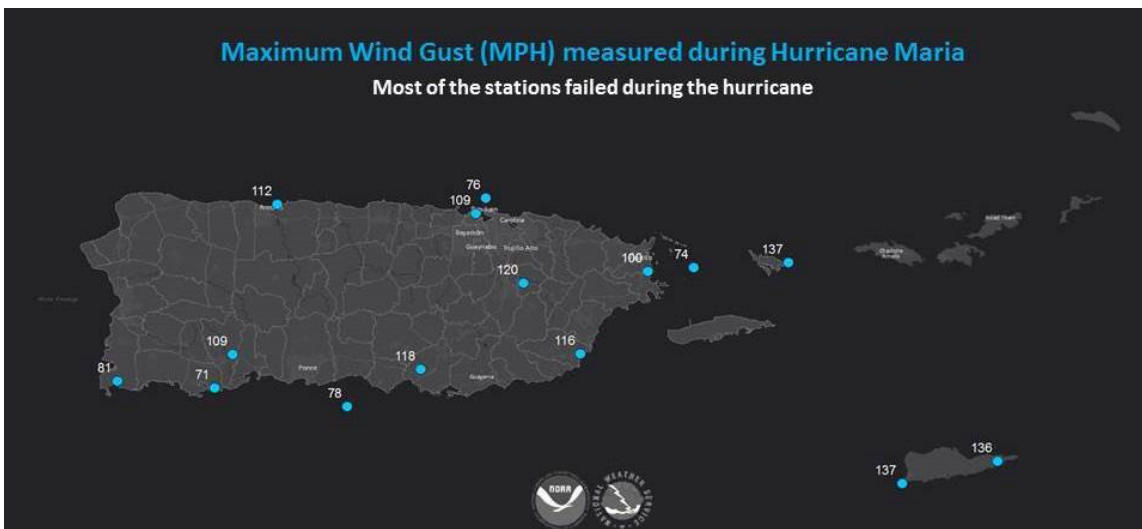


Figure 3. NOAA Image of Hurricane Maria Maximum Wind Gusts

Severe flooding and mudslides occurred in every interior mountainous region of the island. Mudslides and sinkholes left communities unrecognizable and, in many cases, inaccessible. Flooding reached record levels washing away cars, homes and leaving inches of threatening, stagnant water in the aftermath. The most significant flooding occurred immediately around the La Plata River⁶ located on the northern coast of the island, and continued to build at peak levels around the southern interior of the island. The lethal combination of flooding and weakened infrastructure caused a complete failure of the Guajataca Dam which was designed to hold back floodwater from a reservoir located between the municipios of San Sebastián, Quebradillas, and Isabela.

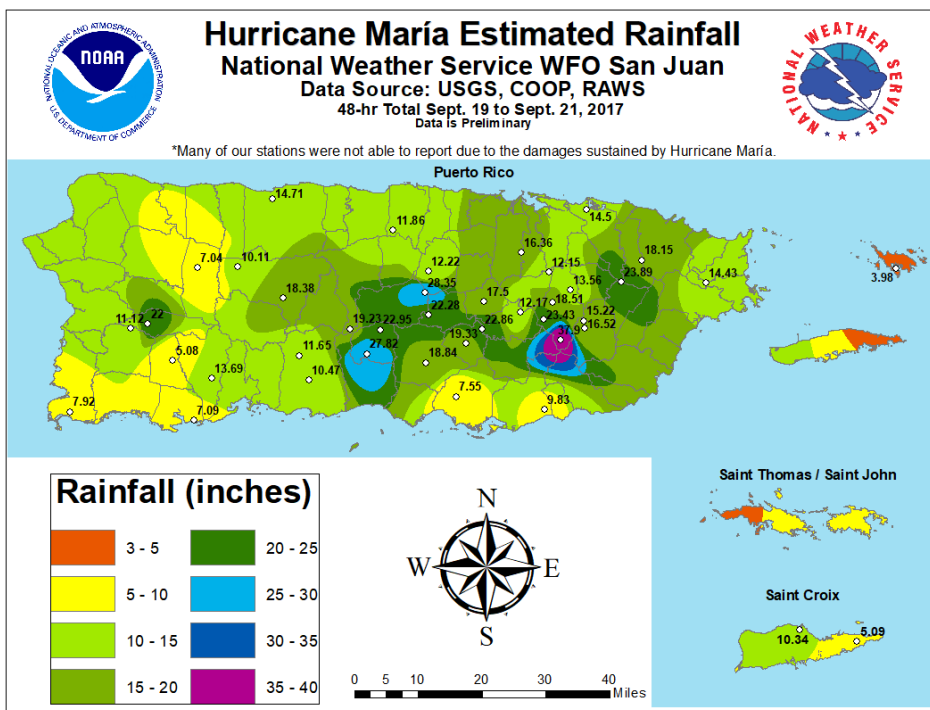


Figure 4. Hurricane Maria Rainfall, image courtesy of NOAA

⁶ National Hurricane Center Tropical Cyclone Report, Hurricane Maria, April 10, 2018 https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf

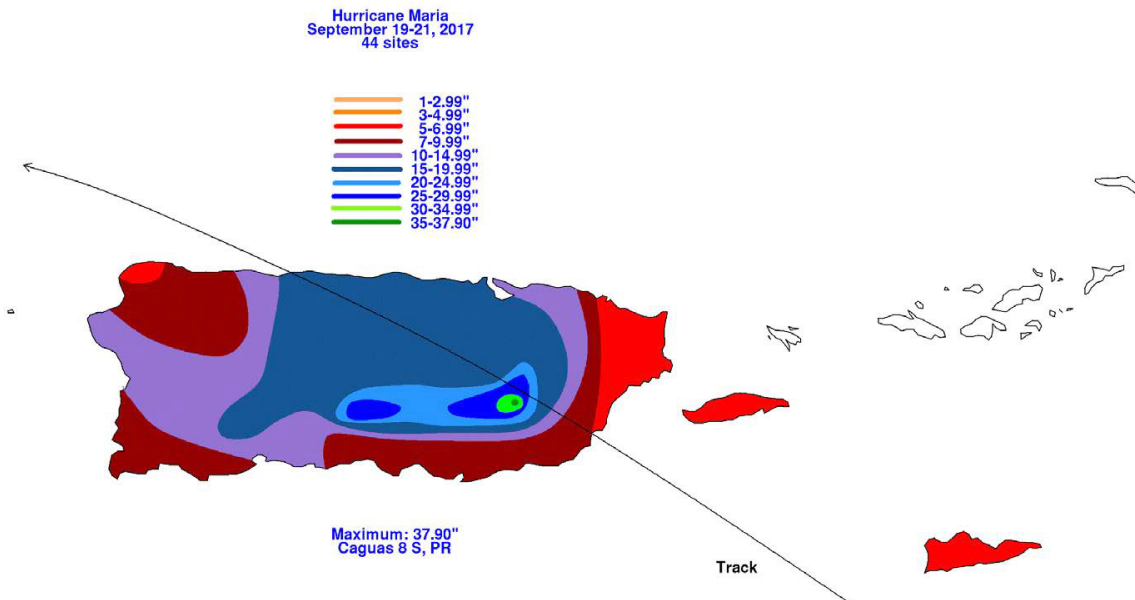


Figure 5. Storm total rainfall (inches) from Hurricane Maria.
Figure courtesy of David Roth, NOAA Weather Prediction Center

The National Hurricane Center recorded storm surge levels that reached maximum inundation⁷ at 6 to 9 feet above ground level along the coasts of the Humacao, Naguabo, and Ceiba municipios. The United States Geological Survey (USGS) data suggests maximum inundation level along the immediate eastern shoreline reached as high as 9 feet. Measurements along the southeastern coast reached 4 to 7 feet in the municipios of Yabucoa, Maunabo, Patillas, and Arroyo. Along the northeastern coast in the municipios of Ceiba and Fajardo, and much of the southern coast from Ponce eastward, inundation levels reached 3 to 5 feet.⁸



Figure 6. Estimated storm surge inundation (feet above ground level) based on an analysis of water level observations along the coasts of Puerto Rico and the U.S. Virgin Islands from Hurricane Maria. Image courtesy of the National Hurricane Center Storm Center

⁷ Inundation is the total water level that occurs on normally dry ground as a result of the storm tide and is expressed in terms of height above ground level.
⁸ National Hurricane Center Tropical Cyclone Report, Hurricane Maria, April 10, 2018 https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf

PUERTO RICO DISASTER RECOVERY PROGRAM

LEADING A TRANSPARENT AND COORDINATED RECOVERY

Puerto Rico is implementing a whole community approach to recovery. The Puerto Rican administration has established interagency coordination and fiscal oversight to support planning for long-term recovery and reconstruction, and to protect federal investment in the island. The Central Office of Recovery, Reconstruction, and Resilience (COR3), established by Administrative Bulletin OE-2017-65 under the existing Puerto Rico Public-Private Partnerships Authority (P3), acts as the oversight function for the Governor's Office to verify compliance of the use of all disaster recovery grant funding, including, but not limited to: FEMA 428, USDA and CDBG-DR. The COR3 office maintains an oversight and coordination role across all federal funding streams.

PRDOH retains responsibility before HUD for grant management, implementation and compliance of programs funded through CDBG-DR. Information on funds usage and outcomes are reported to the COR3 for integration into island-wide recovery operations. The COR3 oversees the development of Puerto Rico's Economic and Disaster Recovery Plan, as required by Section 21210 of the Bipartisan Budget Act of 2018, Pub. L. 115-123 (the "Act"). In coordination with the Federal Emergency Management Agency (FEMA), through the appointed Federal Coordinating Officer, COR3 provides updates to Congress on the progress of developing the 12 and 24-month Economic and Disaster Recovery Plans, of which this CDBG-DR Action Plan is a part.

In addition to regular coordination with COR3, PRDOH coordinated with federal partners, Puerto Rican agencies, civic organizations, and the public in the development of this Action Plan. This intense coordination has been essential to developing a grounded plan within the strict timelines stipulated by HUD. Noteworthy collaborators on this CDBG-DR Action Plan include: The Governor's Office, COR3, and the Puerto Rico Public Housing Administration (PRPHA).



PRDOH will remain in close coordination with COR3 and other agencies throughout the development and implementation of the CDBG-DR recovery strategy.

Building on the work of non-profits and grassroots organizations who have spent months working alongside residents and community leaders has allowed PRDOH to quickly mobilize and inform this plan. The participation of different levels of stakeholders at the federal, state and local levels has provided PRDOH with high-value input based on analyses performed through the lens of each stakeholder sector. The work of these overarching non-profit and civic organizations is even more important since the magnitude of the disaster makes it impossible for PRDOH to coordinate directly with each impacted resident. A full list of participants can be found in The Citizen Participation section of this Action Plan.

WHOLE COMMUNITY APPROACH & INTEGRATED PLANNING

Puerto Rico's devastation has been met with an outpouring of philanthropy, international response, and the assistance of domestic disaster recovery and grant compliance experts and technicians. This community response has provided Puerto Rico with expert insight into a true resiliency-based recovery. Through integrated planning, government reform, public engagement, and a 21st century approach based on technological innovation, Puerto Rico will leverage its intellectual and physical resources to maximize federal investment in the island. Puerto Rico has collaborated with recovery leaders from all sectors working together to synthesize a multitude of data and research and leverage valuable partnerships for public benefit.

A multitude of civic stakeholders have played key roles in the immediate recovery efforts, including but not limited to the Puerto Rico Community Foundation, the Foundation for Puerto Rico, United for Puerto Rico, and the Puerto Rico Recovery Fund.⁹ These organizations have channeled philanthropic donations totaling over \$40 million dollars to communities in need in the form of water and supplies, business support, wi-fi connectivity, critical care and community support. They will continue to play a key role in the long-term rebirth of the island.

Additionally, the Resilient Puerto Rico Commission, supported by the Rockefeller Foundation, together with the Ford Foundation and Open Society Foundations, has been working with communities to assess the extent of the damage, identify stressors, and envision solutions to address and help strengthen the island in an equitable, sustainable fashion. This includes partnering with the Network of Puerto Rico Foundations (Red de Fundaciones de Puerto Rico) to aid in the recovery of a network of local non-governmental organizations (NGOs). This partnership supported the initial damage assessment, the Build Back Better report, commissioned by the Governor and submitted to the President in February 2017. Rockefeller has also supported extensive public engagement through an island-wide campaign called Re-Imagine Puerto Rico designed to solicit resident input through multiple forms of communication.¹⁰

From an interagency perspective, COR3 is leading the collaborative development of a 12 and 24-month Economic and Disaster Recovery Plan, due to Congress in 180 days of the Bipartisan Budget Act of 2018, Pub. L. 115-123 (August 2018). In its first and second report to Congress, COR3 reported significant progress coordinating with FEMA and local stakeholders to develop planning categories that stem from FEMA's National Disaster Recovery Framework (NDRF), and expanded criteria to twelve (12) priority sectors for a comprehensive Recovery Plan. Working with state sector leads, COR3 is guiding a shared vision for Puerto Rico's future along the following five (5) broad elements: 21st Century Infrastructure, Sustainable Economic Growth, Fiscal Responsibility & Government Efficiency, Partnership with State and Federal Government, and Increased Commerce and Trade.¹¹ These elements are incorporated into the CDBG-DR eligible programs contained within these pages.

9 More information on each of these organizations can be found at: Puerto Rico Community Foundation <https://www.fcpr.org/que-es-una-fundacion/>, Foundation for Puerto Rico <https://www.foundationforpuertorico.org/>, United for Puerto Rico <https://www.unidosporpuertorico.com/>, and the Puerto Rico Recovery Fund <https://www.puertoricorecoveryfund.com/>

10 Rockefeller, Open Society, and Ford Foundations Announce Efforts to Help Puerto Rico Rebound and Rebuild, November 16, 2017, <https://www.rockefellerfoundation.org/about-us/news-media/rockefeller-open-society-ford-foundations-announce-efforts-help-puerto-rico-rebound-rebuild/> <<https://www.rockefellerfoundation.org/about-us/news-media/rockefeller-open-society-ford-foundations-announce-efforts-help-puerto-rico-rebound-rebuild/>>

11 Letter to Congressional Leadership <http://www.p3.pr.gov/assets/lettertocongressionalleadership-govrossello.pdf>

PRDOH is part of the Puerto Rico Housing Task Force comprised of government leaders to collaborate and advise in three critical areas: informal and substandard housing solutions, foreclosure prevention and mitigation, and flood zone impact. These subcommittees meet on a regular basis to discuss in depth environmental conditions on the ground in Puerto Rico, drivers of resilience and policy solutions, and deliver actionable solutions for Puerto Rico's recovery. The work accomplished in these committees will be incorporated into the Economic plan being developed under COR3 purview and is incorporated into this CDBG-DR Action Plan.

THIRD SECTOR AND CIVIC VISIONS FOR RECOVERY

Referenced within these pages are reports, well-researched studies, and project requests compiled and/or sponsored by non-profit organizations, advocacy groups, municipios, the private sector, and government agencies. The voice of Puerto Rico and its people is strongly represented in these high-quality research reports and therefore incorporated into this action plan as part of the unmet needs assessment.

Several of the most broadly-applicable reports include:

CHILD AND YOUTH WELL BEING INDEX, 2018, YOUTH DEVELOPMENT INSTITUTE

The non-profit organization, Youth Development Institute, published the “Child and Youth Well Being Index, 2018” which examines living conditions of children and youth between the ages of 0 to 21. The organization also published the report “Child Poverty: A Great Abyss for the Puerto Rican Economy,”¹² referenced within these pages.

SUMMARY COUNTING OF HOMELESS, 2017, DEPARTMENT OF THE FAMILY

Puerto Rico Department of the Family completed a four-phase, seven-day study to interview a sample of homeless persons in Puerto Rico published in the “Resumen conteo de personas sin hogar, 2017”¹³ (Summary Count of Homeless Persons, 2017, in its English translation).

HOUSING INDUSTRY SITUATION, PUERTO RICO BUILDERS' ASSOCIATION

The Puerto Rico Builder's Association, in partnership with Estudios Técnicos Inc., completed a housing study¹⁴ to document housing market conditions and formulate public policy recommendations. The study evaluates main indicators of the housing industry and addresses problems Puerto Ricans face in access to housing. Because the preparation of this report coincided with hurricanes Irma and Maria, the study also recommends mechanisms to address post-storm housing challenges.

¹² Child Poverty: A Great Abyss for the Puerto Rican Economy, Youth Development Instituted, <https://www.puertoricoreport.com/wp-content/uploads/2018/04/Instituto-Desarrollo-Juventud-Child-Poverty-A-Great-Abyss-for-Puerto-Rican-Economy.pdf>

¹³ Summary Counting of Homeless, 2017, Department of the Family, http://www2.pr.gov/agencias/secretariado/ProgramasServicios/Documents/COC_2017/PRESENTACION_COC_2017.pdf

¹⁴ Housing Industry Situation, Puerto Rico Builders' Association, http://www.cdbg-dr.pr.gov/wp-content/uploads/ponencias/otros/2018-03-07_Ponencia_Asoc.%20de%20Constructores.pdf

ECONOMIC REPORT TO THE GOVERNOR 2017, PLANNING BOARD OF PUERTO RICO

A report prepared by the Planning Board of Puerto Rico, which estimates economic impact to public services by analyzing physical damage, loss of income, and making adjustments for any increases in income since the time of the storm. The Puerto Rico Planning Board has the responsibility to measure and report on economic activity in Puerto Rico.¹⁵

PUERTO RICO POST-MARIA, 2018, CENTER FOR PUERTO RICAN STUDIES, CITY UNIVERSITY OF NEW YORK

This report explores measurable impacts of Hurricane Maria on the Puerto Rican population utilizing data published up to February 2018 and focuses particularly on out-migration. The Center also manages an online clearinghouse to support disaster relief and recovery efforts.¹⁶

ReIMAGINE PUERTO RICO, CITIZEN PARTICIPATION PROJECT, 2018

A report of focus group activities conducted in February and March 2018 involving more than 500 participants engaged through multiple discussion platforms. The project worked with leaders, communities and experts to create a set of recommendations to help guide recovery so that Puerto Rico may become stronger and more resilient in the long-term.¹⁷

PROJECT REQUESTS COLLECTED THROUGH PUBLIC ENGAGEMENT

Promptly after Federal Register 83 FR 5844 published, the Puerto Rico Department of Housing (PRDOH) conducted public hearings across the island to solicit input. As of May 2, 2018, a total of 71 municipios (91% of all municipios) and 65 other participants submitted written comment. Public hearing information and a history of public response can be found on the PRDOH website <http://www.cdbg-dr.pr.gov/public-hearings/>. A summary of responses containing funding requests as of May 2, 2018 by recovery area is shown in the chart below. Due to the cumulative size of submitted comments, a full public participation package can be found in a separate published volume.

¹⁵ Economic Report to the Governor 2017, Planning Board of Puerto Rico, <http://jp.pr.gov/Portals/0/Economia/Informes%20Econ%C3%B3micos%20al%20Gobernador/Informe%20Econ%C3%B3mico%20al%20Gobernador%20y%20Ap%C3%A9ndice%20Estad%C3%ADstico%202017.%20pdf.pdf?ver=2018-04-09-135004-193>

¹⁶ Puerto Rico Post-Maria, Rebuild Puerto Rico Report, City University of New York, Center for Puerto Rican Studies, https://centropr.hunter.cuny.edu/sites/default/files/PDF/puerto_rico_post_maria-2018-final.pdf

¹⁷ ReImagine Puerto Rico, Citizen Participation Project 2018, <http://www.resilientpuertorico.org/participacion-ciudadana/> <<http://www.resilientpuertorico.org/participacion-ciudadana/>>

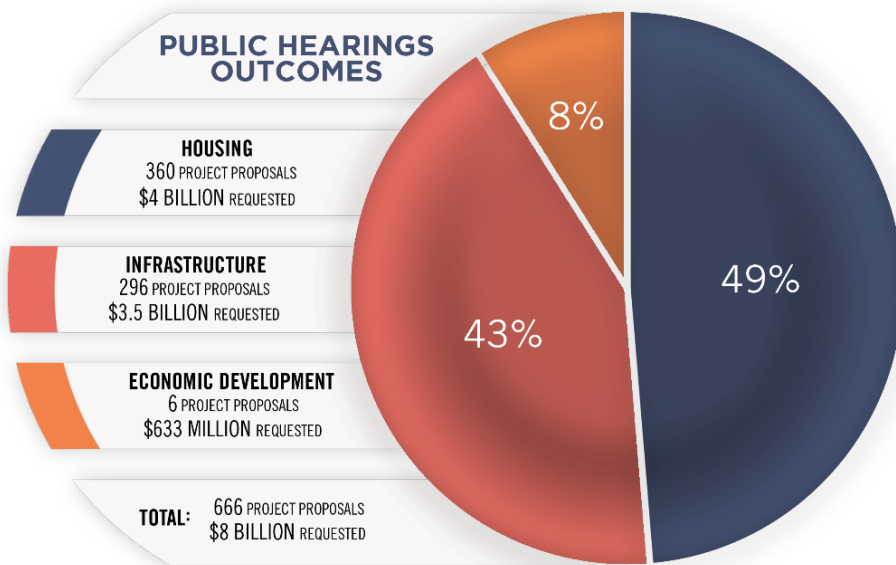


Figure 7. Summary of public hearing outcomes as of 5/2/18

Public respondents submitted project requests in the areas of housing, economic, and infrastructure recovery. At this early stage of recovery, these projects have been reviewed and considered as part of the overall need. As these projects are further reviewed for impact tied to the hurricanes, and assessed for final costs for repair, they may be further considered for inclusion in the community’s recovery profile.

Housing Projects Proposed

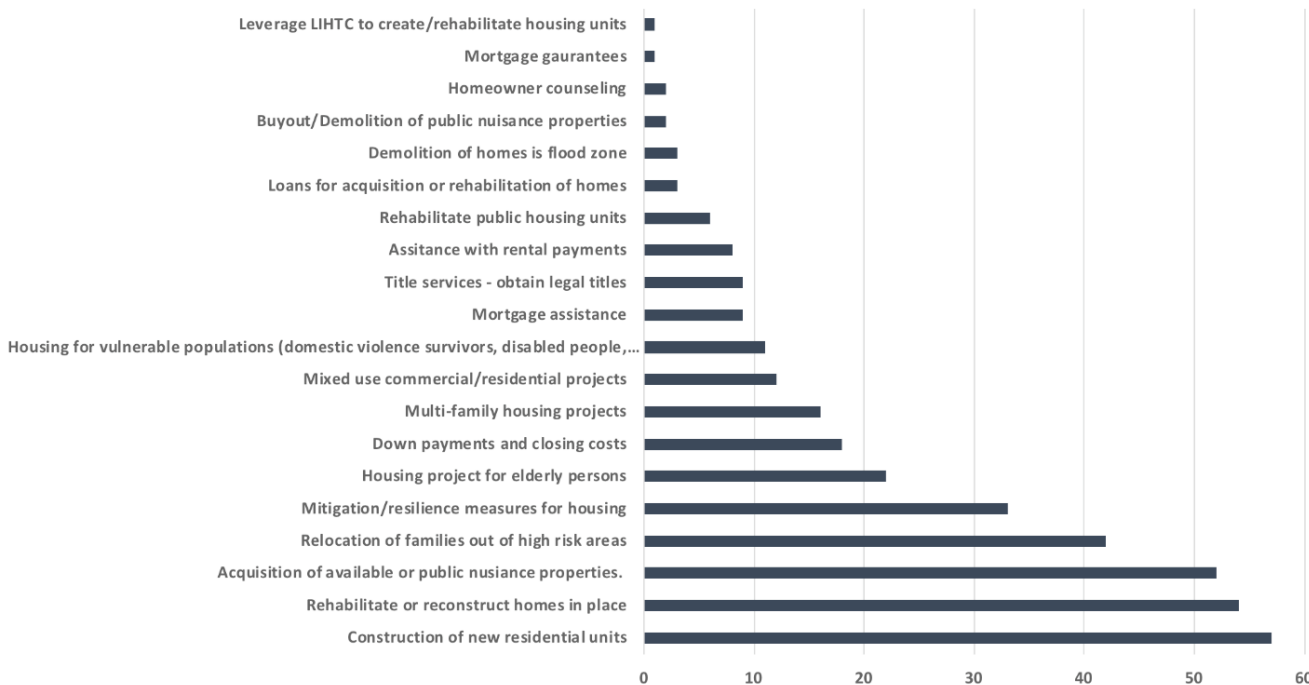


Figure 8. Housing projects proposed through public engagement

Economic Development Projects Suggested



Figure 9. Economic projects proposed through public engagement

Infrastructure Projects Proposed

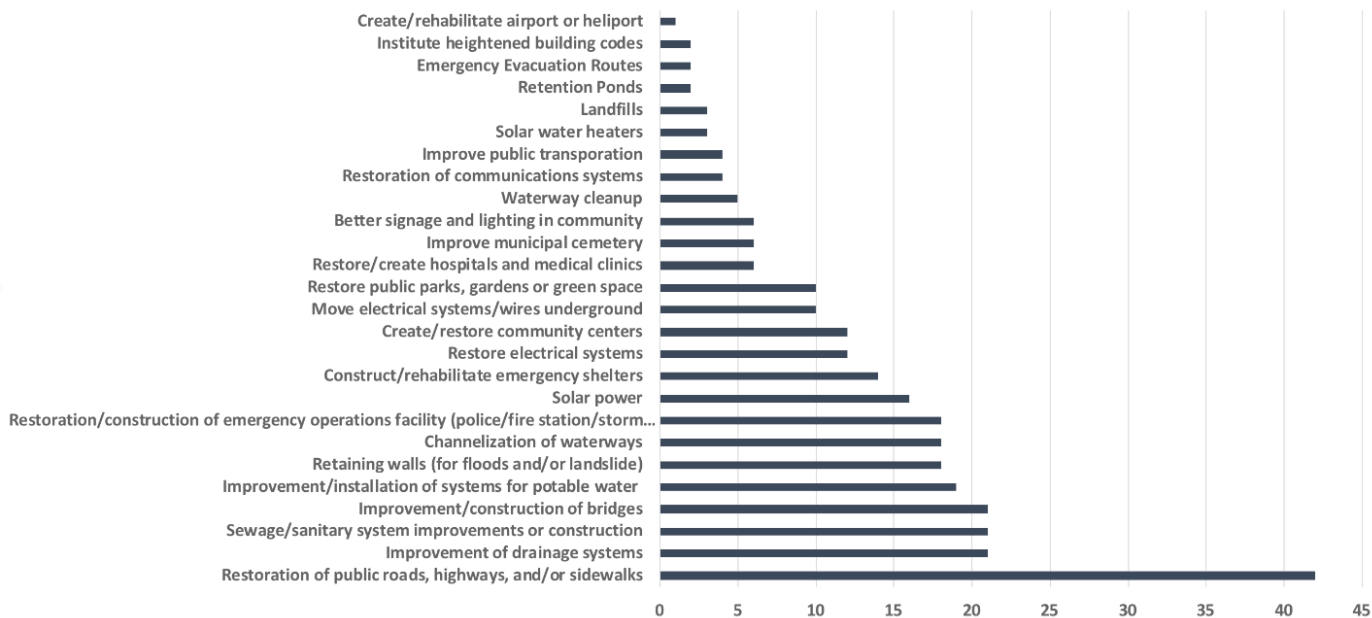


Figure 10. Infrastructure projects proposed through public engagement

COMMUNITY PROFILE: SUMMARY OF IMPACT AND PRESIDENTIALLY DECLARED AREAS

The current recovery effort is for both hurricanes Irma and Maria. Thirty-three (33) of the island's municipios were declared disaster areas in both of these storms.

Striking two-weeks before Hurricane Maria, Hurricane Irma impacted the island as a Category 5 storm leaving over 1 million residents without power. On September 5, 2017, in anticipation of the storm's path and severity, Governor Rosselló requested prepositioned aid and approval of FEMA Individual and Public Assistance pending impact of the storm. The President responded and issued a disaster declaration on September 10, 2017 for Individual and Public Assistance in the following jurisdictions:¹⁸

Hurricane Irma Designated Individual and Public Assistance (DR-4336)		
Designated Individual Assistance		
Canovanas	Fajardo	Vega Baja
Cataño	Loiza	Vieques
Culebra	Luquillo	
Dorado	Toa Baja	
Designated Public Assistance		
Adjuntas	Culebra	Naguabo
Aguas Buenas	Dorado	Orocovis
Barranquitas	Guaynabo	Patillas
Bayamón	Gurabo	Quebradillas
Camuy	Hatillo	Salinas
Canóvanas	Jayuya	San Juan
Carolina	Juncos	Utua
Catano	Las Piedras	Vega Baja
Ciales	Loíza	Vieques
Comerío	Luquillo	Yauco

Table 1. Hurricane Irma Eligible FEMA Jurisdictions

¹⁸ Presidential Disaster Declaration for Hurricane Irma <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-approves-puerto-rico-disaster-declaration/>

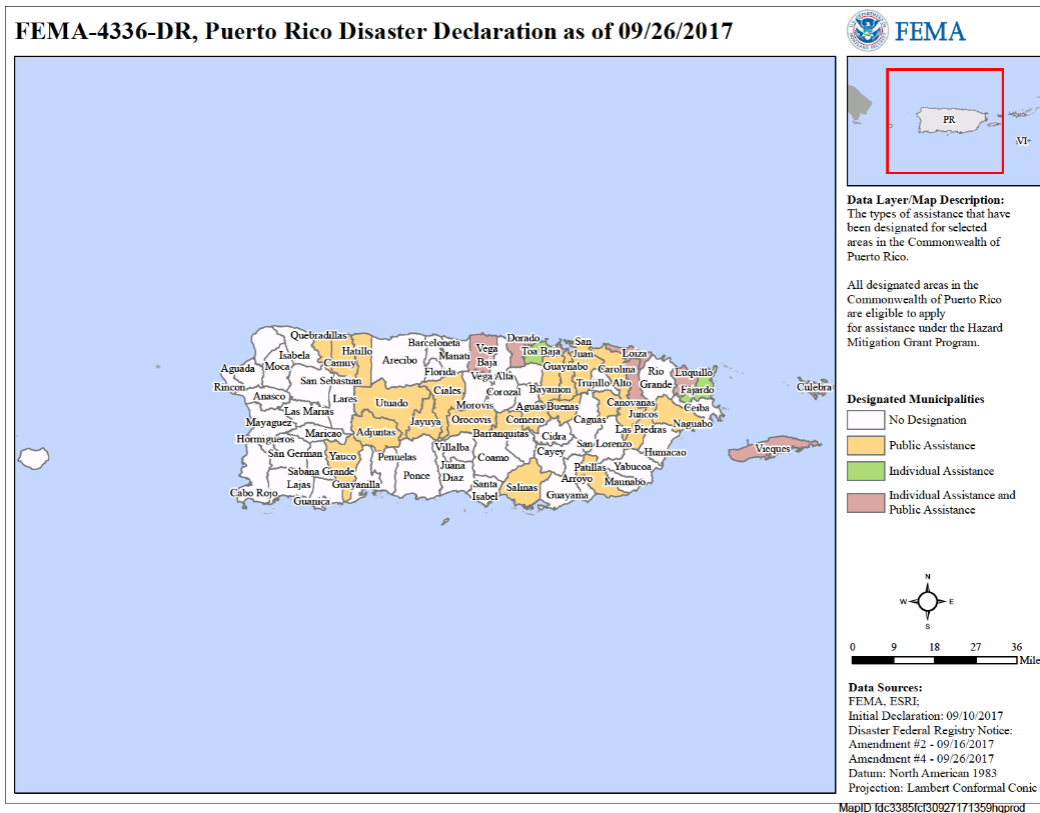


Figure 11. FEMA map of Public and Individual Assistance for Hurricane Irma

On September 20, 2017, the day Hurricane Maria made impact, Governor Ricardo Rosselló requested an expedited presidential declaration for Individual Assistance and assistance for debris removal and emergency protective measures (Categories A and B), including direct federal assistance under the Public Assistance program for all 78 municipios and Hazard Mitigation throughout the Commonwealth. The severity, magnitude and trajectory of the storm warranted the need for supplemental Federal assistance prior to the completion of joint Federal, State, and local government Preliminary Damage Assessments (PDAs).¹⁹

19 [https://www.fema.gov/media-library-data/1508251490706-c45ffe54424cebb6c3e5ae5b4ccd364b/FEMA4339DRPR\(Expedited\).pdf](https://www.fema.gov/media-library-data/1508251490706-c45ffe54424cebb6c3e5ae5b4ccd364b/FEMA4339DRPR(Expedited).pdf)

Hurricane Maria Designated Individual and Public Assistance (DR-4339)		
Adjuntas	Fajardo	Naguabo
Aguada	Florida	Naranjito
Aguadilla	Guánica	Orocovis
Aguas Buenas	Guayama	Patillas
Aibonito	Guayanilla	Peñuelas
Añasco	Guaynabo	Ponce
Arecibo	Gurabo	Quebradillas
Arroyo	Hatillo	Rincón
Barceloneta	Hormigueros	Rio Grande
Barranquitas	Humacao	Sabana Grande
Bayamón	Isabela	Salinas
Cabo Rojo	Jayuya	San Germán
Caguas	Juana Díaz	San Juan
Camuy	Juncos	San Lorenzo
Canóvanas	Lajas	San Sebastián
Carolina	Lares	Santa Isabel
Cataño	Las Marías	Toa Alta
Cayey	Las Piedras	Toa Baja
Ceiba	Loíza	Trujillo Alto
Ciales	Luquillo	Utua
Cidra	Manatí	Vega Alta
Coamo	Maricao	Vega Baja
Comerío	Maunabo	Vieques
Corozal	Mayagüez	Villalba
Culebra	Moca	Yabucoa
Dorado	Morovis	Yauco

Table 2. Hurricane Maria Eligible FEMA Jurisdictions

FEMA-4339-DR, Puerto Rico Disaster Declaration as of 11/01/2017

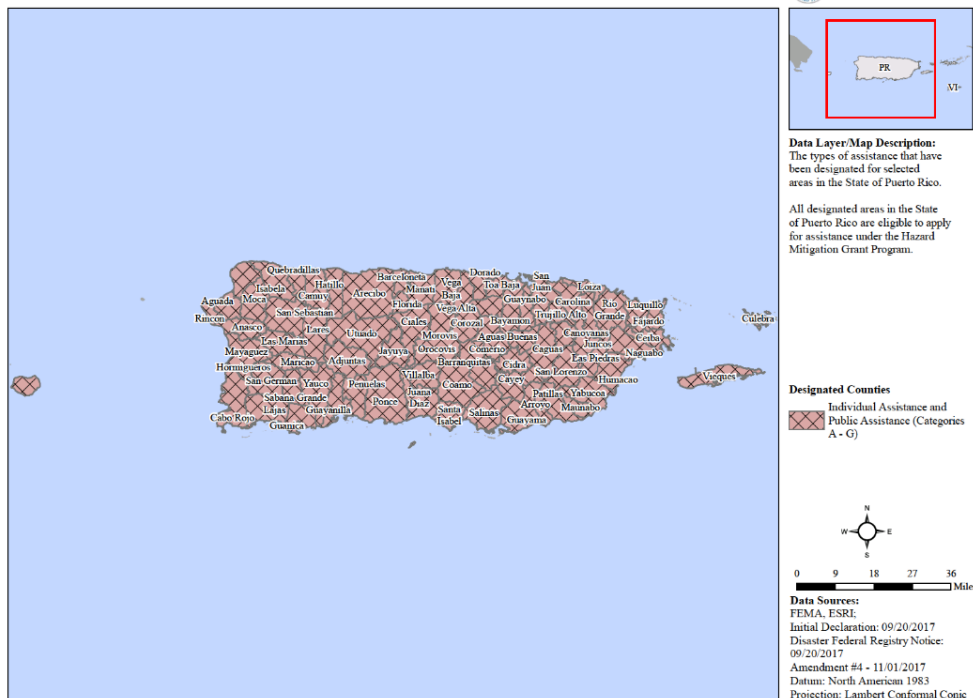


Figure 12. FEMA map of Public and Individual Assistance for Hurricane Maria

As the entirety of the Puerto Rican islands is an impact zone from these two storms, recovery needs have exceeded funding available through FEMA's Disaster Relief Fund (DRF), resulting in a special allocation by Congressional Appropriation, awarded through the Department of Housing and Urban Development (HUD) to Puerto Rico in the form of Community Development Block Grants for Disaster Recovery (CDBG-DR).

MOST IMPACTED AND DISTRESSED AREAS

HUD uses the “best available” data to identify and calculate unmet needs for disaster relief, long-term recovery, restoration of infrastructure, and housing and economic revitalization. Based on this assessment, HUD has notified Puerto Rico that it will receive two CDBG-DR grants to assist in recovery from both hurricanes Irma and Maria.

The first allocation, awarded in the amount of \$1,507,179,000 through HUD grant number B-17-DM-72-0001, requires 80% of grant funds to be allocated to HUD designated most impacted and distressed (MID) jurisdictions. Puerto Rico has thus, a minimum of \$1,205,743,200 that will be allocated for recovery projects in the following jurisdictions:

Irma and Maria Most Impacted and Distressed			
Jurisdictions			
Adjuntas	Comerío	Naguabo	
Aguada	Corozal	Naranjito	
Aguadilla	Dorado	Orocovis	
Aguas Buenas	Fajardo	Patillas	
Aibonito	Guayama	Ponce	
Añasco	Guaynabo	Río Grande	
Arecibo	Gurabo	Salinas	
Arroyo	Hatillo	San Juan	
Barceloneta	Humacao	San Lorenzo	
Barranquitas	Isabela	San Sebastián	
Bayamón	Juana Díaz	Santa Isabel	
Caguas	Juncos	Toa Alta	
Camuy	Lares	Toa Baja	
Canóvanas	Las Piedras	Trujillo Alto	
Carolina	Loíza	Utua	
Cataño	Manatí	Vega Alta	
Cayey	Maunabo	Vega Baja	
Ciales	Mayagüez	Villalba	
Cidra	Moca	Yabucoa	
Coamo	Morovis	Yauco	
Zip Codes			
00650	00664	00735	00667
00624	00678	00623	00683
00765	00773	00670	00606
00656	00677	00660	00653

Table 3. HUD Designated Most Impacted and Distressed (MID) Areas

The 80% MID areas cover almost the entirety of the island and include communities of vastly different characteristics. PRDOH will work with local governments to ensure programs serve a variety of recovery needs and provide avenues for community-driven planning.



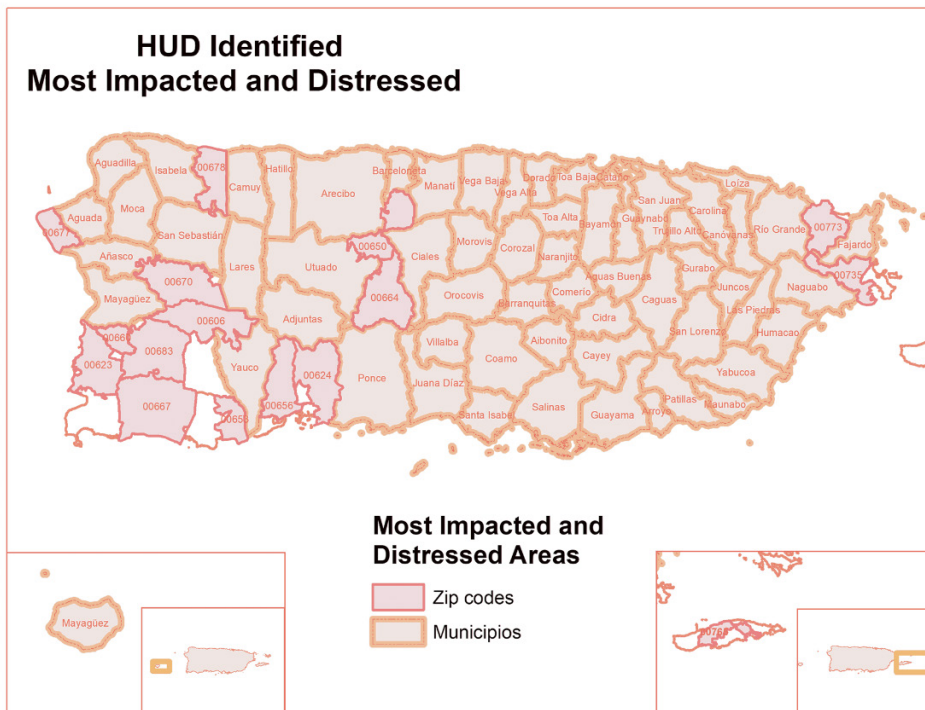


Figure 13. HUD Most Impacted and Distressed designated areas

BUILDING BACK BETTER

Puerto Rico is committed to building back stronger and more resilient to future hazards. Activities supporting this commitment will not only enhance the quality of construction for life-saving protective measures, but also preserve the integrity of the federal investment contributed by the American people. The rebirth of Puerto Rico hinges on sustainable growth yielded by the influx of recovery monies. Through strategic partnerships and resiliency planning, Puerto Rico will set the stage for long-term investment and economic growth. Implementation of recovery activities will focus on innovation and the perpetual application of mitigation and resilience techniques.

Puerto Rico will implement construction methods that emphasize quality, durability, energy efficiency, sustainability, and mold resistance. All rehabilitation, reconstruction, and new construction will be designed to incorporate principles of sustainability, including water and energy efficiency, resilience, and mitigation against the impact of future shocks and stressors. Puerto Rico will enforce procurement procedures that increase the use of sustainable standards, which may include FORTIFIED Home™ and Leadership in Energy and Environmental Design (LEED) certified construction vendors. FORTIFIED Home™ is a risk-reduction program providing construction standards for new homes and retrofit standards for existing homes.

This set of standards increases a home's resilience to natural hazards, including high wind, hail, and tropical storms through the following levels:

- Gold level for new construction of single-family, detached homes; and
- Silver level for reconstruction of the roof, windows and doors; or
- Bronze level for repair or reconstruction of the roof.

Where feasible, Puerto Rico will follow best practices such as those provided by the U.S. Department of Energy's Guidelines for Home Energy Professionals. For all new construction or for substantially rehabilitated structures, this may require installed appliances to meet ENERGY STAR certification standards at a minimum.

For non-substantially rehabilitated housing structures, Puerto Rico will follow the HUD CPD Green Building Retrofit Checklist guidelines to the extent they are applicable to the construction methods utilized on the island. When older or obsolete products are replaced as part of rehabilitation work, Puerto Rico will use products and appliances with ENERGY STAR labels, Water Sense labels, or Federal Energy Management Program (FEMP or equivalent) designations. For specific required equipment or materials for which an ENERGY STAR- or WaterSense-labeled or FEMP-designated product does not exist, the requirement to use such products does not apply.

In conducting its impact and unmet needs assessment for this CDBG-DR Action Plan, Puerto Rico has designed program objectives and supporting budgets to consider the additional costs associated with protecting housing and community investments from future disasters through eligible resilience activities.

LEVERAGING OF FUNDS

Federal Register 83 FR 5844 requires that a Disaster Recovery grantee demonstrate use of its own resources.²⁰ However, as outlined in the Build Back Better report, "*...the Government of Puerto Rico, its agencies, public corporations and instrumentalities (the "Government") are currently facing the unprecedented devastation caused by Hurricanes Irma and Maria. In addition, the Government had embarked on profound fiscal adjustments that limits the amount of reconstruction funds from its own government sources.*"²¹

A large portion of federal assistance and significant local funding delivered up to this point has largely contributed to life-sustaining efforts and temporary aid as opposed to efforts that contribute to permanent rebuilding. Such assistance allows residents to: power homes and buildings by generator power, shelter in place by replacing roofs with tarps and limited repairs, removing hazardous structural materials from their homes, and providing access to homes and communities through the removal of hazardous debris from roads and pathways.

For permanent, long-term recovery projects funded by CDBG-DR, Puerto Rico has little opportunity to leverage local funding due to the wide-spread economic hardship and the existing bond debt. This economic hardship and the severity of the damage caused by Hurricane Maria has been recognized by the federal government in the approval of a higher federal cost share for FEMA Public Assistance Funds increasing the standard ceiling of 75% to allow up to 100% federal reimbursement for Category A and B work, and 90% for Categories C through G work.

²⁰ Federal Register 83 FR 5844 <https://www.gpo.gov/fdsys/pkg/FR-2018-02-09/pdf/2018-02693.pdf>

²¹ Build Back Better Puerto Rico, Request for Federal Assistance for Disaster Recovery, November 2017

Puerto Rico's recovery funding strategy primarily aligns federal assistance funding, to the greatest extent possible, through complimentary programs in order to maximize recovery dollars and overcome funding barriers. This includes ensuring programs are funded with the most-restrictive eligible funding sources first, in accordance with their proposed eligible activity, and then moving through the funding stream to the least restrictive. For that reason, and to ensure compliance with Stafford Act restrictions against duplication of benefit, this Action Plan will focus on housing and economic recovery, while Puerto Rico works with FEMA to finalize the program field guidance to participate in alternative procedures for all large project funding for Public Assistance Categories C-G pursuant to section 428 of the Stafford Act.

Puerto Rico has up to 12 months from the time of impact to qualify for FEMA's Hazard Mitigation Assistance program. Funding for mitigation activities through the HMA program is awarded for up to 15% of the value of Category C-G project requests. Until Puerto Rico and FEMA address the island's eligibility for Hazard Mitigation Assistance (HMA) funding, CDBG projects which could be otherwise eligible under FEMA's Hazard Mitigation Grant Program (HMGP), such as buyout and demolition, will be tracked and applied to a FEMA Global Match, if allowed. Opportunities for private and philanthropic sector contributions will also be considered during program design to maximize local leverage.



UNMET NEEDS ASSESSMENT

SUMMARY OF IMPACT AND UNMET NEED

In compliance with HUD requirements detailed in Federal Register 83 FR 5844, Puerto Rico has completed an unmet needs analysis to guide this recovery, based on best available data. The results of this analysis further investigate components of the damage assessed in the Build Back Better report, and identify gaps in funding after SBA, FEMA, private insurance and local assistance have been delivered.

The impact and unmet needs outlined in this report reveal a strong need for housing assistance supported by resilience planning and economic opportunity for households. Large-scale infrastructure activities and broader impact are assumed to be captured in the Build Back Better report published in November 2017 and are not re-listed here. Additionally, the 12 -month Economic and Disaster Recovery Plan conducted under FEMA’s engagement of the Homeland Security Operational Analysis Center (HSOAC) will contain a much broader analysis of the macroeconomic environment with greater access to additional data. A full list of data sources and literature analyzed for this unmet needs assessment can be found in Appendix A. The unmet needs assessment will also be updated as additional data becomes available and as part of the Action Plan process for additional CDBG-DR allocations.

The unmet needs calculation below is based solely on current, federal data sources, and is a subset of the larger assessments conducted by Build Back Better and the 12 Month Economic and Disaster Recovery Plan to Congress. The municipios submitted a great deal of local data, which has been extremely important in informing program design. The local information is available as part of the Public Comment annex to the plan. Federal datasets are used in this portion of the unmet needs assessment to be able to analyze impact island-wide. The Build Back Better report established \$94.4 billion in need, based on an extensive data set across all sectors.

The February 9, 2018 Federal Register states that for purposes of the CDBG-DR Action Plan to HUD: *“Given the extent of damage to housing in the eligible disaster areas and the very limited data at present regarding unmet infrastructure and economic revitalization needs, this notice requires each grantee to primarily consider and address its unmet housing recovery needs.”*²²

Therefore, the impact below is primarily related to estimates generated in relation to FEMA Individual Assistance (IA), Small Business Administration (SBA), and National Flood Insurance Program (NFIP) impact data. In conjunction with federal agencies, the units of general local government (UGLGs/ municipios) have a clear sense of unmet needs, as outlined in their public comment (ponencias). They will be consulted throughout and are key leaders in the recovery strategy.

Summary of Impacts/Support	Housing	Infrastructure	Economy	Total
Amount of Estimated Impact	\$34,317,767,502	\$35,270,832,673	\$10,612,254,256	\$80,200,854,431
Amount of Funds Available	\$1,859,853,436	\$32,095,837,496	\$65,205,200	\$34,020,896,132
Unmet Needs	\$32,457,914,066	\$3,174,995,178	\$8,539,749,056	\$44,172,658,299
Percent of Total Unmet Needs	73.48%	7.19%	19.33%	

Table 4. Summary of Unmet Need by Recovery Category²³

²² <https://www.gpo.gov/fdsys/pkg/FR-2018-02-09/pdf/2018-02693.pdf>

²³ As noted in text, infrastructure impact and unmet needs do not include FEMA Public Assistance for permanent work (Categories C-G) since those estimates are currently being developed for the 428 Program, or Energy Grid impacts that are in the billions. The infrastructure impact will become more clear as project worksheets are developed, and is expected to be in the billions of dollars.

IMPACT TO DEMOGRAPHICS

SOCIAL VULNERABILITY INDEX (SOVI®) FOR TARGETING PRIORITY UNMET NEED

Identifying those areas most impacted and most vulnerable to recovery barriers across the Island provides a useful lens for targeting program intake in the most impacted and distressed areas. The Social Vulnerability Index²⁴ (SoVI®) is a tool for assessing pre-existing vulnerabilities to environmental hazards. The SoVI® is a comparative metric that facilitates the analysis of differences in social vulnerability at a certain level of geography – in this case the municipio and census tract level. The index, in the version used here, synthesizes a collection of socioeconomic variables, which, with support from research literature, represent a reduction in a community’s ability to prepare for, respond to and recover from hazards.

Utilizing the Social Vulnerability Index here empirically delineates the most socially vulnerable census tracts within each FEMA IA designated municipio. Residents in these high vulnerability areas generally have a lower ability to adequately prepare for, respond to, and rebound from environmental impacts (such as floods), shocks, and stresses.

The following table displays the 27 social characteristics analyzed in the Puerto Rico SoVI analysis.

SOCIAL VULNERABILITY VARIABLES	MIN	MAX	MEAN
Median age	17.90	61.8	40.16
Percent black	0	3	0.00
Percent Native American	0	1	0.00
Percent Asian	0	6	0.00
Percent Hispanic	75	100	99
Percent population under 5 years or 65 and over	0	44	23
Percent nursing home residents	0	11	0
Percent female	0	70	52
Percent female headed households	0	66	24
Percent unoccupied housing units	0	100	21
Percent renters	0	100	26
People per unit	0	4.17	2.79
Per capita income	\$0	\$55,810	\$10,922
Percent speaking English as a second language with limited English proficiency	28	97	78
Percent with less than 12th grade education	0	60	27
Percent employment in extractive industries	0	50	2
Percent employment in service industries	0	59	22
Percent of housing units with no car	0	83	19
Percent civilian unemployment	14	83	51
Percent poverty	0	100	46
Percent mobile homes	0	53	0
Percent female participation in labor force	0	100	47
Percent Social Security beneficiaries	0	65	43
Percent households earning over \$200,000 annually	0	18	1
Median gross rent	\$0	\$1,722	\$477
Median housing value	\$0	\$474,900	\$120,766
Median age	17.90	61.80	40.16

Table 5. Social Characteristics Utilized in the Puerto Rico SoVI Analysis

24 Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social science quarterly*, 84(2), 242-261.



Combining social vulnerability information with FEMA damage data provides a standardized, replicable, and pragmatic process pinpointing where scarce resources may be most magnified in driving successful disaster recovery. This overlay procedure results in a visualization of loss relative to vulnerability for Puerto Rico where places with high population such as San Juan, are characterized by a general balancing of impacts due to lower levels of social vulnerability. Conversely, populations residing in the more rural and mountainous regions, although much less heavily populated, are characterized by generally higher levels of social vulnerability. Targeting recovery resources to these most heavily impacted and vulnerable areas may yield high benefit because these areas are currently much less able to bounce back without outside assistance. While there was damage across nearly the entire island, the impacts (according to an extensive analysis of FEMA Verified Loss Data) in certain areas was concentrated more extensively, especially when compounded with an inability to bounce back (social vulnerability).

PRDOH obtained from FEMA a list of Individual Assistance (IA) applicants and identified those applicants with a FEMA verified real property (housing) loss. Using FEMA damage data, each applicant with real property losses was pinpointed on a map. These “hot spots” of FEMA verified loss were overlaid on social vulnerability information to identify areas that were both heavily impacted and had a lower capacity to absorb such losses.

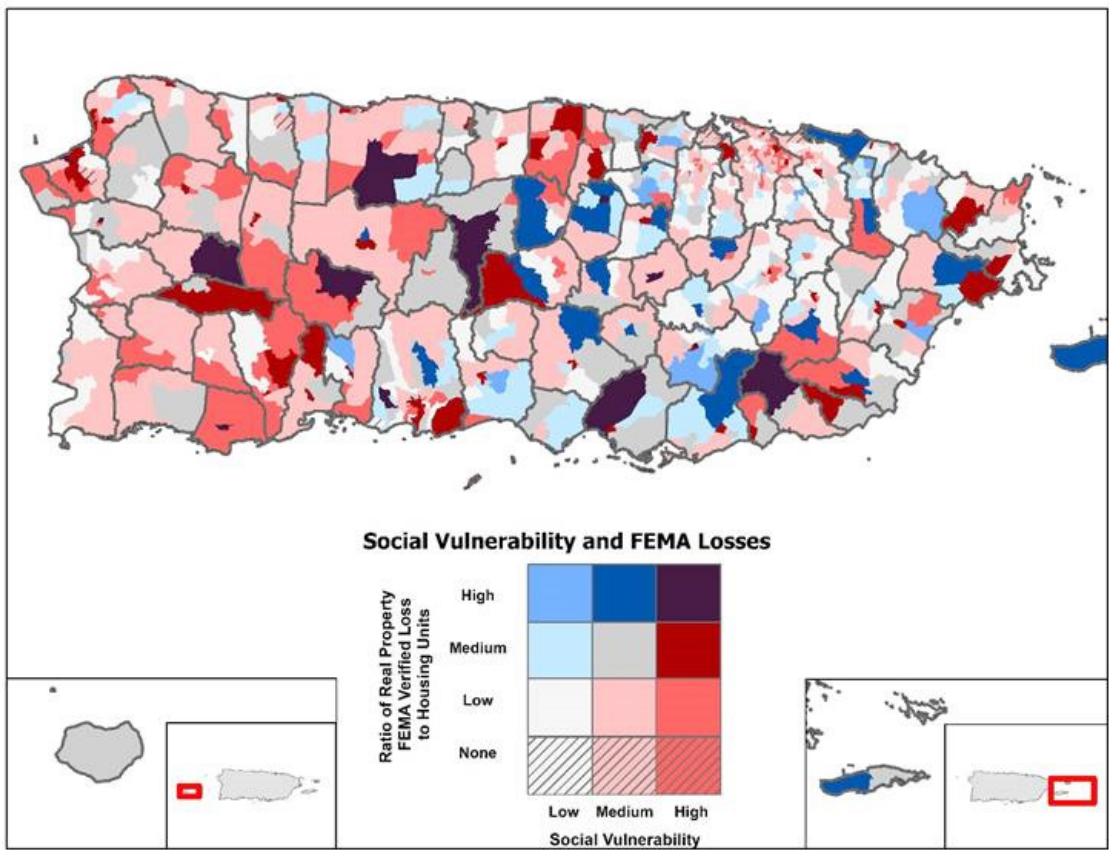


Figure 14. Map of Low to High SoVI communities where FEMA verified-loss applicants are located, in Presidentially Disaster Declared (PDD) area

OUT-MIGRATION AND CHANGES TO THE POPULATION

Before the storms, Puerto Rico had a population of 3,337,177 residents with a median age of 39.4; an age that is almost 2 years older than the US median age of 37.9. When compared to the continental United States, Puerto Rico shows 1.5% less persons 5 years or under, 2.4% less persons 18 years or under, and 3.7% more persons 65 years or older. The number of residents age 40 and above is expected to further increase as a more than ten-year trend of out-migration reaches a peak post-storm demographic shift. This has the potential to accelerate the increase in the portion of the population that is older. The implications of an elderly population, especially those of retirement age, are significant for socio-economic conditions in the post-storm environment. Many retirees 65 or older live on a fixed income and face higher medical costs and mobility challenges. Puerto Rico has almost twice as many disabled elderly than the US. The percent of residents age 65 or older with a disability is astoundingly higher in Puerto Rico with 15.30% versus 8.6 % in the US. The retention or recruitment of a youthful workforce can mitigate this effect by creating a societal balance and bolstering economic growth.

POPULATION, AGE AND LANGUAGE DEMOGRAPHICS		
Community Fact	United States	Puerto Rico
Population estimates, July 1, 2017, (V2017)	325,719,178	3,337,177
Persons under 5 years, percent, July 1, 2016, (V2016)	6.20%	4.70%
Persons under 18 years, percent, July 1, 2016, (V2016)	22.80%	20.40%
Persons 65 years and over, percent, July 1, 2016, (V2016)	15.20%	18.90%
Female persons, percent, July 1, 2016, (V2016)	50.80%	52.40%
Female persons, percent, April 1, 2010	50.80%	52.10%
Veterans, 2012-2016	19,535,341	89,824
Foreign born persons, percent, 2012-2016	13.20%	2.70%
Language other than English spoken at home, percent of persons age 5 years+, 2012-2016	21.10%	94.50%
With a disability, under age 65 years, percent, 2012-2016	8.60%	15.30%

Table 6. Select Demographic Information, Comparison Between US 50 States and Puerto Rico

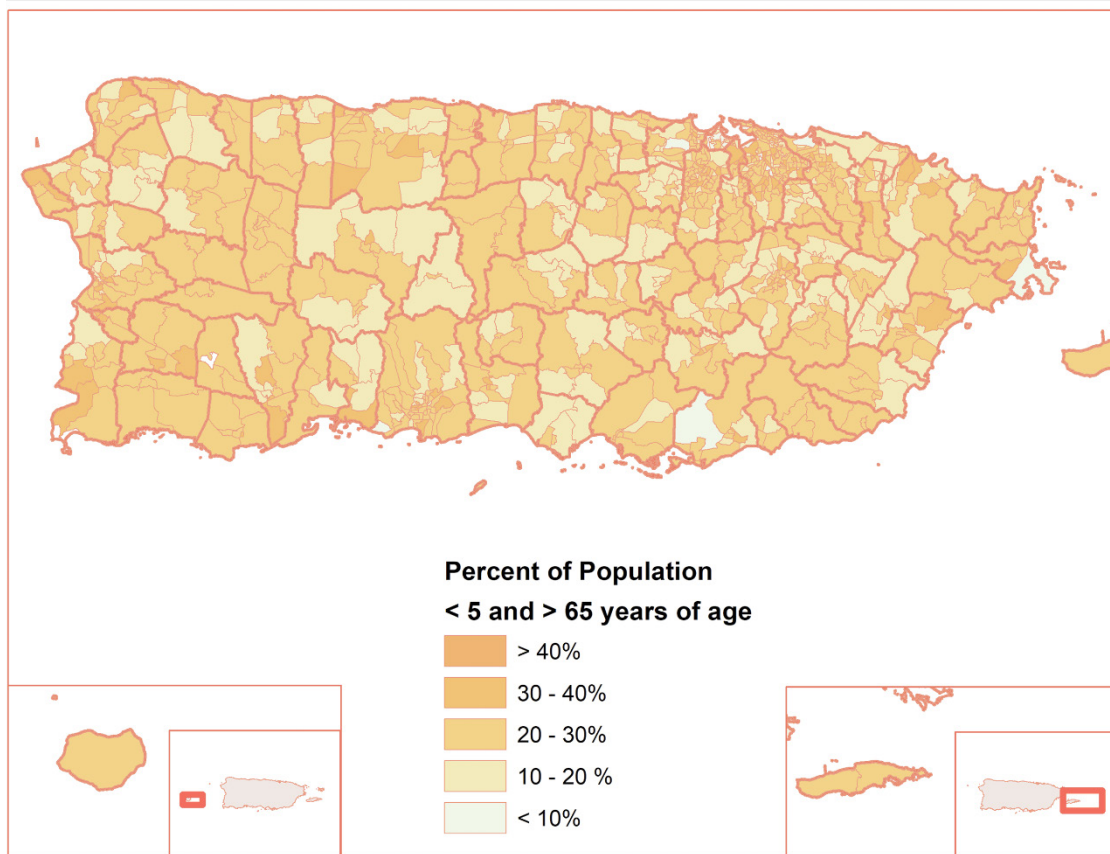


Figure 15. Map of Age Dependent (less than 5 Years or greater than 65 Years old) Population by Census Tract, data source ACS 2012 - 2016

Post-storm conditions only compound out-migration concerns that have been building in recent years due to changes in the economy. According to U.S. Census Bureau data, Puerto Rico has been experiencing a population decline since 2004 driven by rippled effects of debt and recent government bankruptcy. Residents less vulnerable to recovery barriers are leaving the island in search of opportunity, adapting to conditions that other cost-burdened, English language limited, elderly or mobility-challenged residents are unable to overcome.

As American citizens, residents of Puerto Rico travel easily off the islands to the mainland US without the need for a passport or visa. With an estimated 5.4 million Puerto Ricans living in the mainland US (approximately 2 million more than live on the islands), residents of the islands are likely to have family and loved ones to offer them immediate shelter, either temporary or permanent. Understanding these circumstances makes it difficult to pin down an accurate account of true migration at this point, but there are many indicators that help paint a picture.

The Center for Puerto Rican Studies predicted in an October 2017 report that between 114,000 and 213,000 residents will leave the island annually. By 2019, the Center predicts Puerto Rico may lose up to 470,335 or 14% of the population.²⁵ Through continued research on this issue, the Center recently published a post-hurricane report estimating as many as 135,592 Puerto Ricans have relocated to the mainland states.

Commercial flights booked in September and October of 2017 show a net of 179,000 flights (outbound travel reduced by inbound) in September and November 2017.²⁶ FEMA data shows that a total of 40,013 household members and 19,271 households changed their mailing address to a location in the mainland states since first registering with FEMA. The Center analyzed FEMA data to discover the most evacuees, 45%, went to Florida followed by 9% in New York, 8% in Massachusetts, 7% in Pennsylvania, 6% in Connecticut, 4% in New Jersey, 4% in Texas, 3% in Illinois, 1% in Georgia, and 1% in Virginia.

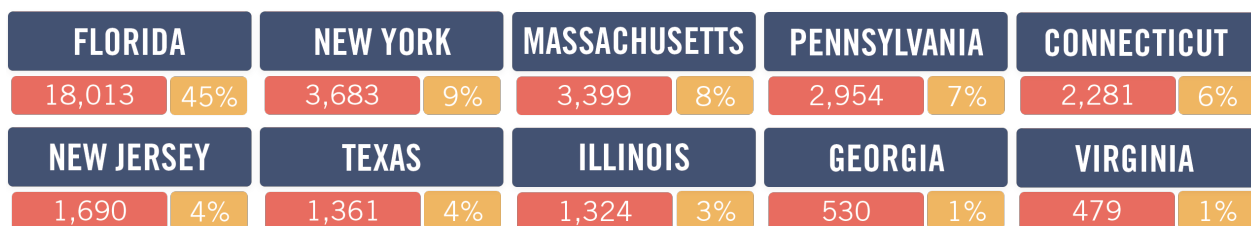


Figure 16. Statistics from Center for Puerto Rican Studies

Students of migrated families have left schools in Puerto Rico with empty classrooms. School enrollment data collected between December 1, 2017 and February 22, 2018 indicates that 11,554 Puerto Rican students enrolled in Florida’s school districts, 2,874 in Pennsylvania, 2,556 in Massachusetts, 2,218 in New York, 1,827 in Connecticut, 886 in New Jersey, and 607 in Illinois.²⁷ Enrollment on the islands has dropped by 38,700 students in one year (since May 2017) which left schools operating at only 60% capacity. By the summer of 2018, the Puerto Rico Department of Education plans to close 283 of the 1,111 schools and reassign teachers to the remaining 828 schools on the island as part of a fiscal plan to save \$150 million. Closed school facilities are being repurposed as housing, business, and community facilities.

25 Estimates of Post-Hurricane Maria Exodus from Puerto Rico, October 2017, City University of New York, Center for Puerto Rican Studies, https://centropr.hunter.cuny.edu/sites/default/files/RB2017-01-POST-MARIA%20EXODUS_V3.pdf

26 ‘Exodus’ from Puerto Rico: A visual guide, CNN, <https://www.cnn.com/2018/02/21/us/puerto-rico-migration-data-invs/index.html>

27 Puerto Rico Post-Maria, Rebuild Puerto Rico Report, City University of New York, Center for Puerto Rican Studies, https://centropr.hunter.cuny.edu/sites/default/files/PDF/puerto_rico_post_maria-2018-final.pdf

SOCIAL MOBILITY AND DEMOGRAPHIC INDICATORS

By 2016 estimates, Puerto Rico is densely populated with 1,088.2 residents per square mile compared to the US at 87.4 residents per square mile, and 45.1% of the population lives below the poverty line. High poverty has affected the island for years, creating difficulty in daily life activities such as paying rent, buying food, and paying for transportation. As of 2016, an estimated 43.5% of Puerto Rican residents were identified as living in poverty, compared to 12.7% in the US. The median household income in Puerto Rico is \$19,606 and as low as \$15,800 in nine (9) municipios. Wage-earning females earn almost \$3,000 less than males comparatively, with female median income at \$11,262 and male median income at \$14,190.

EDUCATION, ECONOMIC AND INCOME DEMOGRAPHICS		
Community Fact	United States	Puerto Rico
High school graduate or higher, percent of persons age 25 years+, 2012-2016	87.00%	73.90%
Bachelor's degree or higher, percent of persons age 25 years+, 2012-2016	30.30%	24.60%
Persons without health insurance, under age 65 years, percent	10.10%	6.80%
In civilian labor force, total, percent of population age 16 years+, 2012-2016	63.10%	44.80%
In civilian labor force, female, percent of population age 16 years+, 2012-2016	58.30%	40.00%
Total accommodation and food services sales, 2012 (\$1,000)	708,138,598	4,256,139
Total health care and social assistance receipts/revenue, 2012 (\$1,000)	2,040,441,203	6,098,340
Total manufacturers' shipments, 2012 (\$1,000)	5,696,729,632	76,575,043
Total merchant wholesaler sales, 2012 (\$1,000)	5,208,023,478	20,184,374
Total retail sales, 2012 (\$1,000)	4,219,821,871	24,957,584
Total retail sales per capita, 2012	\$13,443	\$6,806
Mean travel time to work (minutes), workers age 16 years+, 2012-2016	26.1	29.5
Median household income (in 2016 dollars), 2012-2016	\$55,322	\$19,606
Per capita income in past 12 months (in 2016 dollars), 2012-2016	\$29,829	\$11,688
Persons in poverty, percent	12.70%	43.50%
Total employer establishments, 2015	7,663,938	43,620
Total employment, 2015	124,085,947	677,974
Total annual payroll, 2015 (\$1,000)	6,253,488,252	17,315,903
Total employment, percent change, 2014-2015	2.50%	-0.50%

Table 7. Select Economic Demographic Information, Comparison of US 50 States to Puerto Rico

Unemployment has increased since the storms knocked services offline, obstructed roadway access, and caused structural damage to businesses across the island. Unemployment was at 4.7% in 2016 with 11,805,773 out of work and as of February 2018 has been reported at 10.6%.²⁸ Unemployment today is in flux. Monthly unemployment claims filed with the Labor Department have fluctuated anywhere from 1,469 to 7,300 claims a month since Maria hit.

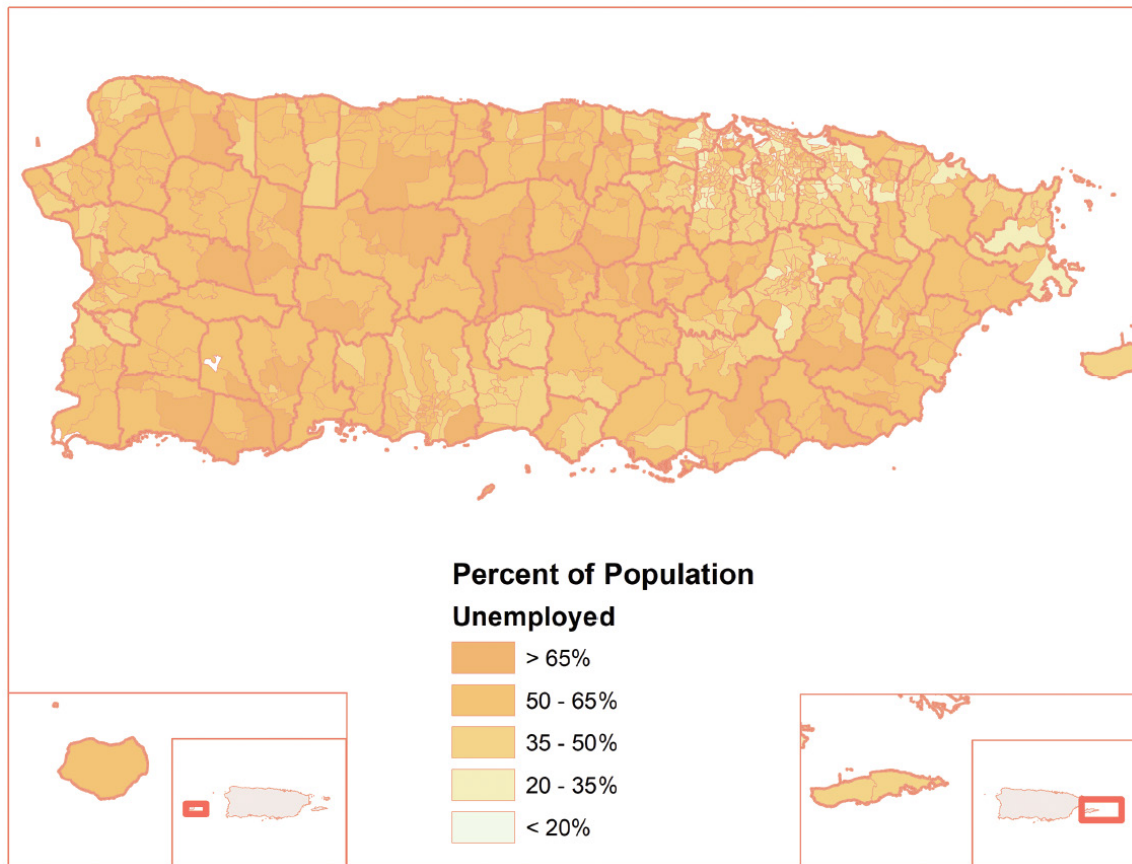


Figure 17. Percent Unemployment by Census Tract, data source ACS 2012-2016

Median income for Puerto Rican households is half that of the poorest state on the US mainland, Mississippi, and almost 60% less than the US overall. Highest levels of concentrated poverty are located in more inland areas and the southwestern coast in the following municipios: Maricao – 64%, Adjuntas – 63%, Guánica – 63%, Comerío – 61%, Ciales – 60%, Barranquitas – 60%, Lajas – 60%, Jayuya – 60%, Las Marías – 59%, and Guayanilla – 59%.

²⁸ Bureau of Labor Statistics, <https://www.bls.gov/eag/eag.pr.htm>

Spanish is the predominant language in Puerto Rico. Government business is conducted in both English and Spanish, and English is taught in public and private schools as a second language from first through 12th grade. Although a large fraction of the population is bilingual, the map on the following page shows Spanish is the primary language spoken across the island. All programs and recovery assistance will need to address this diversity in language to ensure critical assistance information and recovery guidance reaches all residents, especially those with limited English language abilities.

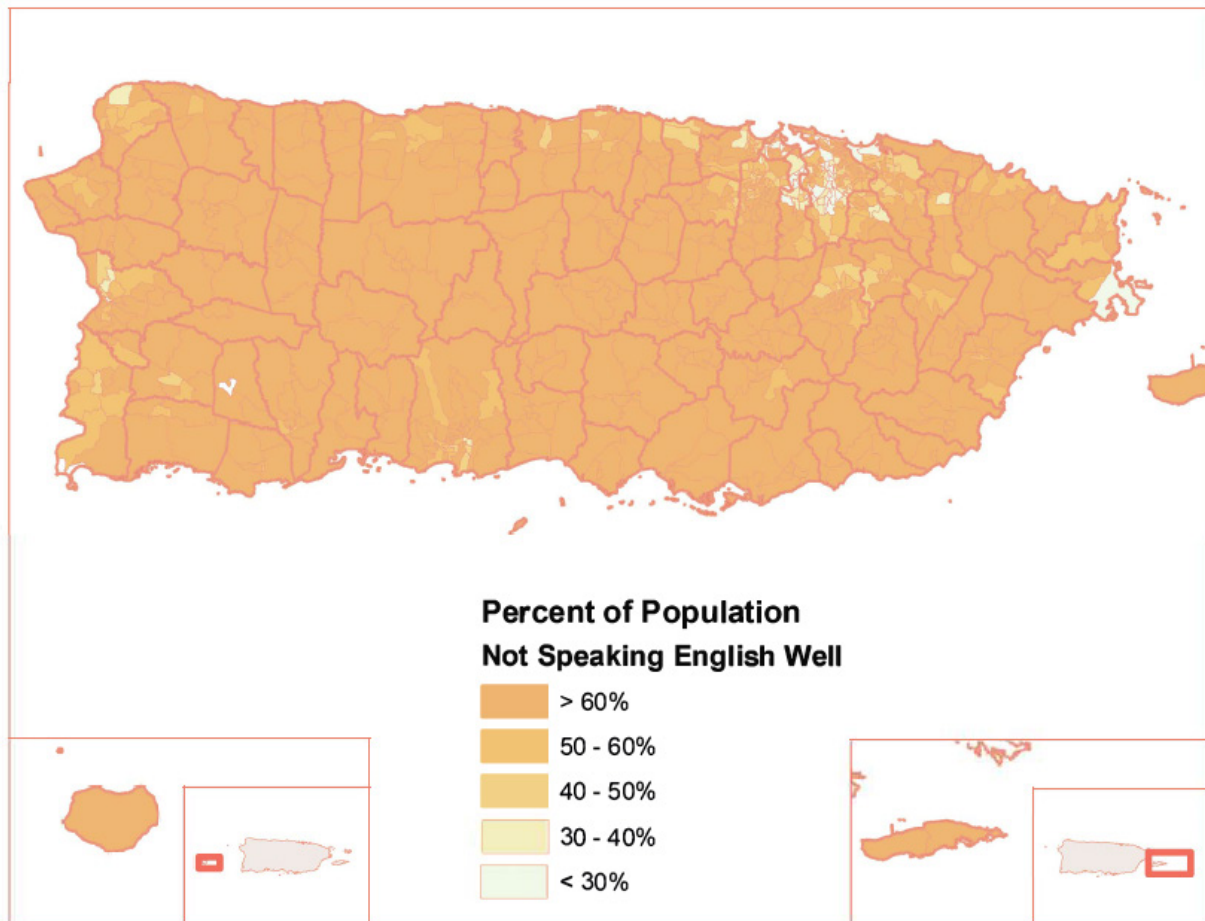


Figure 18. Majority of the island speaks English in limited capacity or not at all, source ACS 2012-2016

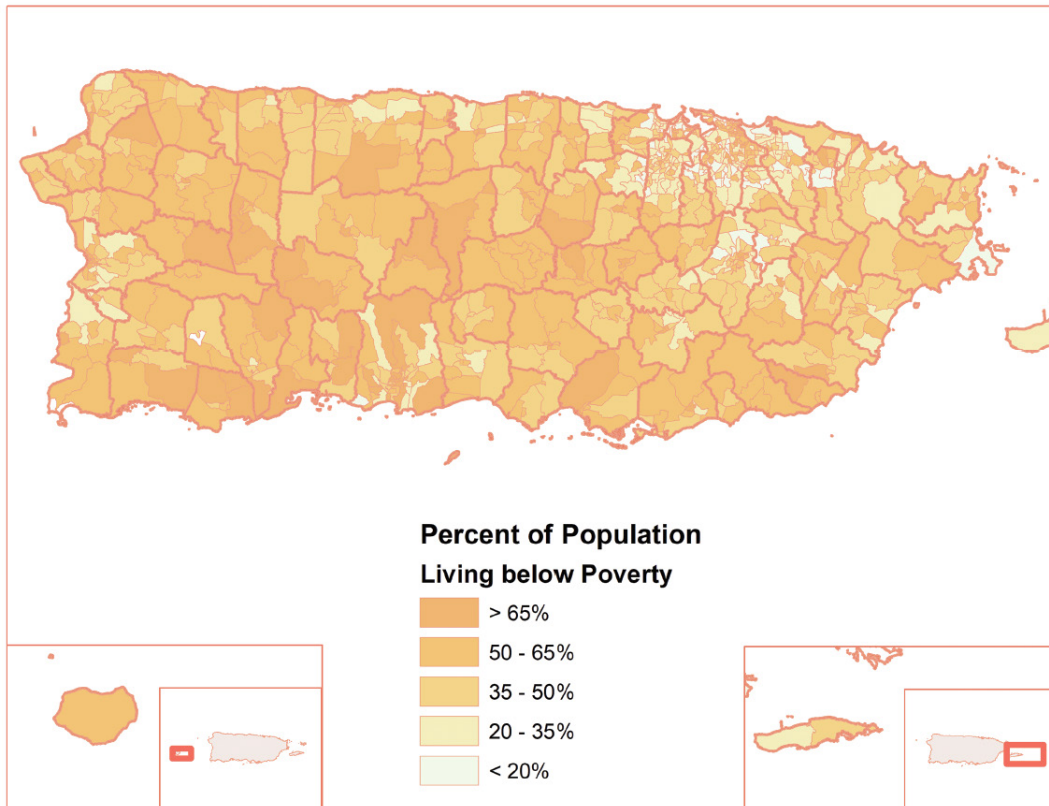


Figure 19. Population living below the poverty line, by census tract, data source ACS 2012-2016

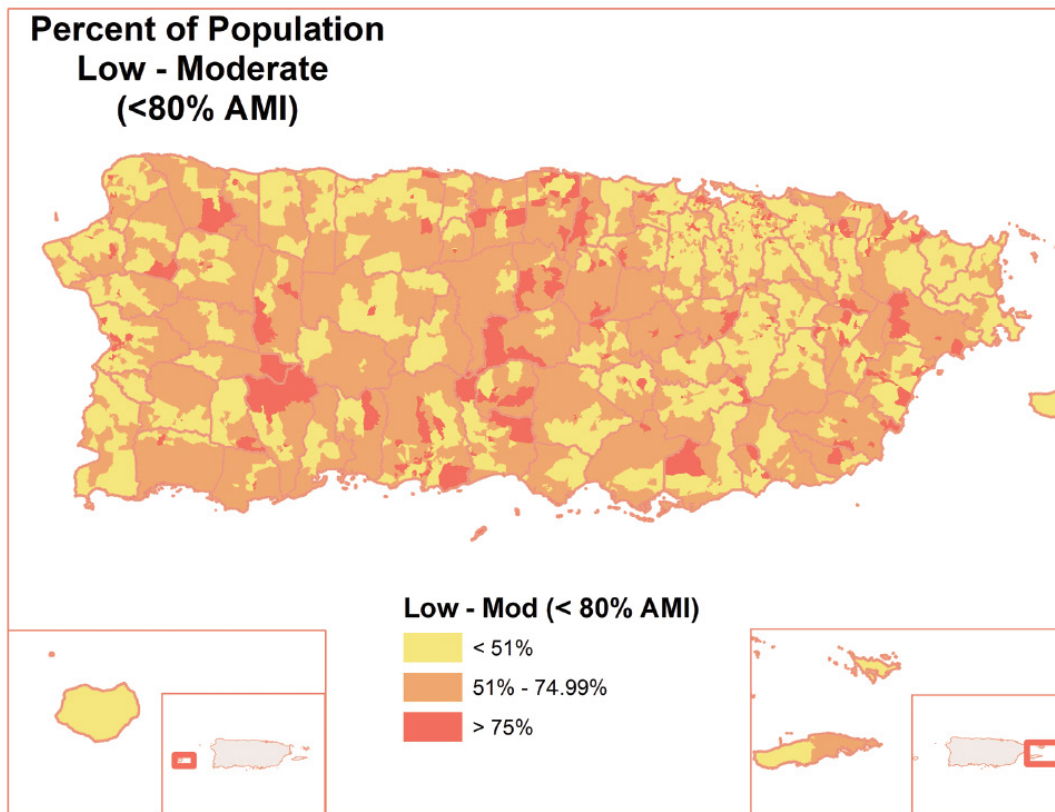


Figure 20. Distribution of Low-to-Moderate Populations, data source ACS 2012-2016

SPECIAL NEEDS POPULATION

Individuals with special needs are another highly vulnerable population to be considered. This category of the population possesses social and/or socio-economic characteristics that cause various difficulties in daily life and require additional or specialized services and accommodations. Such difficulties require Continuum of Care services and in many cases specialized medical care to accommodate physical, emotional, behavioral, or learning disability or impairment.

Special needs homeowners with low-to-moderate incomes impacted by the storm reside in above average levels in the 10 municipios depicted below:

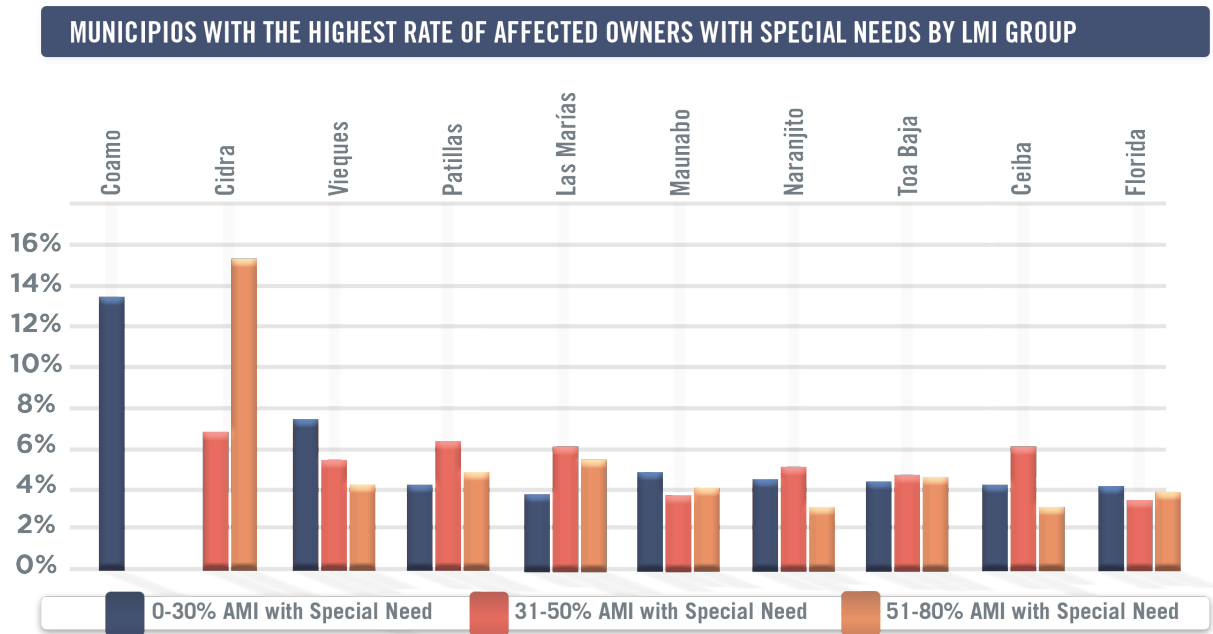


Figure 21. Percent population with designated Special Need, broken down by income group

ABOVE AVERAGE SPECIAL NEEDS OWNER POPULATION ACROSS ALL LMI GROUPS AFFECTED BY MARIA

Municipio	0-30% AMI With A Special Need	31-50% With A AMI Special Need	51-80% AMI With A Special Need
Coamo	13.33%	0.00%	0.00%
Cidra	6.67%	0.00%	15.38%
Vieques	7.38%	5.44%	4.17%
Patillas	4.24%	6.37%	4.83%
Las Marías	3.65%	6.23%	5.58%
Maunabo	4.90%	3.77%	4.08%
Naranjito	4.56%	5.18%	3.13%
Toa Baja	4.33%	4.75%	4.64%
Ceiba	4.23%	6.17%	3.10%
Florida	4.20%	3.53%	3.92%

Figure 22. Top 10 municipalities with highest level of homeowners with designated Special Need, broken down by income category

Similarly, special needs renters with low-to-moderate incomes reside in above average levels in the following 10 municipalities:

ABOVE AVERAGE SPECIAL NEEDS RENTER POPULATION ACROSS ALL LMI GROUPS AFFECTED BY MARIA

Municipio	0-30% AMI With A Special Need	31-50% With A AMI Special Need	51-80% AMI With A Special Need
Comerio	12.50%	0.00%	0.00%
Vieques	8.56%	1.27%	6.34%
Trujillo Alto	7.94%	0.00%	0.00%
Las Marías	3.77%	6.42%	5.65%
Juncos	4.35%	2.12%	2.33%
Ceiba	3.36%	5.82%	2.33%
Corozal	3.42%	3.95%	1.59%
Barranquitas	2.95%	5.59%	3.35%
Guayama	3.12%	2.72%	2.74%
Aibonito	3.45%	3.24%	3.28%

Figure 23. Top 10 municipalities with highest level of renters with designated Special Need, broken down by income category

MEDICAID DEPENDENT RESIDENTS

According to ACS 2012-2016 data, 48% of Puerto Rican residents and more than 62% of children received Medicaid benefits in 2016. The Medicaid participation rate is consistent with the high rate of poverty on the island. Medicaid assistance in Puerto Rico, unlike the 50 states, is provided in the form of a block grant rather than a fixed share of costs. For states, the federal government covers between 50 and 83 percent of the costs, following an established “Federal Medical Assistance Percentage” (FMAP) that is based on per capita income in the state. The formula does not apply to territories, which have a fixed FMAP rate of 55 percent, regardless of income. If Puerto Rico’s FMAP were calculated using the same formula as for states, it would be at the maximum level of 83 percent.²⁹

On February 9, 2018, Congress enacted the Bipartisan Budget Act of 2018 with disaster relief provisions that provided \$4.8 billion in additional federal Medicaid funding for Puerto Rico. However, even with the additional one-time funding, there is a significant risk that more residents will become eligible for Medicaid in the coming months, creating additional needs for new funding.

CHILD AND YOUTH WELFARE

Child poverty is a serious concern for Puerto Rico that must be addressed as part of the recovery effort. When hurricanes Irma and Maria hit, the child poverty rate was already at 56%. Increased economic challenges brought on by post-storm conditions may lead to an increase in this rate over time. Unless mitigated against by impactful recovery programs, child poverty has dangerous implications not only for the future of Puerto Rico, but the whole of American society. Children living in poverty are less likely to complete school, have poorer health with less access to medical services, and tend to keep a low economic status earning lower wages through adulthood.

According to The Youth Development Institute of Puerto Rico, six (6) out of every 10 children in Puerto Rico are living in poverty.³⁰ This adds a unique layer to the social vulnerabilities Puerto Rico’s communities face in recovery.



²⁹ More Trouble Ahead: Puerto Rico's Impending Medicaid Crisis, Center for Economic and Policy Research <http://cepr.net/images/stories/reports/puerto-rico-medic-aid-2017-10.pdf>

³⁰ Child Poverty: A Great Abyss for the Puerto Rican Economy, Instituto Desarrollo Juventud, http://juventudpr.org/wp-content/uploads/pdf/Child_Poverty_in_Puerto_Rico_Infographic.pdf

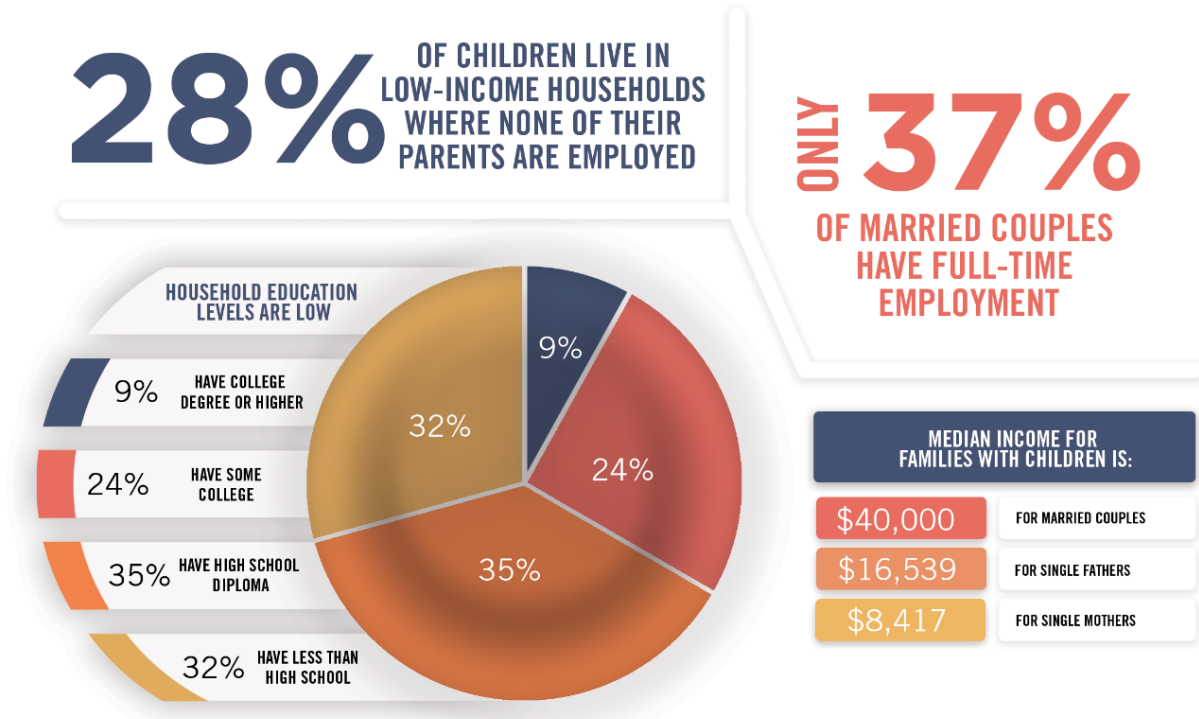


Figure 24. Statistics provided by the Youth Development Institute

HOMELESSNESS

Puerto Rico faces the potential for increased homelessness as homeowners face mortgage foreclosures, affordable housing continues to be in short supply, and the economy remains in the initial phases of recovery.

In 2017, a sample study completed by the Department of the Family recorded 3,501 Puerto Ricans as homeless, with 31% of them being chronically homeless.³¹ The problem of being homeless brings forth more complexity in recovery due to social problems such as substance abuse, mental health disorders and poor health conditions. An estimated 37% of homeless persons are battling some form of substance addiction to either illicit drugs or alcohol, and 23% are unable to return home due to familial problems. An estimated 15% are homeless due to financial reasons only.

Puerto Rico is eligible for annual formula-based grant funding from HUD for Continuum of Care (CoC) Services to end homelessness and provide critically needed support to local programs that serve individuals and families experiencing homelessness. Funding for these programs has gradually increased over the years. There are two operational jurisdictions managed out of field offices PR-502 and PR-503. In 2017 reports to HUD, these field offices estimated an annual renewal demand of \$12,658,322 for PR-502 to fund 42 sub-recipients in Puerto Rico’s jurisdiction,³² and \$5,590,093 for PR-503 to fund 29 sub-recipients to serve the South-Southeast jurisdiction.³³

31 Resumen Censo De Personal Sin Hogar, 2017, http://www2.pr.gov/agencias/secretariado/ProgramasServicios/Documents/COC_2017/RESUMEN_COC_2017.pdf

32 2017 Grant Inventory Worksheet – PR-502: Puerto Rico Balance of Commonwealth CoC, <https://www.hudexchange.info/grantees/pr-502/>

33 2017 Grant Inventory Worksheet – PR-503: South-Southeast Puerto Rico CoC, <https://www.hudexchange.info/grantees/pr-503/>

SOCIAL HOUSING PROGRAMS

Mental care services and services targeted to vulnerable populations, such as domestic violence survivors and people living with AIDS, will continue to increase in importance as social safety nets are strained.

Puerto Rico receives annual formula-based grants from HUD administered by the Office of Socioeconomic and Community Development (ODSEC, for its Spanish acronym) to address the housing needs of special needs populations. For fiscal year 2017, Puerto Rico received \$44.1 million in community development funds through HUD's Community Development Block Grant (CDBG), HOME Investment Partnership Program (HOME), Emergency Solutions Grant (ESG), and Housing Opportunities for Persons with Aids (HOPWA).³⁴

Program	Service	2017 Award
CDBG	Provides grants to states and localities to provide decent housing and a suitable living environment, and to expand economic opportunities, principally for low- and moderate-income person	\$23,078,405
HOME	Provides grants to states and localities to expand the supply of affordable housing by building, buying, and/or rehabilitating affordable housing for rent or homeownership or providing direct rental assistance to low-income people. Since 1992, this program has helped 7,165 participants, and 50% of them have been homebuyers. ³⁵	\$9,619,282
ESG	Provides grants to states and localities to help people regain stability after experiencing a housing crisis or homelessness. This is completed through street outreach, emergency shelter, homelessness prevention, rapid re-housing assistance, and Homelessness Management Information System.	Regular: 3,655,78 Extra: \$2,018,250
HOPWA	Provides grants to states, localities, and nonprofit organizations to provide housing assistance and related supportive services for low-income persons living with HIV/AIDS and their families.	\$1,979,243

Table 8. 2017 funding for select HUD programs

34 Puerto Rico Granted Federal Community Development Funds After Hurricane, Caribbean Business, October 16,2017, <http://caribbeanbusiness.com/federal-funds-assigned-for-community-development-in-puerto-rico/>

35 HOME Program Progress Dashboard, cumulative as of 12.31.2017, accessed at https://www.hudexchange.info/resource/reportmanagement/published/HOME_Dash_PJ_AAAA-PR_PR_20171231.pdf

SPECIAL COMMUNITIES

Certain communities with concentrations of poverty, lack of basic infrastructure, unacceptable environmental conditions, poor housing status, and high social stressors were designated by the government of Puerto Rico as Special Communities. This designation has allowed for Puerto Rico to assess dedicated financing and governmental support to Special Communities and to stimulate the involvement of local residents in the improvement and development in their communities. There are currently 725 Special Communities across the Island, with at least one in every municipio. The more than 208,000 households in these communities are important participants of the recovery programs. Large concentrations of special communities can be seen (in the map below) in Quebradilla, Hatillo, Yauco, Canóvanas, and Orocovis.

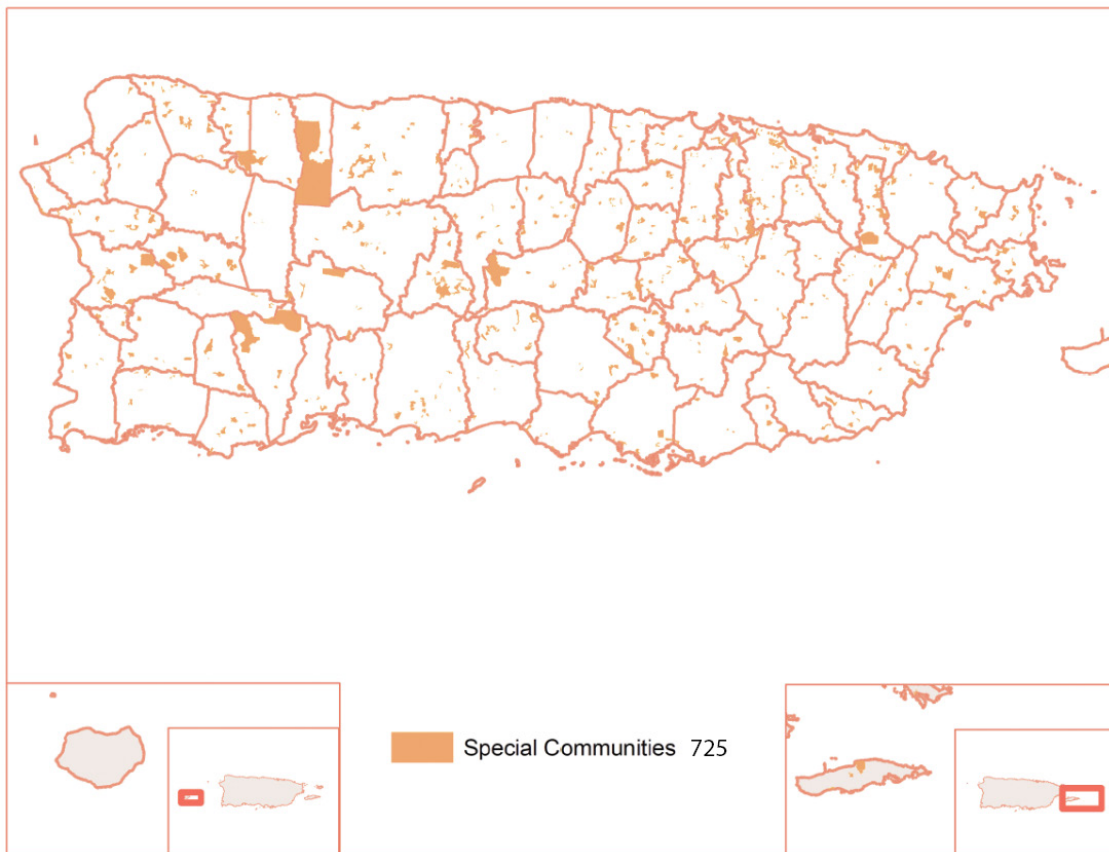


Figure 25. Concentration of Special Communities, data source Puerto Rico Planning Board

HOUSING IMPACT

Fragility in the housing market has come to full exposure as a result of hurricanes Irma and Maria. The degree of damage caused by the storms was worsened due to widespread destruction of inadequate housing structures and damage to unoccupied, unmaintained homes. It has been estimated that anywhere from 45% to 50% of Puerto Rican households have either erected or maintained houses through informal construction, a self-managed method of construction completed without the use of an architect, proper permits, and in many cases without proper title to the land. This type of construction reduces the structural integrity of homes to withstand natural environmental conditions and renders them ineffective to withstand hurricane conditions.

A reality of the market is that cost-burdened households face exacerbated challenges in the search for safe, affordable housing. There are more than 14,500 tenant households and more than 13,300 owned homes that are overcrowded by 1 or more persons.³⁶ Funds are needed for the repair or reconstruction of aging and fragile structures, informally constructed homes, and homes unlawfully located on public lands or through illegal subdivision. With compounded factors including overcrowding, thousands of financially overburdened households, an aging population and out-migration of residents under 40, the need for comprehensive recovery is critical.

SINGLE FAMILY HOUSING MARKET

Hurricanes Irma and Maria have exacerbated an already challenged housing market. A reduction in wage base in the economy has reduced the population's buying power, limiting homeowner mobility, reducing the purchase of higher value homes, and in many cases creating conditions for foreclosure. With changing economic conditions and evolving household makeup, Puerto Rico has seen little investment in recent years in homes valued above \$100,000, and more demand for affordable housing. An increase in single parent households and decrease in average household income shows a population of declining means. According to ACS 2012- 2016 data, Puerto Rican households have a median income of \$19,606, which is significantly lower than the poorest state in mainland US, Mississippi, with a median household income of \$40,528, and almost 60% less than the US median household income of \$55,322.

Social circumstances have a significant impact on market behavior. Younger couples are delaying investment in property while established, elderly heads of household remain the predominant homeowners. Overall households with small children show a reduction in marriages and an increase in single parent households, predominantly female head of household.

³⁶ Puerto Rico Builder's Association Housing Study, February 2018

HOUSING DEMOGRAPHICS		
Community Fact	United States	Puerto Rico
Housing units, July 1, 2016, (V2016)	135,697,926	1,571,744
Owner-occupied housing unit rate, 2012-2016	63.60%	68.60%
Median value of owner-occupied housing units, 2012-2016	\$184,700	\$118,600
Median selected monthly owner costs -with a mortgage, 2012-2016	\$1,491	\$887
Median selected monthly owner costs -without a mortgage, 2012-2016	\$462	\$154
Median gross rent, 2012-2016	\$949	\$460
Households, 2012-2016	117,716,237	1,237,180
Persons per household, 2012-2016	2.64	2.82
Living in same house 1 year ago, percent of persons age 1 year+, 2012-2016	85.20%	92.80%

Table 9. Select Housing Demographic Information, Comparison of US 50 States to Puerto Rico

55% of the occupied housing units in Puerto Rico have a value less than \$150,000. Single family housing stock before the storms was at 1,555,880 units with approximately 1.2 million of those homes occupied.³⁷ According to FEMA IA data, over 1.06 million households, or households representing 88% of total housing units, have applied for disaster assistance. As home prices have adjusted to economic conditions and devalued over time, homeowners have been unable to accumulate the capital required to improve their living conditions or accommodate expanding households. According to the Puerto Rico Builders' Association Study, Puerto Rico has seen a 25% drop in property values over the last ten years from \$219,170 in 2007 to \$164,470 in 2017. Total sales (and by price ranges) have been reduced to a compounded annual rate of 14.5% between 2004 and 2016. The reduction has been stronger in prices of more than \$160,000 per unit.³⁸

³⁷ 1-year American Community Survey, 2016 <https://www.census.gov/acs/www/data/data-tables-and-tools/supplemental-tables/>

³⁸ Puerto Rico Builder's Association Housing Study, February 2018

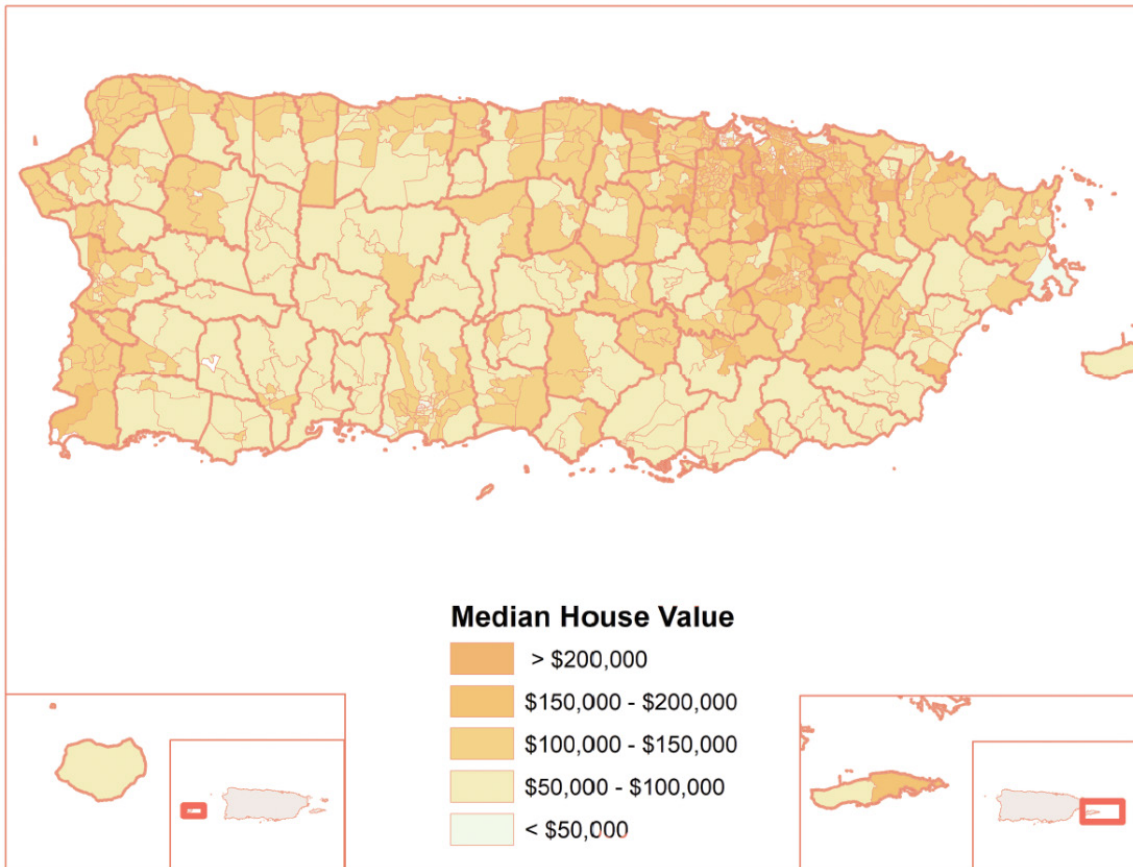


Figure 26. House Median Value, source data from American Community Survey 2012-2016

According to the Department of Housing and Urban Development (HUD), there are approximately 130,000 mortgages held across the island translating to \$13 billion in currently unpaid principal balance.³⁹ Although debtors have been given an extended moratorium on their mortgages, there is a high risk of foreclosure on these properties that will follow the moratorium expiration on May 18, 2018. This could lead to vacated homes adding to the already aging stock of unoccupied homes with significant deterioration or damage that is expected to prevent resale.

Aging housing stock further contributes to the decrease in property value, eroding the wealth and asset accumulation of residents. About 40% of the housing stock was built before 1970, with 31% of it constructed between 1970 and 1989.

³⁹HUD Foreclosure data https://www.huduser.gov/portal/datasets/nsp_foreclosure_data.html



Figure 27. Housing Unit Tenure, source data from American Community Survey 2012-2016

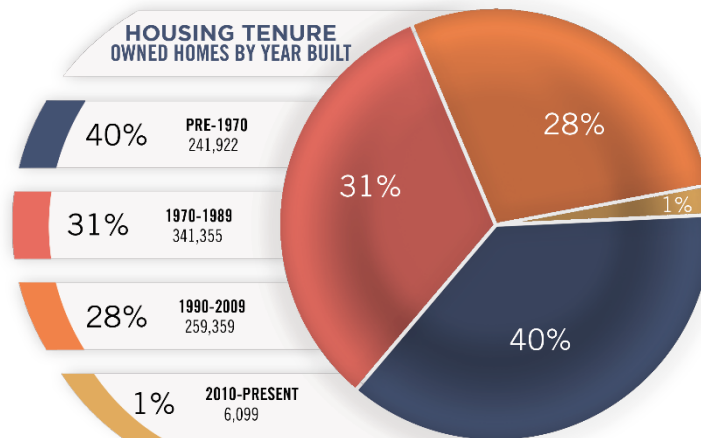


Figure 28. Housing Tenure, source data from American Community Survey 2012-2016

MULTIFAMILY HOUSING MARKET

According to ACS 2012-2016 data in 2016, there were a total of 1,237,180 housing units in Puerto Rico, of which 31.4 % were occupied in 2016 by 388,445 renters.

According to the Puerto Rico Builder’s Association study, 56.8% of currently rented properties rent for less than \$500 a month, representing more than half of the population of renters. Approximately 36.4% of renters pay between \$500 and \$999 in rent per month, while 6.8% pay between \$1,000 to \$3,000 per month. An estimated 53,000 tenant households live in substandard housing.

Although sufficient quantities of rental units may exist, demand for high-quality affordable rental housing has increased with economic challenges. Households may earn income just above the poverty line, disqualifying them from critical assistance, but too little to afford higher quality rental housing options. These households may earn between \$15,000 to \$25,000 in annual income.

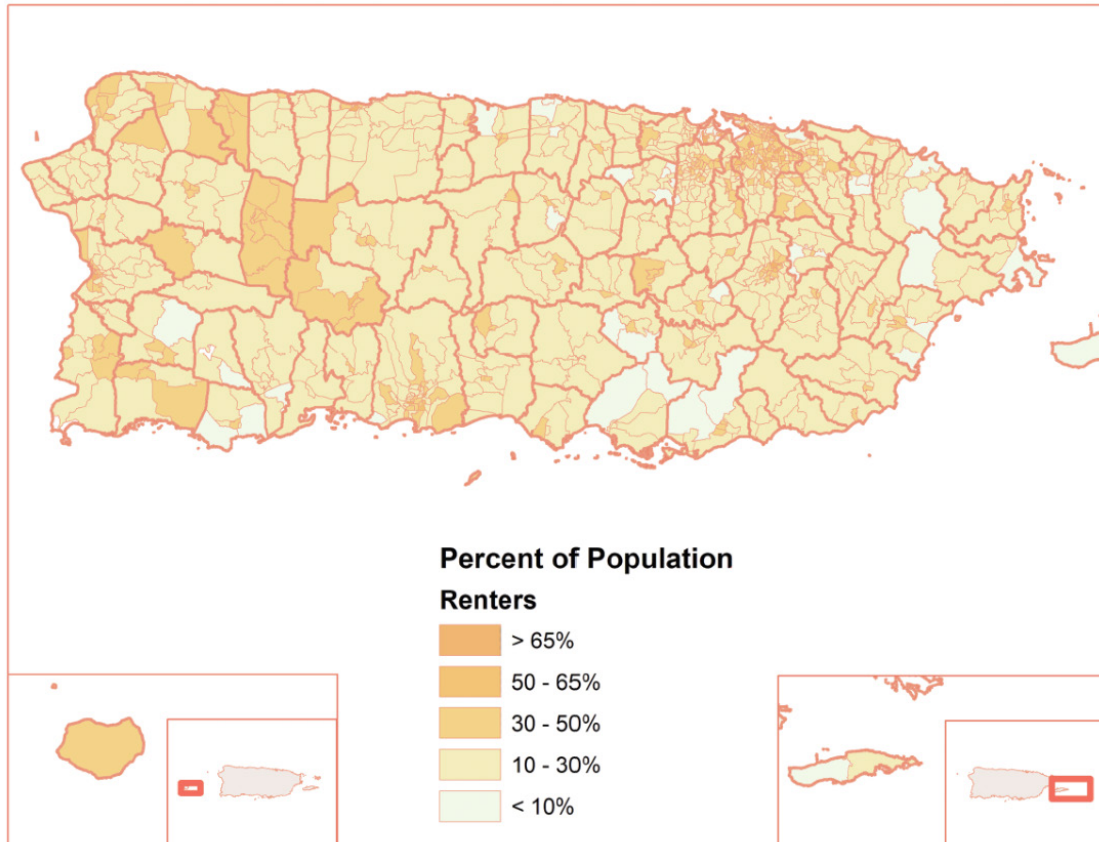


Figure 29. Disbursement of rental population, source data from ACS 2012-2016

A recorded 324,437 renter households applied for FEMA IA assistance as a result of hurricanes Irma and Maria.⁴⁰ This number of units with confirmed damage may increase as assessment of damage and inspections for code compliance post-storm continues. In the rental market recovery, there is a strong need to formalize the island-wide rental market reporting and housing standard compliance. Aging buildings impacted by the storm will need to be addressed with a focus on resilience. More than 76% of the island's rental stock was constructed before 1990.

40 FEMA Individual Assistance (IA) data – FIDA 31621 as of April 2, 2018

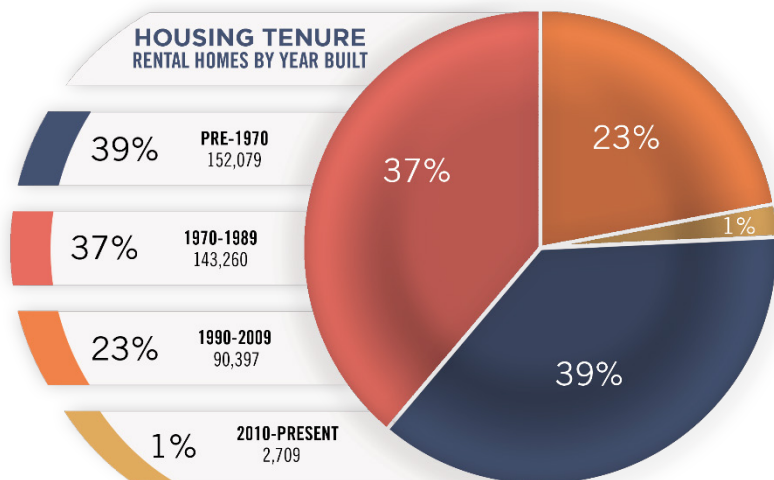


Figure 30. Rental Housing Tenure, source data from American Community Survey 2012- 2016

IMPACT TO PUBLIC HOUSING

The Puerto Rico Public Housing Authority (PRPHA) is the second largest housing authority in the US, with over 55,000 units across 340 properties. There are also approximately 30,000 households using Housing Choice Vouchers and 18,000 households in project-based Section 8 units. The PRPHA reports 15,386 public housing units with damage, with initial damage claims over \$119 million. Full damage assessments are still being completed, and the damage amount is expected to rise. As insurance claims are negotiated with insurers, the amount of unmet need is expected to adjust.

PUBLIC HOUSING PROJECT TYPE	TOTAL OF DAMAGE CLAIMS	TOTAL PAID BY INSURANCE	REMAINING NEED
Public Housing	\$100,407,981	\$59,342,266	\$41,065,715
State Project	\$1,625,196	\$1,070,465	\$554,731
Tax Credit	\$17,294,285	\$11,096,285	\$6,198,000
Total	\$119,327,462	\$71,509,016	\$47,818,446

Preliminary data provided by PRPHA – April 2018

Table 10. Public Housing Unmet Need

Before the hurricanes, there were 25,000 persons on the public housing waiting list and 7,955 (as of June 2014) on the Section 8 waiting list. PRPHA has been implementing mixed-income, mixed finance strategies as part of its Asset Repositioning Strategic Plan to generate high-quality, diversified housing options. The Gladiolas mixed-finance development, which was still being completed at the time of hurricane Maria, is an example of this new strategy, which incorporates public housing units, Section 8 voucher units, market rate, and tax-credit units.⁴¹ Asset repositioning will continue to play a vital role in the recovery process, leading to high-quality diversified housing options for residents across all housing assistance and income categories.

41 https://www.hud.gov/states/puerto_rico_virgin_islands/stories/2017-06-14

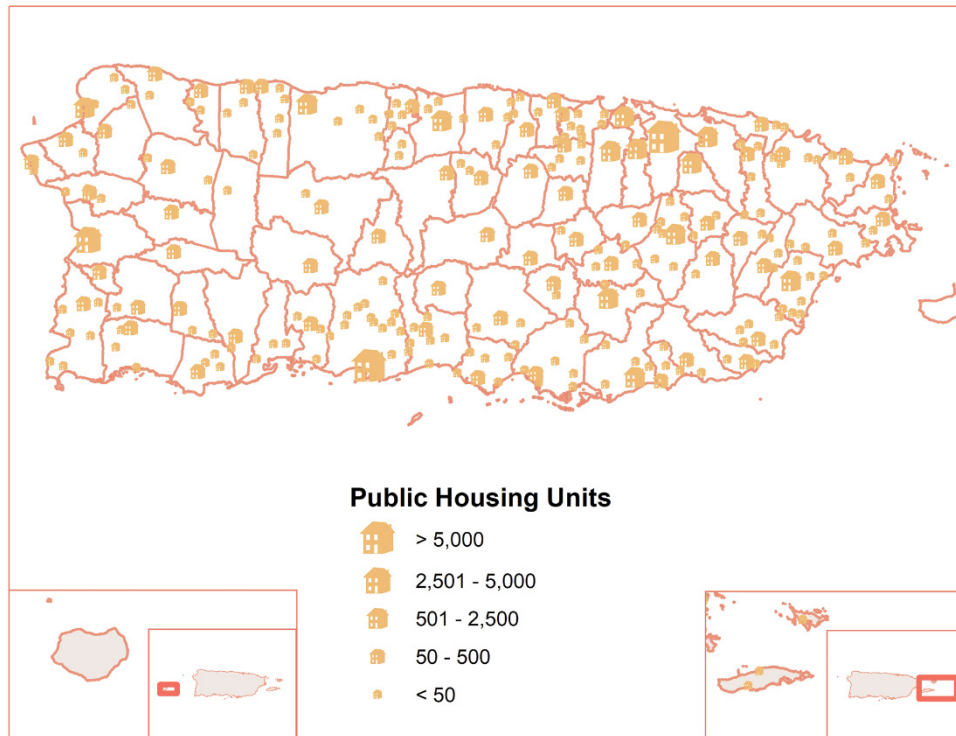


Figure 31. Location of Public Housing Units, data provided by PRPHA

SHELTERS

When Maria weather projections became a reality, the government quickly recognized the need to evacuate residents into safety shelters. In the Governor's emergency declaration, Puerto Rico responded to an unprecedented need for storm shelter by designating 500 schools and other government buildings as shelters.⁴² There were over 15,000 sheltered residents in these designated locations. This included all sectors of the population, including individuals, families with young children, and the elderly.⁴³ Several of these government buildings provided much needed refuge from the storm but lacked appropriate accommodations such as a kitchen area or shower stalls for longer-term use. The Puerto Rico Public Housing Authority (PRPHA) is responsible for the coordination, inspection, and monitoring of shelter facilities provided by the Puerto Rican Government. The agency, in coordination with FEMA, accommodated the unprecedented number of shelter occupants across the island. San Juan and Toa Baja saw the highest number of occupants at 16,375 and 10,560 respectively.

⁴² Executive Order E0-2017-047, <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/emergency/83261/declaration-emergency-pr-2017-oe-2017-047.pdf>

⁴³ Department of Housing Shelter Report

SHELTER OCCUPANCY BY MUNICIPIO									
ADJUNTAS	4491	CAROLINA	947	GUAYANILLA	3827	MARICAO	2039	SAN GERMAN	936
AGUADA	1461	CATANO	4188	GUAYNABO	2331	MAUNABO	614	SAN JUAN	16375
AGUADILLA	486	CAYEY	1570	GURABO	1853	MAYAGUEZ	4075	SAN LORENZO	3996
AGUAS BUENAS	1072	CEIBA	1026	HATILLO	2300	MOCA	391	SAN SEBASTIAN	1658
AIBONITO	1178	CIALES	1666	HORMIGUEROS	954	MOROVIS	1696	SANTA ISABEL	4040
ANASCO	2588	CIDRA	1440	HUMACAO	3782	NAGUABO	1246	TOA ALTA	5758
ARECIBO	3960	COAMO	4413	ISABELA	3419	NARANJITO	3598	TOA BAJA	10560
ARROYO	2320	COMERIO	3254	JAYUYA	5138	OROCOVIS	1524	TRUJILLO ALTO	561
BARCELONETA	933	COROZAL	3315	JUANA DIAZ	4231	PATILLAS	1950	UTUADO	7537
BARRANQUITAS	1030	CULEBRA	126	JUNCOS	938	PENUELAS	2630	VEGA ALTA	4944
BAYAMON	1425	DORADO	3019	LAJAS	1024	PONCE	13524	VEGA BAJA	4852
CABO ROJO	2067	FAJARDO	3078	LARES	1357	QUEBRADILLAS	90	VIEQUES	1038
CAGUAS	3399	FLORIDA	329	LAS MARIAS	1675	RIO GRANDE	6424	VILLALBA	1465
CAMUY	673	GUANICA	1089	LUQUILLO	2248	SABANA GRANDE	1173	YABUCOA	1746
CANOVANAS	14304	GUAYAMA	3979	MANATI	2060	SALINAS	6368	YAUCO	1169

Figure 32. Peak number of shelter occupants by municipio

The Government of Puerto Rico worked quickly to transition the evacuees in emergency shelters into other, transitional living situations more appropriate for daily living. By February 2018, all evacuees housed in emergency shelters were transitioned out.

HOUSING TYPOLOGIES

INFORMAL CONSTRUCTION

Socioeconomic challenges have led a high number of residents to construct housing without professional design and in many cases without proper permitting or construction materials up to housing regulation or code. Although this type of construction strongly represents the resilience of the Puerto Rican people, it has created a significant number of housing units unfit to withstand the high wind, rain and flooding conditions brought by hurricanes. Although there is no reliable public record of these units, it is estimated that more than half of the islands’ housing stock has been erected through “informal construction” or construction completed without the assistance of an engineer or architect, or the requisite permits. Understanding that the realities of island living, and high levels of unemployment have only resulted in an increase in this type of construction, Puerto Rico is committed to incentivizing recovery assistance that will minimize the occurrence of “informal construction” and prevent rebuilding in high-risk flood zones or on public land.

PROPERTY TITLE CONCERNS

Many impacted homeowners have struggled to receive federal recovery assistance in part due to unclear ownership records or property records. Record numbers of applicants have been denied by FEMA assistance due to the fact they have been unable to verify they own the homes for which they are claiming damage. Although FEMA has taken steps to ease documentation requirements for the population by accepting sworn affidavits from applicants who lack a deed, approval numbers have still been significantly low. This high denial rate has left hundreds of thousands without critical assistance and a large unmet housing need.

Due to the extent of undocumented informal construction on unregistered land, reform to the parcel registry is paramount to restructuring the housing market. Parcel registry is important for clarifying ownership and preventing boundary disputes. Informal construction on unregistered land is a concern for all municipios. The chart below depicts the comparison of known properties with and without title in select municipios.



Figure 33. Select municipalities' distribution of legal titles and non-legal titles, data provided by PR-DOH Planning

HOUSING FUNDS MADE AVAILABLE

FEMA INDIVIDUAL ASSISTANCE (IA)

According to available data as of April 2, 2018, FEMA registered over 1,067,618 applicants, however reports indicate significant ineligible rates and low payouts, with only 194,126 approved for housing repair or replace assistance.

Owner occupied single family homes with repair needs represent the largest group of Maria impacted properties across Puerto Rico. According to FEMA, 255,633 owner-occupied homes were estimated to sustain damage across the island. More than 728,662 applicants to FEMA housing programs resided in single family housing. Upon FEMA inspection, 255,633 had more than \$1.17 billion in real property verified losses.

The map below displays concentrations of real property loss normalized by housing units.

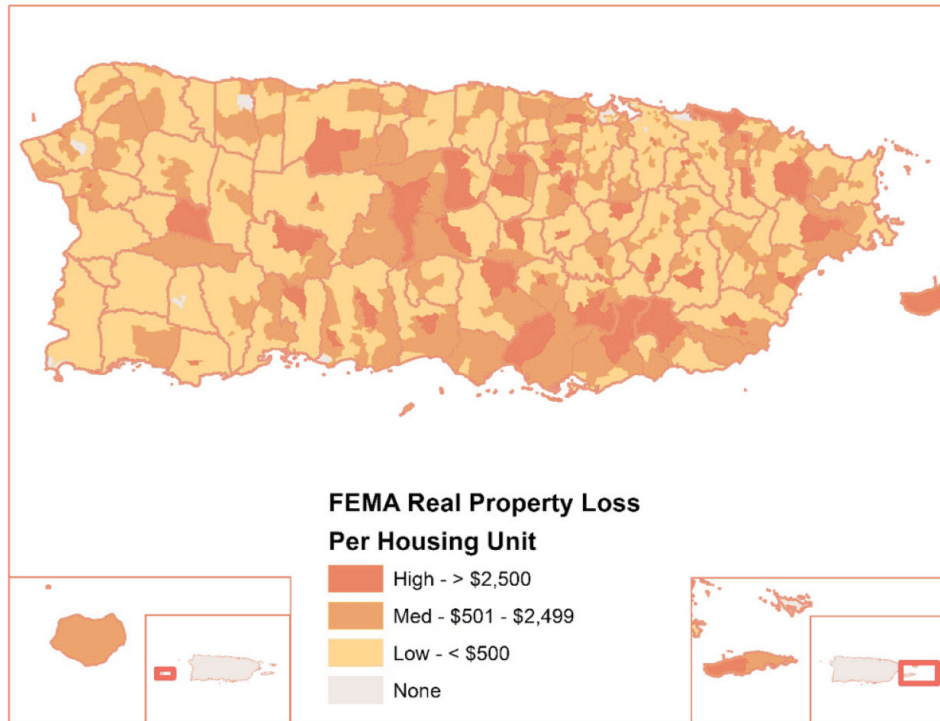


Figure 34. FEMA Real Property Loss

There are 581,468 FEMA applicants residing in owner-occupied houses or duplexes, representing 78% of the owner-occupied applicant pool. Condo, townhouses and apartment owners make up 16% of the applicant pool for a total of 117,359 homes.

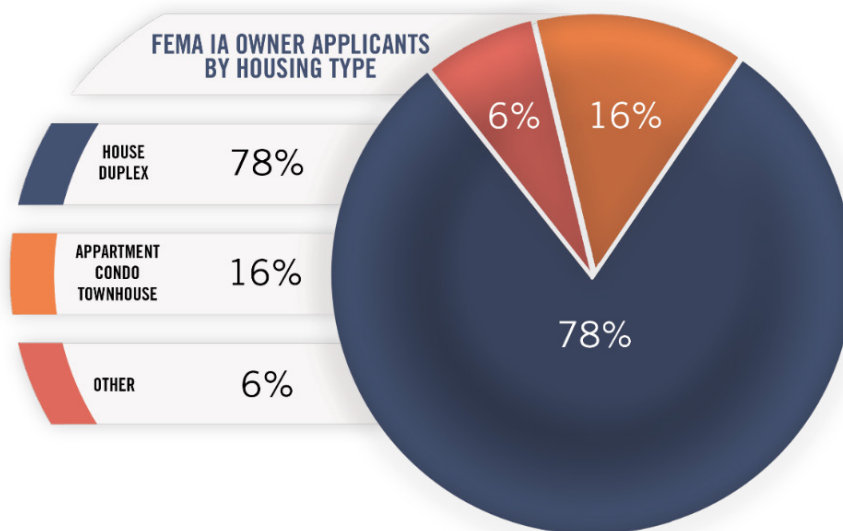


Figure 35. FEMA IA Owner-occupied applicant by Housing Type

FEMA STEP – TU HOGAR RENACE

The Department of Housing, FEMA and the Government of Puerto Rico have overseen the Sheltering and Temporary Essential Power (STEP) program, known as Tu Hogar Renace (Your Home Reborn, in English), as a first step in the recovery process for thousands of island residents.

The Tu Hogar Renace program is designed to bring property to a safe, functional and habitable level and limits maximum investment in each property to \$20,000. The program allows residents to return to their properties and shelter in place until permanent repairs can be made. Improvements include repairs to electric service, roofs, walls and windows, natural gas or propane service, and the removal of debris.

By design and by FEMA directive, STEP repairs are intended to be temporary. Often, the work performed under STEP is built upon during CDBG-DR housing rehabilitation and reconstruction programs. Furthermore, STEP generally does not consider Green Building requirements, Energy Star, Code, or Housing Quality Standards, which are HUD expectations for housing activities.

As of April 24, 2018, Tu Hogar Renace has received 205,801 applications and has determined 205,799 eligible.⁴⁴ The program has served residents in every municipio conducting temporary repairs. Most program activity is concentrated in the following five municipalities:



Figure 36. Number of applicants in the Tu Hogar Renace program, provided on program website through interactive map

The temporary repairs performed on these homes will support residents to remain in place, in their own homes and communities while they await long-term recovery options.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) AND PRIVATE INSURANCE

In October 2017 FEMA paid \$2.8 billion in NFIP claims for Hurricanes Harvey, Irma and Maria and only \$121,000 of that was paid to Puerto Rican households. As of April 25, 2018, NFIP paid out \$17.9 million in flood claims to 413 households. Only 5,675 homeowners had flood insurance when Maria made landfall, representing a fraction of the population located in FEMA designated flood zones. An overlay of FEMA applicant locations to the current 100-year flood boundary identified 139,643 applicants in the flood zone. This gap in coverage for the population at large contributes to an exponentially high unmet need in the housing sector.

Additionally, 3,991 private flood claims resulted in payments of \$13.6 million over 1,399 payouts.⁴⁵

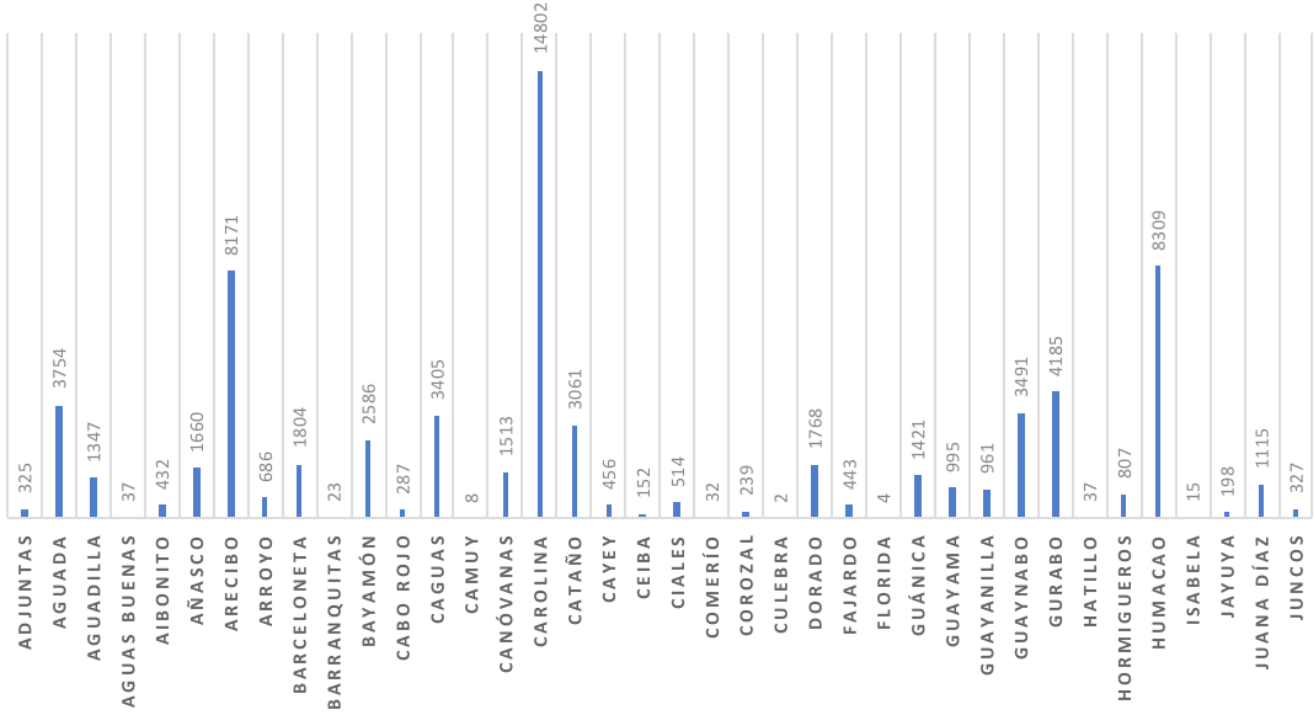
⁴⁴ Tu Hogar Renace website, accessed on April 24, 2018, <https://tuhogarrenace.com/>

⁴⁵ Office of the Commissioner of Insurance for Puerto Rico, claim summary, February 28, 2018



Figure 37. High level view of FEMA 100-year flood zone

FEMA APPLICANTS IN FLOODPLAIN (MUNICIPIOS A - J)



FEMA APPLICANTS IN THE FLOODPLAIN (MUNICIPIOS L - Z)

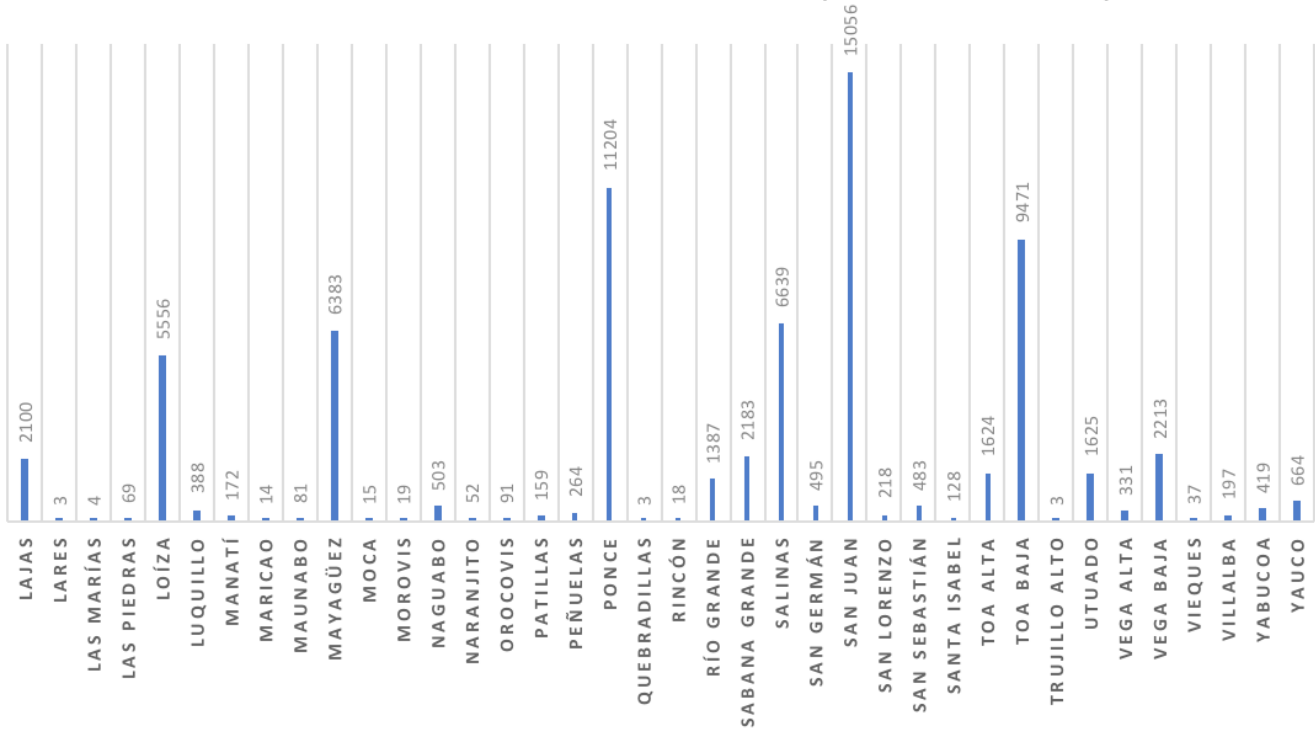


Figure 38. Table of housing applicants located in FEMA 100-year flood zones by municipio

HOUSING UNMET NEED

HOUSING IMPACT METHODOLOGY

Denial rates for FEMA Housing Assistance (81%) and the percent of those applying for but not receiving SBA (75%) have been uniquely high in Puerto Rico. The remaining homeowners who have been unable to secure this or other assistance funding have been left with an overwhelming unmet recovery need. Utilizing best available data, the current unmet need for housing in Puerto Rico has been calculated by a methodology that accounts for the gap between FEMA Full Verified Loss (FVL) and SBA Award. FEMA's Individuals and Households Program provides assistance for repairs and replacements that will make a home "habitable" whereas SBA awards loan funding for the full cost to restore a home.

HUD calculates "unmet housing needs" as the number of housing units with unmet needs times the estimated cost to repair those units minus repair funds already provided. However, because complete data sources are often difficult to obtain after a major disaster event, HUD has stated that empirically justified calculations may be used to determine the average cost to fully repair a home. Generally, this is accomplished by "using the average real property damage repair costs determined by SBA for its disaster loan program for the subset of homes inspected by both SBA and FEMA. Because SBA is inspecting for full repair costs, it is presumed to reflect the full cost to repair the home, which is generally more than the FEMA estimates on the cost to make the home habitable."⁴⁶

Previously approved impact assessment methodologies have utilized the SBA estimates of damage and repair needs, FEMA IA Housing Assistance data, and National Flood Insurance Program (NFIP) data in combination with each other to triangulate the real need as opposed to relying only on FEMA verified losses alone. Utilizing SBA damage estimates provides a more comprehensive look at recovery than simply looking at FEMA inspected damage. SBA sends "construction specialists" trained to evaluate a more complete cost of repairing or replacing a damaged structure to each applicant, returning a more comprehensive estimate of recovery than original estimates from FEMA. Also, further accounting for under-representation of impacted populations stemming from FEMA ineligible applicants provides a more accurate picture of overall housing impact across a study area.

Specifically, for Puerto Rico, the average FEMA real property loss for Irma and Maria was \$4,542, based on 269,777 applicants with FEMA verified losses. SBA average verified losses per household were valued at \$32,220 based on 49,132 applicants and represent a 7.1 times higher verified loss amount than FEMA. SBA median loss value of \$27,473 is 34.5 times higher than FEMA's value of \$794 for the same group of applicants. SBA's average verified personal property losses at a value of \$8,314 per household are 4.9 times higher than FEMA's \$1,680 per household. Furthermore, matching FEMA's applicant data with SBA's loan data on FEMA registrant number for more than 90,000 applicants highlighted two other important facts utilized in identifying housing unmet needs. First, that 22.49% of matching records (disaster victims) had \$0 FEMA real property losses but greater than \$0 SBA verified property losses. Second, that 11.8% had \$0 FEMA personal property loss but greater than \$0 SBA verified contents losses.

For Irma and Maria, when applying the average verified loss amount (\$32,221) of all SBA applicants with real property losses (49,132) to those who were disqualified or turned down for SBA loan assistance and those for whom a FEMA loss was established pushes the full extent of housing impact

⁴⁶ Federal Register Vol. 78, No. 43 /Tuesday, March 5, 2013

caused by Hurricane Maria to more than \$32.5 Billion (before accounting for an increase in rebuilding for resilience or deductions for funds already provided). A few additional considerations are factored in to arrive at a more comprehensive picture for this estimated unmet need. Utilizing the median SBA real property damage amount of \$27,473 accounts for outliers in the SBA data (a few very high and very low damage amounts) driving the average SBA loss up. Applying the median SBA property loss amount of \$27,473 to the total number of SBA applicants not approved for disaster recovery loans, in conjunction with HUD estimates of unmet housing needs for those without a determined real property loss, provides a more conservative and realistic view of losses to residential property across the island. Utilizing the unmet needs values from HUD discussed below, and FEMA data about the number of applicants (more than 1.06 million) results in an unadjusted housing impact of \$24.9 Billion. Methods for creating housing impacts and unmet needs are discussed below.

Housing impacts for this needs assessment have been calculated using SBA data in conjunction with FEMA applicant information. We begin (table 11) by utilizing the known real property (repair) losses from SBA for the 49,132 applicants for which this value is determined (A). Included here are also an estimate (B) of losses for those SBA applicants who were not approved for a disaster loan, SBA verified reconstruction losses (C), and verified manufactured home losses (D). Combined these SBA derived losses are more than \$3 billion (E).

ID	Line Item	Count	Value
A	SBA applicants with a real estate verified loss	49,132	\$ 1,585,456,477
B	SBA applicants without a real estate verified Loss (Estimate)	53,920	\$ 1,517,745,885
C	SBA Applicants with verified Reconstruction Losses	1,251	\$ 171,053,436
D	SBA applicants with verified Manufactured Home Loss	74	\$ 2,721,854
E	Total verified loss of FEMA applicants referred to SBA (Estimate)	104,377	\$ 3,276,977,652

Table 11. SBA Verified Losses

Accounting for those FEMA non-renter (owner or “not specified”) applicants (~ 750,000) who did not apply to SBA requires a more nuanced approach. First, one can account for SBA’s higher average loss value by multiplying any FEMA verified loss amount by 7.1 to create a more realistic loss estimate. Secondly, utilizing loss value cutoffs and rebuild cost estimates provided in the federal register can help in a clearer understanding of losses across the island.⁴⁷

Table 12 shows the breakdown of estimated losses to those not accounted for in SBA’s loan dataset. FEMA owner applicants with inspected losses (269,193) represent more than \$8.6 billion in losses when multiplied by SBA’s 7.1 times higher real property loss values (A). Rows (B – F) represent a breakdown of owner losses by HUD classified Minor-Low to Destroyed damage level categories for those owner applicants with FEMA personal property verified losses but without FEMA real property verified losses. Here, FEMA personal property verified losses were first multiplied by 4.9 to account for underestimates in FEMA derived losses and then classified into HUD designated unmet needs categories. Impact value estimates were derived by multiplying counts of applicants (by damage category) by HUD provided estimates (table 13). Here a straight-line linear model is implemented, producing estimates for Minor-Low and Minor-High categories not provided by HUD. An estimate of potential unmet needs populations (J) was generated by first multiplying the total owner applicants without either a real property or personal property loss (G) by 22.49% (accounting for FEMA’s missing real property

47 <https://www.gpo.gov/fdsys/pkg/FR-2018-02-09/pdf/2018-02693.pdf>

losses compared to SBA's), adding 22.49% of the remaining homes across the island (accounting for missing damages for those who did not apply for FEMA Housing Assistance) (I) adding 1,295 (the number of SBA applicants without a FEMA registrant number), and subtracting applicants already accounted for in SBA loss estimates (104,377). This potential unmet needs applicant count is then multiplied by the median SBA property loss value (\$27,473) and summed with values (A-F) to create an estimated loss for all home owner applicants (L). Estimated total losses of \$18.7 Billion (M) to homeowners is derived by summing this value (L) with losses from SBA data alone (Table 11, Line E).

ID	Line Item	Count	Value
A	FEMA owner or "not specified" applicants with FEMA inspected real property damage (SBA Multiplier)	269,193	\$ 8,684,273,556
B	Additional FEMA owner or "not specified" applicants with only FEMA inspected personal property damage (SBA Multiplier) Minor-Low	24,864	\$ 759,744,384
C	Additional FEMA owner or "not specified" applicants with only FEMA inspected personal property damage (SBA Multiplier) Minor-High	5,029	\$ 174,647,112
D	Additional FEMA owner or "not specified" applicants with only FEMA inspected personal property damage (SBA Multiplier) Major-Low	5,636	\$ 215,571,364
E	Additional FEMA owner or "not specified" applicants with only FEMA inspected personal property damage (SBA Multiplier) Major-High	5,096	\$ 211,968,120
F	Additional FEMA owner or "not specified" applicants with only FEMA inspected personal property damage (SBA Multiplier) Severe	3,166	\$ 209,164,956
G	Total owner or "not specified" applicants without a FEMA Verified Loss (Property or Contents)	430,197	
H	Total SBA applicants	104,377	
I	Total Housing Units in Declared Municipios	1,571,744	
J	Potential unmet need population	187,286	\$ 5,145,308,278
K	Median verified loss		\$ 27,473
L	Losses of FEMA owner applicants not referred to SBA (Estimate)		\$ 15,400,677,770
M	Total verified loss of all homeowner applicants across FEMA and SBA (Estimate)		\$ 18,677,655,422

Table 12. Estimated Damage to Owner Applicant Dwellings

Category of Real Property Damage	Count of Owner or "Other" Applicants with FEMA verified Personal Property Losses	Count of Renter Applicants with FEMA verified Personal Property Losses	HUD Provided Estimate of Unmet Need
Minor Low	24,864	4,793	\$30,556 (Estimated TREND)
Minor High	5,029	14,206	\$34,728 (Estimate TREND)
Major Low	5,636	16,503	\$38,249
Major High	5,096	27,274	\$41,595
Severe	3,166	35,564	\$66,066

Table 13. HUD and estimated unmet needs based on personal property derived damage category

A similar method as above was utilized to capture impacts to the renter impacted community (table 14). Here, only 584 applicants had verified real property damage (A). Lines B-F represent a breakdown of renter losses by HUD classified Minor-Low to Severe damage levels for those applicants with FEMA personal property verified losses but without FEMA real property verified losses. Here, FEMA personal property verified losses were first multiplied by 4.9 to account for underestimates in losses then classified into HUD designated categories based on federal registry classifications. Damage estimates were derived by multiplying counts of applicants (by damage category) by HUD provided estimates (Table 13). An estimate of potential unmet needs populations (I) was generated by multiplying the total renter applicants without either a real property or personal property loss (G) by 11.8% (accounting for FEMA's \$0 personal property losses compared to SBA's > \$0 contents losses), and subtracting a count of SBA applicants who received funds to support rental repair (H). This potential unmet needs applicant count is then multiplied by the median SBA property loss value (\$27,473) and summed with values (A-F and H) to create an estimated loss for all home renter applicants.

ID	Line Item	Count	Value
A	FEMA renter applicants with FEMA inspected real property damage (SBA Multiplier)	584	\$ 5,910,151
B	Additional FEMA renter applicants with only FEMA inspected personal property damage (SBA Multiplier) Minor-Low	4,793	\$ 146,454,908
C	Additional FEMA renter applicants with only FEMA inspected personal property damage (SBA Multiplier) Minor-High	14,206	\$ 493,345,968
D	Additional FEMA renter applicants with only FEMA inspected personal property damage (SBA Multiplier) Major-Low	16,503	\$ 631,223,247
E	Additional FEMA renter applicants with only FEMA inspected personal property damage (SBA Multiplier) Major-High	27,274	\$ 1,134,462,030
F	Additional FEMA renter applicants with only FEMA inspected personal property damage (SBA Multiplier) Severe	35,564	\$ 2,349,571,224
G	Total renter applicants without a FEMA Verified Loss (Property or Contents)	225,513	
H	Total SBA business applicants with verified repair, reconstruction, or relocation losses (rental NAICS code)	1,061	\$ 59,235,065
I	Potential unmet need population	25,559	\$ 702,182,407
J	Average verified loss		\$ 27,473
K	Total verified loss of rental property owners (Estimated)		\$ 5,522,385,000

Table 14. Estimated Damage to Renter Applicant Dwellings

Next, damages cataloged by other sources outside of SBA and FEMA are accounted for (table 15). Included here are preliminary public housing damage estimates⁴⁸ (A) provided by Puerto Rico’s Public Housing Administration, insured residential damages (B), and private flood insurance damages (C) from Puerto Rico’s Office of the Commissioner of Insurance.

ID	LINE ITEM	COUNT	VALUE
A	Real estate damage to public housing		\$ 119,327,462
B	Insured Damage (Domestic and Foreign Residential and Private Flood)	150,907	\$ 527,818,867
C	Insured Damage (Domestic and Foreign Residential and Private Flood)	3,991	\$ 20,760,714

Table 15. Other Housing Damages

Totaling across all areas reveals total housing losses of at least \$30 Billion. Accounting for 38% in additional costs associated with necessary resilience measures such as more stringent building codes, cost of compliance measures, elevations, or freeboard requirements, increases the total estimate of damages to more than \$34.3 Billion (Table 16).⁴⁹ HUD has historically accepted a 30% in additional costs to account for resiliency measures. Due to the high number of informally built homes in Puerto Rico, it is estimated that the cost of resilience is higher than 30%. The HUD memo released on April 10, 2018, which outlines the methodology used to make a second allocation of \$18.4 billion for Puerto Rico, accounts for approximately \$8 billion (or 46% of the unmet needs allocation) dedicated solely to resilience. To account for the estimated higher cost of resilience, the unmet needs assessment uses the median, 38%, between the historically accepted 30% resilience costs and 46% allocated for resilience in the HUD memo.

TOTAL HOUSING VERIFIED LOSS	\$ 24,867,947,465
Accounting for 38% resilience costs	\$ 34,317,767,502

Table 16. Total Estimated Losses

Accounting for insurance, loans, and other recovery resources (table 17) depicts the total benefit provided to Puerto Rico to date. Here, more than \$1.8 billion across 11 categories spanning federal, state, and local resources have been provided to the island. Unfortunately, recovery funds provided to date still leave a large unmet housing need of greater than \$32.5 Billion (Table 18). Because the impact of hurricanes Irma and Maria was felt island wide, unmet needs data in the following table is calculated at an island wide level.

48 Note: The public housing damage estimates are in the initial phases and are likely to rise as the formal loss assessments are completed.

49 Utilizing HUD’s breakdown of resilience/mitigation as a ratio of the total allocation results in a 46% resilience allocation. This may in fact be more in line with needs to bring informal housing up to resilient standards.

ID	Service	Count	Value
A	FEMA housing assistance payments	194,126	\$578,679,401
B	SBA home loan current manufactured housing payments	16	\$494,700
C	SBA home loan current real estate payments	25,612	\$745,947,845
D	SBA home loan current relocation payments	8	\$731,000
E	SBA home loan current reconstruction payments	424	\$47,434,372
F	SBA business loan payments to landlords	372	\$15,408,100
G	NFIP building payments	413	\$17,902,882
H	Public housing funds		\$71,509,016
I	Housing Finance Authority		\$9,800,000
J	Insurance Payment (Residential)	59,123	\$358,280,592
K	Private Insurance Flood Payments	1,399	\$13,665,528
L	Total benefit (to date)		\$1,859,853,436

Table 17. Sources and amounts of recovery funds (to date)

Total Unmet Housing Need to Pre-Storm Standards	\$23,008,094,029
Accounting for 38% resilience costs	\$32,457,914,066

Table 18. Unmet Housing need for Puerto Rico

INFRASTRUCTURE IMPACT

CATASTROPHIC IMPACT TO POWER GRID

Puerto Rico's electrical grid was already in a state of deterioration when the hurricanes hit. Irma first caused a power outage for nearly 50% of the island, then Maria caused a complete loss of power in all 78 municipalities. By 2 a.m. on September 20, 2017, Puerto Rico reached a total blackout. Due to a damaged outage management system, Puerto Rico Electric Power Authority (PREPA) was initially unable to read meters in order to determine an accurate count of residents left without service. Nearly three months later fiber optic cables were repaired allowing the system to read meters and begin the targeted road to recovery.

Under these conditions, the impact has been staggering. Power restoration has been hampered due to the sheer scale and complexity of the damage. Much of the island's 2,400 miles of transmission lines, 30,000 miles of distribution lines and 342 substations were severely damaged in the storm.

Before the hurricanes, PREPA was already an underfunded public utility in need of an estimated \$4 billion to overhaul its outdated power plants and reduce its reliance on imported oil. In July 2017, PREPA filed for bankruptcy with \$9 billion in debt, according to the Puerto Rico Fiscal Agency and Financial Advisory Authority. Today, the Government of Puerto Rico is in the process of privatizing PREPA in hopes of incentivizing innovation, boosting efficiency and improving services for the people.

Power restoration is a combined effort from the U.S. Army Corps of Engineers, FEMA, Puerto Rico Electric Power Authority (PREPA) and the utility industry which, as of March 21, 2018, have all come together to restore 93.4% of PREPA customers, translating to service for more than 1,368,864 residents.⁵⁰ The agency estimates full recovery by May 2018, but there have been setbacks along the way. On April 12, 870,000 customers lost power when a tree fell on a major power line near the town of Cayey while workers were clearing vegetation. A week later, on April 18, power was lost to all of Puerto Rico when an excavator repairing 2017 damage from Hurricane Maria hit a line connecting two major power plants.

IMPACT TO CRITICAL INFRASTRUCTURE

HEALTH CARE SERVICES

The widespread failure of Puerto Rico's power grid had a crippling effect on the island's 69 hospitals. Weeks after Maria made impact only a handful of hospitals were up and operating on generators, with operations threatened daily due to the shortage of diesel fuel and disruption in fuel distribution due to damaged roads. Governor Rosselló responded by ordering that all hospitals be placed on a priority list to receive diesel. Under these conditions, few hospitals remained operational, with limited supplies, in many cases with no running water, and few if any operating rooms for life-sustaining treatment. Supplemental health care arrived on October 3, 2017 when the U.S. Navy dispatched the USNS Comfort, a Military Sealift Command hospital ship with more than 800 personnel and one of the largest trauma facilities in the US.

FEMA facilitated the deployment of more than 4,700 medical personnel within the first six months and

⁵⁰ U.S. Army Corps of Engineers, https://www.army.mil/article/202518/fact_sheet_six_months_after_hurricane_the_corps_provides_update_about_historic_power_restoration

cared for over 38,000 survivors in the agency's largest medical response mission ever.⁵¹ Countless volunteers and charitable organizations also provided service.

One US-based non-profit, Direct Relief, reportedly delivered over \$1.8 million in charitable financial assistance and more than 453 tons of supplies. In the month of October alone the organization transported 76 tons of medicine and medical supplies distributed to more than 20 health centers across Puerto Rico. Days before Christmas they airlifted another 40 tons of medicine. As of March 2018, six months following Hurricane Maria, Direct Relief had provided charitable assistance to more than 60 hospitals and clinics and delivered more than \$62.6 million in medical aid including medicine, supplies and services.⁵²

DAM FAILURE

One of the island's largest dams, the Guajataca Dam located in Puerto Rico's northwest corner, sustained such damage from Hurricane Maria from extreme winds and 15 inches of flooding rains that it failed 19 days after impact. Guajataca is a hydroelectric dam, 120 feet high, holding water from the Guajataca River in the neighborhood of Terranova. The reservoir of the dam lies between the municipalities of Quebradillas, Isabela and San Sebastián and was built to hold back 55.3 million cu yd of water. Weakened by the storm, the emergency spillway of the dam eventually collapsed, flooding communities and contaminating the water supply for over 350,000 Puerto Ricans. The government ordered the evacuation of 70,000 residents in and surrounding the towns of Isabella and Quebradillas.

The U.S. Department of Defense and U.S. Army Corps of Engineers arrived onsite 4 days after Hurricane Maria and worked for 20 days just to stabilize the dam. The Air Force, Marines, Navy and Army National Guard along with the Puerto Rican National Guard joined the Corps to fly in jersey barriers and super sack sandbags to stop the flooding. Long-term plans to repair the dam are underway. For now, the Corps has completed temporary fixes involving the installation of diesel water pumps to draw down the crest waterline at the dam and refill the canal that supplies drinking water to 250,00 residents.⁵³

DISRUPTED COMMUNICATIONS

Communication disruptions across the islands complicated response efforts for months. Days after the storm, on September 27, 2017, the Federal Communications Commission issued a status report that both 911 centers on the island were operational, but overall, 91.1% of the island's cell sites were out of service. Every municipio reported that 75% or more of their cell sites were out of service with 100% of cell sites out of service for 31 of the 78 municipios.⁵⁴

51 Six Months After Maria: Progress Made, Work Continues, March 16, 2018, <https://www.fema.gov/news-release/2018/03/16/six-months-after-maria-progress-made-work-continues>

52 Six Months After Hurricane Maria, 2018 Recovery Continues in Puerto Rico, Direct Relief, <https://www.directrelief.org/2018/03/six-months-after-hurricane-maria-recovery-continues/>

53 Feds Fight to Firm Up Puerto Rico Dam, ENR Southeast, February 26, 2018, <https://www.enr.com/articles/44047-feds-fight-to-firm-up-puerto-rico-dam>

54 Communication Status Report for Areas Impacted by Hurricane Maria, September 27, 2017, Federal Communications Commission, http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0927/DOC-346943A1.pdf

FEMA PUBLIC ASSISTANCE (PA)

As of April 26, 2018, Puerto Rico has received \$4,424,124.65 in allocated PA funds for Hurricane Irma and \$ 1,586,719,183.76 for Hurricane Maria, for a combined allocation thus far of \$1,63,096,043. Final Public Assistance is expected to grow significantly as project worksheets for permanent work are submitted and reviewed by FEMA.

In the six months following Hurricane Maria, the agency had obligated \$1.3 billion in PA, \$69 million of that supporting debris removal (Category A work) and \$1.23 billion supporting emergency protective measures (category B work). They had delivered 1,969 generators and cleared 6.47 million cubic yards of hazardous debris.⁵⁵

Hurricane Irma Category A and B work totaled \$5,723,146 for the four eligible municipios Canóvanas, Juyaya, San Juan, Yauco and state-wide.

DR – 4336, HURRICANE IRMA CATEGORY A AND B WORK				
Category Work	Sum of Project Requests	Sum of Federal Share	Required Local Share	Total Project Funding
A – Debris Removal	\$2,199,149	\$1,781,127	\$418,022	\$2,199,149
B – Protective Measures	\$3,523,997	\$2,642,998	\$880,999	\$3,523,997
Total	\$5,723,146	\$4,424,125	\$1,299,021	\$5,723,146

Table 19. Table of obligated dollars for Emergency Work by category for Hurricane Irma

On September 25, 2017 President Trump increased cost sharing to 100% Federal funding for debris removal and emergency protective measures for Hurricane Maria, including direct Federal assistance for 180 days from the date of the declaration.⁵⁶ On November 2, 2017, President Trump increased the federal cost share for all Public Assistance to 90% of the total eligible costs, except for assistance previously approved at 100%.⁵⁷

⁵⁵ Six Months After Maria, March 15, 2018, <https://www.fema.gov/hurricane-maria>

⁵⁶ <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-amends-puerto-rico-disaster-declaration-2/>

⁵⁷ <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-amends-puerto-rico-disaster-declaration/>

DR – 4339, HURRICANE MARIA CATEGORY A AND B WORK				
Category Work	Sum of Project Requests	Sum of Federal Share	Required Local Match	Total Project Funding
A – Debris Removal	\$147,777,283	\$147,777,283	\$0	\$147,777,283
B – Protective Measures	\$1,245,593,045	\$1,245,593,045	\$0	\$1,245,593,045
Total	\$1,393,370,329	\$1,393,370,329	\$0	\$1,393,370,329

Table 20. Table of obligated dollars for Emergency Work by category for Hurricane Maria

Further information on permanent work for Categories C - G is forthcoming. On April 12, 2018, the Government of Puerto Rico and FEMA announced agreed upon guidelines for permanent work. FEMA will use 428 Alternative Procedures to develop fixed-cost project estimates in collaboration with Puerto Rico and applicants. FEMA announced it will reimburse up to 90% of the cost share and set a deadline to identify all projects and agree upon all estimates within 18 months.

INFRASTRUCTURE UNMET NEED

ESTIMATING PUBLIC ASSISTANCE

Public Assistance data is slow to materialize as municipios work on creating project worksheets. Through its Public Assistance (PA) Program (CDFA Number 97.036), FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. This dataset lists all public assistance recipients, designated as Applicants in the data. The dataset also features a list of every funded, individual project, called project worksheets.⁵⁸ Unfortunately, FEMA's Open FEMA Dataset: Public Assistance Funded Projects Details - V1⁵⁹ currently has only some of the closed-out project data for Category A (Debris Removal) and Category B (Protective Measures), but no data on projects across the 6 additional project areas; Roads and Bridges, Water Control Facilities, Public Buildings, Public Utilities, Recreational or Other, and State Management.

58 <https://www.fema.gov/media-library/assets/documents/28331>

59 <https://www.fema.gov/openfema-dataset-public-assistance-funded-projects-details-v1>

Public Assistance Category	Project Amount	Federal Obligation	Unmet Needs
A - Debris Removal	\$ 374,928,060	\$ 374,928,060	\$ -
B - Protective Measures	\$ 3,145,952,838	\$ 3,145,952,838	\$ -
C - Roads and Bridges	\$ 1,588,047,381	\$ 1,429,242,643	\$ 158,804,738
D - Water Control Facilities	\$ 2,721,648,010	\$ 2,449,483,209	\$ 272,164,801
E - Public Buildings	\$ 8,381,860,147	\$ 7,543,674,132	\$ 838,186,015
F - Public Utilities	\$ 17,991,258,181	\$ 16,192,132,363	\$ 1,799,125,818
G - Recreational or Other	\$ 1,067,138,057	\$ 960,424,252	\$ 106,713,806
Grand Total	\$ 35,270,832,673	\$ 32,095,837,496	\$ 3,174,995,178
Preliminary estimates - subject to change			

Table 21: Total PA cost by category

Preliminary data indicates initial Public Assistance Project costs by category across the island. Utilizing this dataset puts the initial public infrastructure impact across the island at approximately \$35.3 Billion (Table 21). A majority of these infrastructure impacts (51%) have been to the Public Utilities Sector (Table 22). Applying the recent FEMA approved 90% / 10% cost share, an estimated unmet need of \$3.2 Billion remains. The impact and unmet need numbers are likely to change and may increase as project worksheets are completed.

Public Assistance Category	% of total
A - Debris Removal	1%
B - Protective Measures	9%
C - Roads and Bridges	4%
D - Water Control Facilities	8%
E - Public Buildings	24%
F - Public Utilities	51%
G - Recreational or Other	3%
Grand Total	100%
Preliminary estimates - subject to change	

Table 22: % of PA cost by category.

ECONOMIC IMPACT

This recovery brings a unique opportunity to meaningfully improve economic conditions as the Puerto Rican people rebuild stronger and more resilient. Through critical rebuilding of housing and infrastructure, cross-sectoral activities will bring tangible economic benefit in the form of jobs and the increased value of island structures and neighborhoods. Economic planning and strategic spending will ensure recovery funds injected into the economy today have a lasting impact.

ECONOMIC CONDITIONS

Declining economic conditions in Puerto Rico have been exacerbated by hurricanes Irma and Maria. These storms impacted the island at a time of financial and economic constraint. On June 30, 2016 the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) was signed into law to establish an oversight board and a process for restructuring the island's debt. In May 2017, Puerto Rico effectively filed the largest-ever federal bankruptcy proceeding by a local government. At the time Puerto Rico filed, unemployment across the island was at 11%, and much of Wall Street's attention has focused on the creditors who hold some of Puerto Rico's \$74 billion in public debt. As a covered entity under the law, Puerto Rico is required to submit a fiscal plan; the latest version was approved and certified on April 19, 2018 by the Financial Oversight and Management Board (FOMB).⁶⁰

IMPACT ON BUSINESS AND EMPLOYMENT

The impact to Puerto Rico's medical products manufacturing industry was felt around the US. When factories and distribution centers located on the island were impacted by the storm it caused a direct impact to local jobs and industry production, and a ripple effect throughout the mainland US. Hospitals across the country were faced with a shortage of intravenous fluids like saline and dextrose which are essentials to everyday treatment. They are needed to deliver medications and rehydrate patients.

According to American Community Survey data, many jobs in the Puerto Rican economy before the storms were in education for elementary and secondary schools, restaurants and food service, and hospitals. The most common jobs held before the storm were secretaries and administrative assistants, cashiers, and janitorial, and teaching elementary and secondary school. Higher paying jobs were in environmental engineering, physicians and surgeons, architectural and engineering managers, and chemical engineers.

The top five economic sectors with reported losses made to SBA due to the hurricanes are:

1. Real Estate, Rental and Leasing
2. Accommodations and Food Services
3. Health Care and Social Assistance
4. Retail Trade
5. Manufacturing

⁶⁰ <https://juntasupervision.pr.gov/index.php/en/fiscalplan/>

AMOUNT OF LOSSES VERIFIED BY SBA					
Economic Sector	Building	Furniture	Machinery	Inventory	Total Losses
Real Estate Rental and Leasing	\$70,764,253	\$1,812,657	\$2,777,607	\$280,462	\$75,634,979
Accommodation and Food Services	\$23,136,309	\$3,314,709	\$7,376,402	\$1,808,706	\$35,636,126
Health Care and Social Assistance	\$24,513,579	\$1,389,270	\$6,826,130	\$725,197	\$ 33,454,176
Retail Trade	\$14,793,580	\$2,180,210	\$4,278,255	\$6,441,917	\$27,693,962
Manufacturing	\$11,421,437	\$849,215	\$10,212,639	\$2,598,756	\$25,082,047
Other Services (except Public Administration)	\$16,077,690	\$820,455	\$5,930,417	\$953,144	\$23,781,706
Unknown Business Types	\$12,515,624	\$318,140	\$ 1,602,840	\$694,058	\$15,130,662
Arts, Entertainment, and Recreation	\$12,461,765	\$582,309	\$1,837,302	\$210,446	\$15,091,822
Wholesale Trade	\$5,144,100	\$397,549	\$1,777,825	\$3,824,633	\$11,144,107
Professional, Scientific, and Technical Services	\$6,808,256	\$986,409	\$2,087,958	\$1,057,875	\$10,940,498
Educational Services	\$9,074,799	\$588,710	\$584,696	\$171,375	\$10,419,580
Information	\$991,067	\$109,148	\$4,721,176	\$46,050	\$ 5,867,441
Construction	\$3,332,757	\$181,721	\$ 1,810,989	\$231,680	\$ 5,557,147
Transportation and Warehousing	\$2,691,642	\$132,131	\$1,120,257	\$32,529	\$3,976,559
Agriculture, Forestry, Fishing and Hunting	\$2,421,739	\$46,454	\$695,598	\$480,691	\$3,644,482
Administrative and Support and Waste Management and Remediation Services	\$774,424	\$112,496	\$375,329	\$163,400	\$1,425,649
Finance and Insurance	\$487,757	\$44,270	\$290,926	\$31,000	\$ 853,953
Utilities	\$117,943	\$25,027	\$150,494	\$22,000	\$315,464
Mining	\$43,757	\$6,000	\$133,845	\$600	\$ 184,202
Management of Companies and Enterprises	--	--	--	--	--
Public Administration	--	--	--	--	--
Total Across Sectors	\$217,572,478	\$13,896,880	\$54,590,685	\$19,774,519	\$ 305,834,562

Table 23. SBA Business Losses by Sector

Today, the Puerto Rican economy is adapting to the impact of Hurricane Maria. According to the Bureau of Labor Statistics, as of February 2018, unemployment in Puerto Rico is at 10.6%. In February there were 848,300 jobs in non-farm industries, compared to the 871,200 jobs in September 2017. In the industry of Leisure and Hospitality Puerto Rico saw a decline from 80,400 in September 2017 to 78,300 in February 2018. The true impact of this change will reveal itself over time.

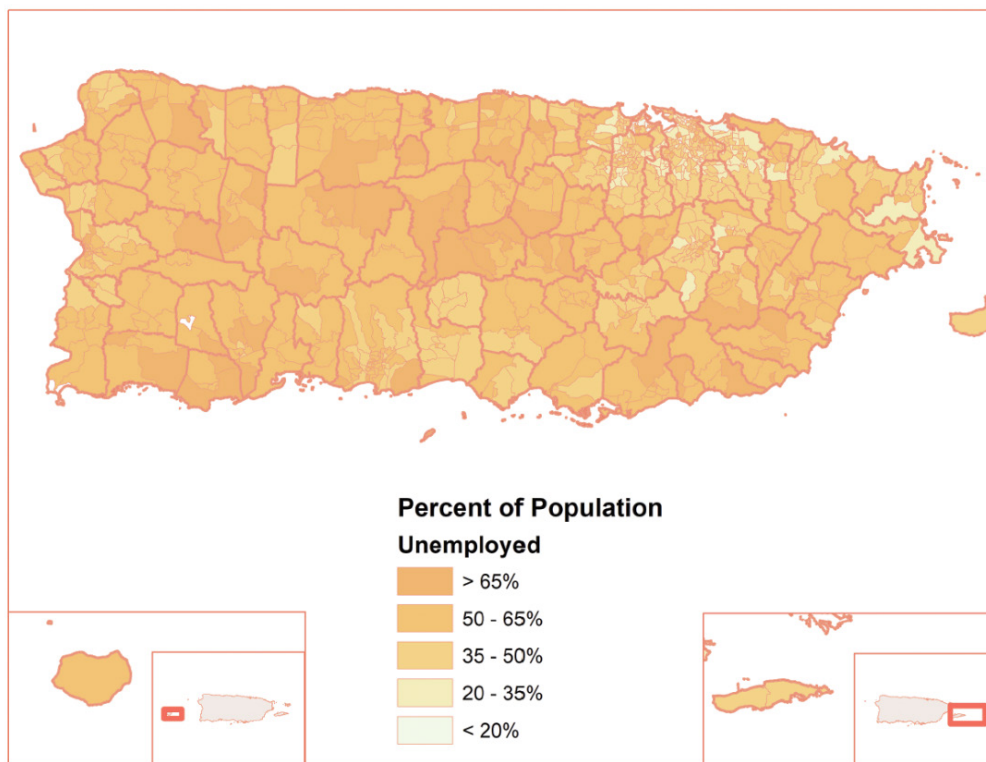


Figure 39. Percent Unemployment by Census Tract, source data ACS 2012 - 2016

IMPACT ON TOURISM

Hurricanes Irma and Maria left almost all of Puerto Rico without power or water, closed airports, and vacant cruise terminals. CBS News reported a month after the storm that a third of the hotels in Puerto Rico remained shuttered and beaches were closed for swimming because of possible water contamination.⁶¹ Immediately following the storm, demand for hotel rooms increased as a result of the influx of first responders and relief workers. At the beginning of the high season, in December 2017, the island officially declared itself open for tourism, ready to receive the people and income required to bring back one of the island's lifeblood sectors. Seven months later, although still in recovery mode, tourism on the island is increasing as relief efforts wind down. Although the tourist zones of San Juan have seen increasing numbers as the weeks pass, and the beach hotels are open in Condado and Isla Verde, many other more insular areas of the island are still heavily damaged. One such example is the El Yunque National Forest, which is closed until further notice. Additionally, several major resorts, such as El Conquistador, Caribe Hilton and Ritz-Carlton San Juan, remain shuttered. However, restaurants and bars are seeing increased patronage, and attractions like El Morro fort and Old San Juan are just as crowded as before the storms.

⁶¹ "It's like a ghost town": Puerto Rico tourism craters in wake of Hurricane Maria, October 24, 2017, <https://www.cbsnews.com/news/puerto-rico-tourism-hurricane-maria/>

The Puerto Rico Tourism Company (PRTC) reports the following post-storm metrics:

- **Cruises:** Puerto Rico resumed cruise operations just two and a half weeks after Hurricane Maria, and by end of June 2018, Puerto Rico will have received 1.04 million passengers. The 2018/2019 cruising season expects 1.7 million passengers, which is expected to generate roughly \$250 million in revenue for the economy.
- **Air Access:** The airline industry is restoring. Two weeks after Hurricane Maria, the Luis Muñoz Marín International Airport had 20 daily flights, but today, there are on average 110 daily flights. Capacity is on the rise with a current monthly seat volume of 391,000. By July 2018, seat capacity will increase by 81,000 more. By early summer 2018, air access will be on par with levels this time last year.
- **Hotels:** Currently, there are over 122 hotels operating, which equates to 12,458 available rooms, along with hundreds of Airbnb listings and paradores (small, family-run inns). Another 2,670 rooms will be added to that inventory after undergoing renovations, which include the Wyndham Grand Rio Mar Puerto Rico Golf & Beach Resort, the Ritz-Carlton Reserve and El San Juan Hotel. Approximately \$1.9 billion will be injected into new developments and renovations, which contributes to adding roughly 3,831 new jobs.
- **Destination Attractions:** A month after Hurricane Maria, 22 attractions were open, however, in February 2018 there were more than 120. Additionally, 13 golf courses and 15 casinos are open for recreation, and there are 4,000 operating restaurants. PRTC reports continued commitment from partners who are choosing to keep their big-ticket events in Puerto Rico, like the Ironman which took place on March 18, 2018.⁶²

With continued recovery of public infrastructure and reopening of resorts and restaurants, Puerto Rico's tourism sector will eventually rebound to pre-storm levels. Nonetheless, the more time-sensitive issue facing the tourism sector is public perception of the status of the recovery in the most frequently visited areas of the island. As a result of private investment, these are the areas that typically recover the quickest. Many of the hotels and resorts function with backup generators and water tanks on hand for when storms strike.

With the addition of over 2,000 rooms slated for this year, it will be imperative for the island to target outreach efforts and implement a robust marketing campaign to reach potential visitors that may not be aware of the pace of recovery in the tourist areas, such as Old San Juan and Condado. Because so much national media attention has rightly focused on the recovery, many potential tourists may not be aware that the frequently visited attractions and areas of the island are ready to receive them. In the coming months, it will be the concerted efforts enacted by the island around tourism marketing that will ensure full recovery of the sector to pre-storm levels and prove San Juan worthy of its ranking on Lonely Planet's 2018 Top 10 Cities to Visit⁶³, a list published before Irma and Maria made their historic landfall.

⁶² <https://www.prnewswire.com/news-releases/puerto-rico-announces-major-tourism-milestones-while-hosting-the-largest-and-most-important-regional-tourism-event-300591116.html>

⁶³ <https://www.lonelyplanet.com/best-in-travel/cities>

IMPACT ON AGRIBUSINESS

Preliminary figures from the Puerto Rico Department of Agriculture estimated the islands suffered a loss of \$780 million in agriculture yields. Crops were decimated by wind and flooding, and mudslides in the mountainous interior took out many of the roads critical to agricultural production. Primary cash crops such as plantain, banana and coffee crops were hit the hardest.

Puerto Rico's Secretary of Agriculture, Carlos Flores Ortega, estimates that 80% of the entire crop in the agriculture sector was wiped out, based on value. A total of 4,200 cows and 2.2 million chickens were lost while 50% of coffee plants were destroyed. According to data from the Puerto Rico Department of Agriculture, with eight (8) regional reports, some 3,028 insurance claims and \$1.4 million in disbursements made by the Agricultural Insurance Corporation (CSA), infrastructure damages total \$1.8 billion and losses in agricultural production \$182.5 million. Insurance claims are not representative of the entire universe of farmers since only some farmers have policies in effect with the CSA. Regional damage reports continue to be updated as field evaluation works continue to progress to the extent that physical access to the areas allows.⁶⁴

DAMAGES TO THE AGRICULTURE SECTORAS OF JANUARY 29, 2018 (IN MILLIONS OF DOLLARS)			
Región	Damages to Infrastructure and others	Lost Production	Economic Impact
Caguas	371.1	33.1	404.2
Arecibo	319.3	23.5	342.8
Mayagüez	154.1	6.6	160.7
San Germán	196	15.6	211.6
Ponce	190.9	29.9	220.8
Naranjito	197.2	31.2	228.4
Utua	208.9	22.1	231
Lares	187.3	20.5	207.8
Subtotal	\$1,824.8	\$182.5	\$2,007.3

Source: Puerto Rico Department of Agriculture

Table 24. Agricultural Impact, information from Department of Agriculture

⁶⁴ Progress Report on the Impact of Hurricane Maria on the Economy of Puerto Rico, Puerto Rico Planning Board, March 9, 2018

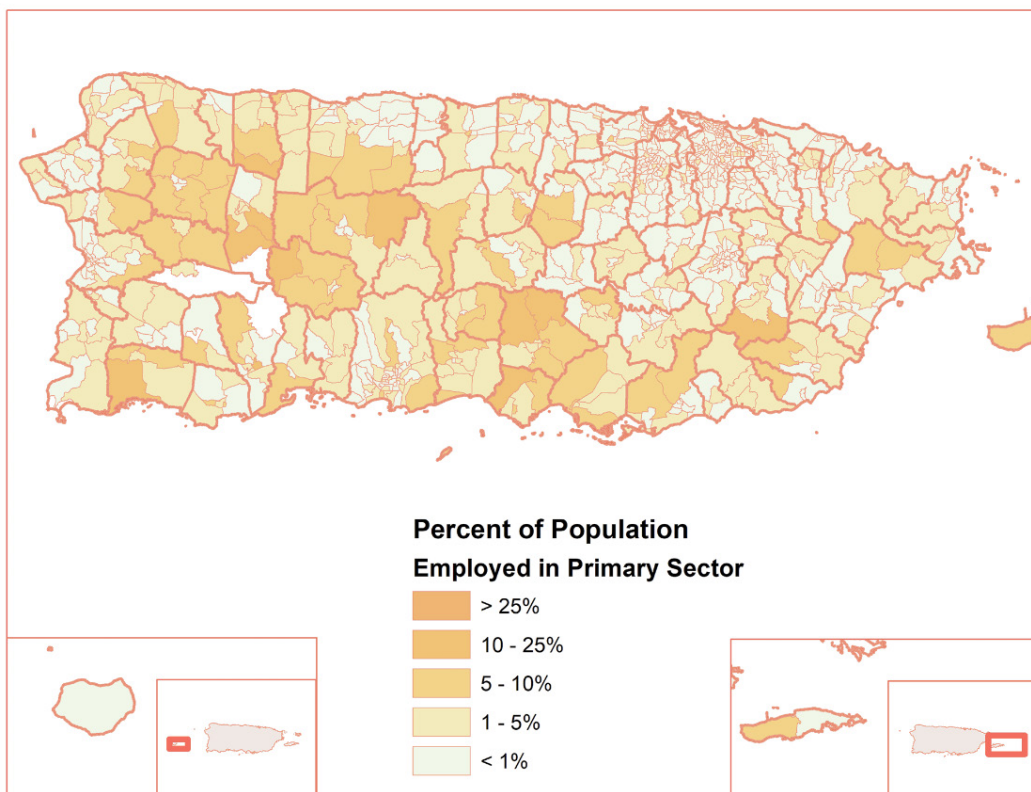


Figure 40. Primary sector (farming, fishing, extractive industry) employment by census tract, source data ACS 2012-2016

IMPACT ON PUBLIC SERVICES

COMMUNITY DISASTER LOANS

Almost all 78 municipalities across the islands have suffered impact from Hurricanes Irma and Maria and have suffered a substantial loss in tax revenue as individual tax payers and businesses face economic hardship in their own recoveries. Without critical tax revenue from property tax, sales tax, income tax, or any other locally imposed tax, these municipalities are unable to support essential services for local residents.

For this need, FEMA has awarded \$53 million for 12 municipalities in low-interest loans under the Community Disaster Loans (CDL) program which provides operational funding to help local governments that have incurred a significant loss in revenue, due to a major disaster that has or will adversely affect their ability to provide essential municipal services. The following 12 municipalities have been reviewed and approved to receive the first iterations of these loans: Bayamón, Caguas, Humacao, Juncos, Ponce, Río Grande, Sabana Grande, Salinas, San Lorenzo, Toa Baja, Trujillo Alto and Yabucoa. These municipalities are each eligible to receive up to a \$5 million loan. 65 other municipalities are under review for requested assistance to determine eligibility and whether they incurred at least 25% loss of tax revenues in their operational funds.

REPORTED PUBLIC SECTOR IMPACT

The Junta de Planificacion, known in English as the Planning Board, is at the forefront of the processes and technology to promote, through effective and appropriate tools, the sustainable development of Puerto Rico. The Board has compiled an extensive report on the hurricane impact to the Puerto Rico public sector. In its analysis the Planning Board also considers the Four-Year Investment Program (Programa de Inversiones de Cuatro Años or “PICA”) framework to assess impact in income loss. The Four-Year Investment Program guides public agencies and corporations in the preparation of their respective investment programs and capital improvements. The Framework contains a demographic and socioeconomic profile of Puerto Rico as a whole and from the regional perspective, and an economic assessment, including analysis of public debt and information on development patterns and priority projects for Puerto Rico.⁶⁵

The Board’s initial impact estimates for public sector agencies, corporations and municipios as of February 6, 2018 was estimated at \$5.7 billion. The “Economic Report to the Governor 2017, Planning Board of Puerto Rico” was published March 9, 2018 and is an important document to be considered by public, private and governmental stakeholders. Readers are encouraged to review the document in full on the Board’s website.⁶⁶

The Puerto Rico Planning Board continues to study the economic conditions of the island and quantify the short and long-term impact of Hurricanes Irma and Maria. In the short term, the information on the labor market is being analyzed for short term impact, while variables such as consumption, investment, and trade balance are being analyzed for a long term macroeconomic picture. The Economic Report to the Governor 2018, will include an analysis of short and long-term impact, using statistical demographic, economic indicators and macroeconomic theory.

Research and actionable planning is strategically divided by the Puerto Rico Planning Board into 11 functional areas. These areas can be seen in the Puerto Rico Planning Board map below.

⁶⁵ Programa de Inversiones de Cuatro Años 2018-2019 A 2021-2022, The Puerto Rico Planning Board, <http://jp.pr.gov/Portals/0/Economia/PICA/MARCO%20REFERENCIA%20DEL%20PICA%202018-2019%20a%202021-2022%20final.pdf?ver=2018-04-19-184254-700>

⁶⁶ Same as footnote above.



Figure 41. Geographic delineation of Planning Board functional areas. Map provided by the Puerto Rico Planning Board.

ECONOMIC UNMET NEED

Economic impact caused by a major disaster event results in immediate loss of services and lowered if not halted business output for companies located in and around the impact zone. True impact can be far reaching and continue in short and long-term waves as the local tax base recovers, making it difficult to pinpoint a true dollar amount for impact and recovery need.

The economic impact calculated for this action plan is based on current federal data sets only and will be updated as necessary to inform a growth-centric approach to the allocation and administration of HUD CDBG-DR assistance.

Understanding financial effects to livelihoods provides a more comprehensive understanding of recovery needs across the impacted area. Detailed assessments such as the forthcoming 180-day report to Congress will provide a more comprehensive overview of extended losses to businesses including those related to power loss, tourism slowdowns, and detailed models related to current influxes of funds, business incubation, and other economic stimulus programs currently underway.

The focus of the assessment in this Action Plan centers on identifying those immediate impacts to businesses (buildings and content) resulting from Irma and Maria. The Small Business Administration (SBA) makes low cost disaster loans available to qualified businesses and their services are an important indicator of business impact. Utilizing SBA business data in conjunction with HUD methods laid out in the Federal Register informs the approach to identify property and content impacts to businesses across Puerto Rico. According to SBA business loan information⁶⁷ there were 86,171 applications issued across the island. Of these, 3,090 applicants had a verified property loss of \$217,572,478 and another 15,593 applicants are either “in-process”, have withdrawn, or were declined for a loan from the program. An additional 68,394 applications were issued but not returned to the SBA (Table 25). Note, the high percentage of applications that were issued but not returned. Anecdotal evidence suggests that many Puerto Rican small business owners walked away from the SBA process because

67 SBA_DCMS_Business_report_Irma_Maria_PR_00029_PR_00031_03_18_2018

they feared they simply could not repay a business loan. Other applicants, particularly those who were declined, have seen an increase in advocacy from members of Congress who hope to see higher rates of SBA approvals moving forward.⁶⁸

Applicant Status	Count of Applicants	% in Status
Approved	2,184	2.53%
Declined	4,217	4.89%
In Process	8,962	10.40%
Issued	68,394	79.37%
Withdrawn	2,414	2.80%
Grand Total	86,171	100%

Table 25. Status of SBA applicants as of 3.18.2018

The average verified loss for all applicants with SBA verified losses was \$70,412 and the median loss was \$31,395. Utilizing the general methodology put forth for the housing impact and unmet needs enables the identification of impacts and unmet needs for those businesses who are not initially accounted for in the available datasets.⁶⁹ Coupling the SBA Business Report with methods put forth by HUD and knowledge about housing impacts provides a robust estimate of actual and probable extended impacts for businesses who did not qualify for loans. The methods utilized in this assessment are outlined here:

First, known losses for those who applied for SBA loans and were visited by SBA inspection teams reveal a total loss (property and contents) of \$335.4 million for roughly 3,090 businesses. Table 26 shows the count and total losses verified by SBA during the inspection process.

SBA Verified Losses			
ID	Line Item	Count	Value
A	SBA applicants with a real estate verified loss (Repairs)	3,090	\$ 217,572,478
B	SBA verified reconstruction loss (Rebuild)	229	\$ 29,487,635
C	SBA verified relocation loss (Rebuild Elsewhere)	5	\$ 97,576
D	Verified furniture loss	460	\$ 13,896,880
E	Verified machinery loss	7	\$ 54,590,685
F	Verified inventory loss	315	\$ 19,774,519
G	Total real estate losses for businesses referred to SBA (Estimate)		\$ 335,419,773

Table 26. Small Business Administration Verified Business Property and Content Loss of All SBA Applicants

68 <http://newsismybusiness.com/velazquez-rebuild-businesses/>

69 SBA_DCMS_Business_report_Irma_Maria_PR_00029_PR_00031_03_18_2018

Extended loss estimates were established by utilizing HUD's methodology outlined in the federal register.⁷⁰ Here, businesses are grouped into 1 of 5 categories based on total real property and content losses. For this assessment, real property loss includes verified repair, reconstruction, or relocation costs and content losses include impacts to furniture, machinery, or inventory. Table 27 shows the number of businesses in each of these loss categories as well as the median loss and percentage of total businesses within said category. These median values are utilized in estimating additional unmet need to other businesses.

HUD Cat	Damage	Count	Median Loss	Percentage of All Businesses
Category 1	< \$12,000	137	7,331	9.76%
Category 2	\$12,000 - \$29,999	349	20,986	24.86%
Category 3	\$30,000 - \$64,999	389	45,015	27.71%
Category 4	\$65,000 - \$149,999	301	90,808	21.44%
Category 5	>= 150000	228	277,751	16.24%

Table 27. Federal register method impacted business count

Estimating additional losses to the more than 80,000 businesses across the island required utilization of SBA data, HUD methods outlined in the Federal Register, and general impact information from FEMA and SBA. The compact size of the island, the fact that homes and businesses often share the same space, and the track of the hurricanes indicates that impacts to homes and businesses likely occurred in a similar pattern. Following this logic, an estimate of the percentage of damaged businesses across the island was created by first multiplying the total number of business applications (86,174) by the percentage of estimated homes damaged by Irma and Maria (90%), yielding an estimated 77,384 businesses impacted. Multiplying this total number of businesses by the true percentage of all business impacted by category provides an estimate of impacted businesses in each category of impact (table 28). Utilizing methods established in the Federal Register, multiplying the total number of businesses by the known median loss value resulted in estimated total losses to property and contents for the hurricane impact areas.

HUD Cat	Damage	Count	Median Loss	Estimated Losses
Category 1	< \$12,000	7551	7,331	\$55,356,381
Category 2	\$12,000 - \$29,999	19236	20,986	\$403,686,696
Category 3	\$30,000 - \$64,999	21441	45,015	\$965,166,615
Category 4	\$65,000 - \$149,999	16590	90,808	\$1,506,504,720
Category 5	>= 150000	12567	277,751	\$3,490,496,817

Table 28. Federal register method estimated additional business counts and estimated losses

These losses were combined with known losses from SBA business data to estimate a total initial economic impact to business real property and contents of nearly \$7.2 billion (Table 28). Accounting for 30% in costs associated with resilience measures such as more stringent building codes, cost of compliance measures, elevations, or freeboard requirements increases the total cost of repairs to \$9.8 Billion.

70 <https://www.gpo.gov/fdsys/pkg/FR-2018-02-09/pdf/2018-02693.pdf>

Category	Count	Value
Category 1 Loss (< \$12,000)	7,551	\$ 55,356,381
Category 2 Loss (\$12,000 - \$29,999)	19,236	\$ 403,686,696
Category 3 Loss (\$30,000 - \$65,000)	21,441	\$ 965,166,615
Category 4 Loss (\$65,000 - \$150,000)	16,590	\$ 506,504,720
Category 5 Loss (>\$150,000)	12,567	\$ 490,496,817
Sum of estimated losses to property and contents		\$ 6,421,211,229
Total verified loss for all businesses (Estimate)		\$ 6,756,631,002
Accounting for 38% resilience costs		\$ 8,604,954,256

Table 29. Estimated Small Business Administration Property and Content Losses

SBA payouts to businesses totaled \$63.8 Million for these lines of loss, leaving a potential unmet need of \$6.7 Billion or \$8.5 Billion when accounting for resilience costs (Table 30).

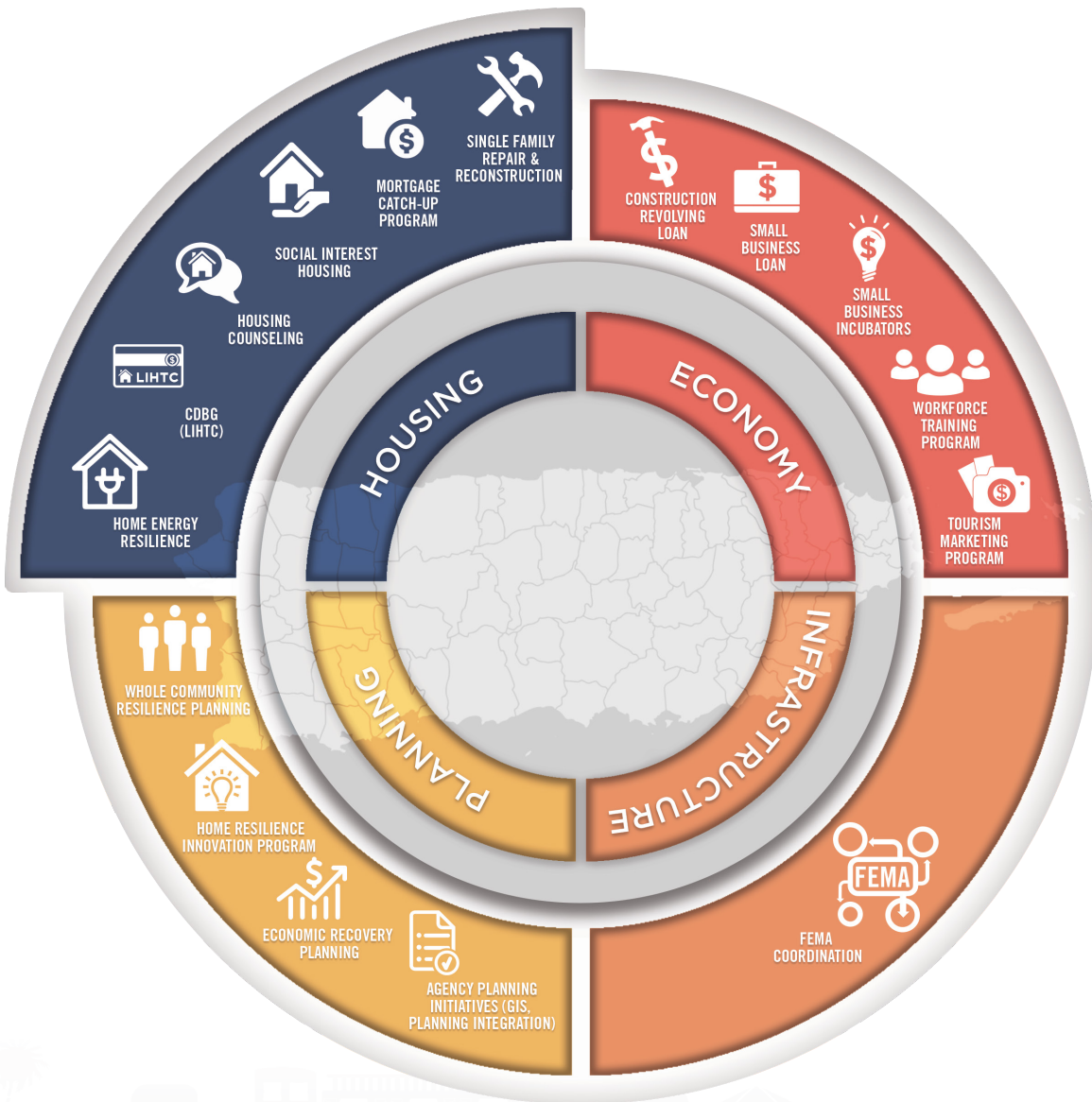
Category	Count	Value
SBA repair payments	833	\$ 39,469,900
SBA reconstruction payments	42	\$ 4,219,400
SBA relocation payments	1	\$ 9,900
SBA furniture payments	460	\$ 2,974,400
SBA machinery payments	743	\$ 13,261,800
SBA inventory payments	315	\$ 3,869,800
Total Benefit		\$ 63,805,200
Total verified loss for all businesses (Estimate)		\$ 6,756,631,002
Accounting for 38% resilience costs		\$ 8,604,954,256

Table 30. SBA business loans and remaining unmet needs

METHOD OF DISTRIBUTION

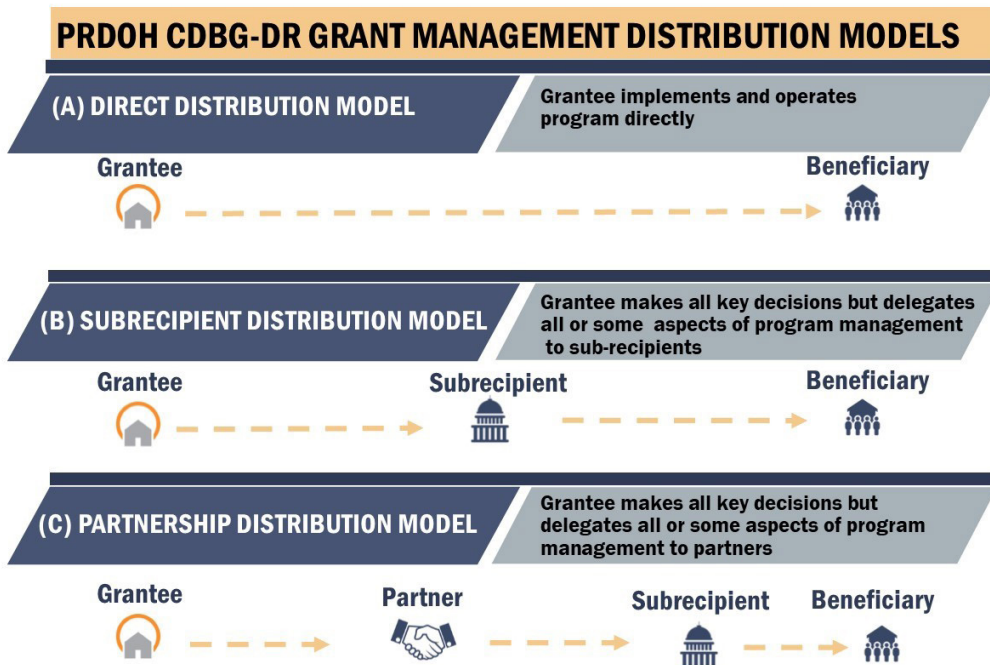
RECOVERY PROGRAMS

Delivering a transparent, people-focused recovery is Puerto Rico's top priority. With these funds Puerto Rico is investing in a safer, more sustainable society. Programs are designed to protect people and property, rebuild families, strengthen communities, generate long-term investment in social capital, and spur economic development. Programs are categorized by Housing, Planning, Economic Recovery, and Infrastructure.



PRDOH will utilize three (3) distribution models for its recovery programs. PRDOH will utilize MOD method A to administer the housing repair, reconstruction, and relocation program. Models B and C will be used for other programs as outlined in detail within the program descriptions in the following pages. Program design was informed by information provided by UGLGs. They will play an active role in many of the programs, including but not limited to housing and planning. Although regional collaboration is highly encouraged, for the purposes of duties and operations conducted under these programs, Partners and/or Sub Recipients shall perform work only in their programmatic areas.

Programs will be administered by PRDOH under one of three models:



Grantee

The Commonwealth of Puerto Rico is formally the Grantee for the CDBG-DR funds. The Governor has designated PRDOH as the grantee for purposes of administering the program and executing grant agreements with HUD. Therefore, PRDOH will be referred to as the grantee in this Action Plan and in administrative agreements with HUD.

Beneficiary

Beneficiaries are the persons to whom assistance, services or benefits are ultimately provided. Eligible beneficiaries are defined for each program in the Action Plan.

Partners

Partners may include governmental agencies or governmental organizations, as applicable for the program established in the Action Plan. Performance requirements, roles, and responsibilities will be outlined by PRDOH in a formal agreement, which may be in the form of a Memorandum of Understanding (MOU). Partners may then perform all or some of Program Management activities as outlined by PRDOH. Partners may procure technical assistance and program management services as outlined by PRDOH, or have technical assistance and program management services provided to them by PRDOH or other oversight agencies. The Partnership model will strengthen the institutional capacity of the agencies involved.

- Partners may then perform some or all aspects of program management, including overseeing Subrecipient awards and performance, in accordance with PRDOH guidelines.

Subrecipients

Subrecipients are chosen by the grantee or its designee (Partner) to undertake certain eligible CDBG activities. Subrecipient means a Unit of General Local Government (UGLG), public or private nonprofit agency, authority, or organization, or a for-profit entity authorized under §570.201(o), receiving CDBG funds from the recipient or another subrecipient to undertake activities eligible for such assistance. Subrecipients may include UGLG's, public and private organizations, agencies, including nonprofit and for-profit subrecipients, as applicable for the program established in the Action Plan. Subrecipients will meet the selection criteria outlined in the Action Plan or Program Guidelines and will:

- Carry out specified program on behalf of PRDOH
- Comply with all Federal statutes, regulations and program requirements
- Comply with all terms and conditions of the subrecipient agreement
- Meet all established performance goals

PRDOH is the responsible entity for subrecipient compliance and performance. Agreements with subrecipients will comply with §570.503. Therefore, Subrecipients who fail to meet any of the criteria outlined above, or as specified in their grant agreement, may have their ability to carry out program activities rescinded, in which case activities would be managed by PRDOH or its designee or funds redistributed in accordance with the Action Plan.

PROGRAM REQUIREMENTS

CDBG-DR PROGRAM NATIONAL OBJECTIVES

All programs supported by HUD Community Development Block Grant Disaster Recovery (CDBG-DR) assistance must demonstrate benefit to individuals and communities by meeting one of the program's three National Objectives for all money spent on projects. These are: (1) benefiting low-and moderate income (LMI) persons, (2) aiding in the prevention or elimination of slums or blight, or (3) meeting a need having particular urgency (urgent need).

Low- to moderate- income households are defined as households that do not exceed 80% of the median income for their area, as determined by HUD. These income categories are grouped into the following classifications:

- Extremely Low income – has an annual income at 30% or below the area median income
- Very Low income – has an annual income at 31% to 50% of the area median income; and
- Low income – has an annual income at 51% to 80% of the area median income.

The income limit tables for Puerto Rico are included as Appendix B to this plan.

In compliance with the Housing and Community Development (HCD) Act, and as announced in 83 FR 5844, the primary objective of the HCD Act is the “development of viable urban communities, by providing decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low and moderate income” (42 U.S.C. 5301(c)). To carry out this objective, the statute requires that not less than 70 percent of the aggregate of CDBG program funds be used to support activities benefitting low- and moderate income persons. The 70 percent overall benefit requirement shall remain in effect for this allocation, unless waived pursuant to a request by an individual grantee to authorize a lower overall benefit for its CDBG-DR grant based on a determination by HUD of compelling need for the reduction.

Duplication of Benefit

In accordance with the Robert T. Stafford Act, as amended, the Puerto Rico will implement policies and procedures to ensure no individual receives duplication of benefit for the same purpose and/or effect to recover from the hurricanes. Federal law prohibits any person, business concern, or other entity from receiving Federal funds for any part of such loss as to which he has received financial assistance under any other program, from private insurance, charitable assistance or any other source. Detailed policies and procedures for assessing Duplication of Benefit will be posted on the Disaster Recovery website.

Pre-agreement Costs

The provisions of 24 CFR 570.489(b) and 570.200 (h) permits a grantee to reimburse itself for otherwise allowable costs incurred by itself or its recipients sub grantees or sub recipients on or after the incident of the covered disaster. The provisions at 24 CFR 570.200(h) and 570.489(b) apply to grantees reimbursing costs incurred by itself or its recipients or subrecipients prior to the execution of a grant agreement with HUD. This includes but is not limited to activities supporting program devel-

opment, action plan development and stakeholder involvement support, and other qualifying eligible costs incurred in response to an eligible disaster covered under Public Law 115-56.

The Puerto Rico Department of Housing (PRDOH) incurred pre-award costs and is seeking reimbursement for these costs that are reasonable and allowable under this regulation. PRDOH intends to recover the pre-award costs consistent with the authority cited in this section. These costs include the cost for salary, employer fringe benefits, and direct operating cost for each employee based on their individual percentage of time spent on the planning of the CDBG-DR program during a pay period. Any cost associated with the disaster recovery efforts will be allocated based on the total time spent on CDBG-DR activities versus other duties for a particular month.

The total cost of the contractors to assist with disaster recovery research and analysis to help PRDOH prepare the unmet needs assessment and action plan and other costs associated with meetings, community outreach, and any other direct costs associated with the Action Plan will be reimbursed by this CDBG-DR grant. Additionally, once contracted, PRDOH may allow the drawdown of pre-agreement costs associated with eligible disaster recovery activities dating back to the date of the disaster(s) for subrecipients and PRDOH with appropriate documentation.

Program Income

Puerto Rico anticipates it may generate program income as part of the activities allowed under this allocation. Should any funds be generated, recovery of funds including program income, refunds, and rebates will be used before drawing down additional CDBG- DR funds. These amounts will be recorded and tracked in the accounting systems and recorded in the HUD Disaster Recovery Grant Reporting (DRGR) system. The DRGR system requires grantees to use program income before drawing additional grant funds, and ensures that program income retained will not affect grant draw requests for other subrecipients. Subrecipients will be required to report program income quarterly and will be subject to applicable regulations and PRDOH and HUD directives. Retention of program income will be in compliance with any subgrant agreements.

Minimizing Displacement

PRDOH plans to minimize displacement of persons or entities and assist persons or entities displaced as a result of implementing a project with CDBG-DR funds. This is not intended to limit the ability of PRDOH to conduct buyouts or acquisitions for destroyed and extensively damaged units or units in a floodplain. PRDOH will ensure that the assistance and protections afforded to persons or entities under the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), and Section 104(d) of the Housing and Community Development Act of 1974 are available. PRDOH plans to exercise the waivers set forth in Federal Register/Vol. 83, No. 28/Friday, February 9, 2018 pertaining to URA and HCD Acts given its priority to engage in voluntary acquisition and optional relocation activities to avert repeated flood damage and to improve floodplain management.

In addition, HUD requires PRDOH to define “demonstrable hardship” and how it applies to applicants. PRDOH will define “demonstrable hardship” as exceptions to program policies for applicants who demonstrate undue hardship. Applicants in this situation will be reviewed on a case by case basis to determine whether assistance is required to alleviate such hardship. Demonstrable hardship may include, but is not limited to, excessive amounts of debt due to a natural disaster, prolonged job loss, substantial reduction to household income, death of a family member, unexpected and extraordinary medical bills, disability, etc.

PROGRAM BUDGET

The program budget outlines how funds will be spent. PRDOH will comply with the requirement that not less than 70% of the aggregate of CDBG DR Program funds be used to support activities benefiting low and moderate income persons, as required by 83 FR 5855, through its housing programs. Any amendments to the Action Plan will take place in conformity with HUD requirements. Non-substantial amendments addressing minor administrative changes will be presented to HUD five (5) days prior to being incorporated into the comprehensive Action Plan. Substantial amendments addressing alterations to the Action Plan such as change to program benefit or eligibility criteria, the addition or deletion of an activity, or the allocation or reallocation of more than 10% of grant funds will be publicly posted for no less than fourteen (14) days to allow public input before finalizing and incorporating into the comprehensive Action Plan. Amendments to this Action Plan will be incorporated into one comprehensive document and tracked chronologically in a version control log.

Performance schedule

Projections for expenditures and outcomes will be submitted to HUD with the action plan and will be amended as needed throughout the life of the grant.

Application Status

PRDOH and/or potential subrecipients or partner agencies will maintain adequate means of informing applicants on the status of applications for recovery assistance at all phases of all program activities. Multiple standard methods of communication will be provided to ensure applicants receive timely, accurate information regarding their applications. Methods of communication include, but are not limited to the Disaster Recovery website, email address, telephone number, postal address, letters, and case managers. PRDOH has established procedures for protecting PII and will require, train or assist all subrecipients and partner agencies in the implementation of equivalent PII protocols. Safeguards to protect PII will be overseen by managers and directors on an ongoing basis for their respected program areas, any irregularities will be reported to the compliance officer for resolution.

Application status will also be conveyed in accordance with a program's design. If PRDOH accepts applications from potential subrecipients, information will be communicated via standard methods of communication as well as the assignment of a PRDOH Regional Oversight Manager responsible for a consistent point of contact for effective, timely communication and oversight of each subrecipient.

Language assistance in the form of translation and/or interpretation services will be provided to applicants who lack sufficient ability to read, speak or understand the English or Spanish language. As needed, PRDOH will provide status updates and program materials in accessible formats in accordance with ADA requirements.

Appeals Process

PRDOH will develop an appeals process which allows program applicants to appeal program decisions. Reconstruction and rehabilitation programs will incorporate a process for applicants to appeal the quality of rehabilitation work, as outlined in 83 FR 5850-5851.

Elevation Standards

As applicable, PRDOH will apply the elevation standards for new construction, repair of substantially damaged structures, or substantial improvements to residential structures in flood hazard areas, such that the lowest floor is at least 2 feet above the 1 percent annual floodplain elevation, as outlined in 83 FR 5850 and 83 FR 5861.

Fair Housing

With this opportunity to rebuild, Puerto Rico will increase housing opportunities and affirmatively promote housing choice throughout the housing market. Program implementation is based on an analysis to ensure that each is conducted in a manner which will not cause discrimination on the basis of race, color, religion, sex, disability, familial status, or national origin.

Housing for vulnerable populations

PRDOH will use housing counseling programs and whole community resilience programs to build programs informed by housing choice to provide affordable housing. Because planning decisions may affect racial, ethnic and low-income concentrations, these programs will help provide affordable housing in areas that are not defined as low-poverty or non-minority areas where appropriate and in response to natural hazard related impacts. Because PRDOH anticipates public housing needs will be partially met through insurance and other public assistance, unmet public housing needs will be reassessed as those funds are identified.

Feasibility and Cost Reasonableness

Puerto Rico will review all projects for feasibility through cost-benefit analysis and/or comparison of construction modification costs to repair and incorporate mitigation measures versus reconstruction to the highest resiliency standard. PRDOH will define “not suitable for rehabilitation” in its policies/procedures governing activities related to lower-income dwelling units.

Procurement procedures pertaining to the acquisition of materials and services will be reviewed for compliance with 2 CFR 200 Cost Principles including: necessary costs, cost reasonableness standards, allowable costs, and cost allocability.

TOTAL ALLOCATION		\$1,507,179,000
	Program Administration (includes admin costs associated with individual programs)	\$75,358,950
	Max Planning	\$226,076,850
	Program Funds after Admin & Planning Deduction	\$1,205,743,200
Category Administration	Program	Subtotal
	ADMINISTRATION TOTAL	\$75,358,950
Planning	Whole Community Resilience Planning	\$37,500,000
	Agency Planning Initiatives (GIS, Planning Integration)	\$25,000,000
	Economic Recovery Planning	\$10,000,000
	Home Resilience Innovation Program	\$750,000
	<i>Planning Program Subtotal</i>	<i>\$73,250,000</i>
	<i>Program Management Planning</i>	<i>\$152,826,850</i>
	Planning Budget Total	\$226,076,850
Housing	Single Family Rehabilitation, Reconstruction, Relocation	\$841,743,200
	<i>Single Family Program Subtotal</i>	<i>\$841,743,200</i>
	Mortgage Catch-Up Program	\$45,000,000
	Social Interest Housing (Homeless, Domestic Violence)	\$12,500,000
	Housing Counseling	\$7,500,000
	CDBG to Low Income Housing Tax Credits (LIHTC)	\$120,000,000
	Home Energy Resilience	\$36,000,000
	<i>Other Housing Subtotal</i>	<i>\$221,000,000</i>
	HOUSING BUDGET TOTAL	\$1,062,743,200
Economy	Small Business Loans	\$50,000,000
	Small Business Incubators	\$10,000,000
	Workforce Training Program	\$8,000,000
	Construction Revolving Loan	\$35,000,000
	<i>Business Redevelopment Portfolio Subtotal</i>	<i>\$103,000,000</i>
	Tourism & Business Marketing Program	\$15,000,000
	Commercial Redevelopment	\$25,000,000
	<i>Tourism Revitalization and Business Investment Portfolio Subtotal</i>	<i>\$40,000,000</i>
	ECONOMIC RECOVERY BUDGET TOTAL	\$143,000,000
Infrastructure	FEMA coordination	\$ --
	All Programs Subtotals	\$1,205,743,200

Table 31. Programs Budget

PLANNING PROGRAMS

Planning is integral to the overall recovery strategy to ensure preparedness and protection from future events. As Puerto Rico transitions from the response phase to the long-term recovery phase, it is imperative for the island to commit ample time and resources to proper planning for adequate response to future storms. Because of the many challenges faced due to back-to-back large-scale storms, Puerto Rico is committed to addressing and correcting recovery issues to ensure the health and safety of its residents. Having proper plans in place in advance of disasters ensures that all stakeholders understand their respective responsibilities and have a roadmap for success in undertaking response activities. Because of the geographic location of Puerto Rico, aging infrastructure, and fiscal woes, vulnerabilities exist in addition to demographic challenges that must be addressed now in anticipation of potential future hazards.

Puerto Rico intends to undertake a Whole Community approach to planning following the national dialogue initiated by FEMA around emergency management. As a concept, Whole Community is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests. Engaging all stakeholders around the whole community approach will foster collective learning and further dialogue around anticipation of risk and best practices for resilience. Whole Community principles include:

- Understanding meeting the actual needs of the whole community
- Engaging and empowering all parts of the community
- Strengthening what works well in communities on a daily basis

In addition to the principles, the following six Whole Community strategies represent pathways to action:

- Understand community complexity
- Recognize community capabilities and needs
- Foster relationships with community leaders
- Build and maintain partnerships
- Empower local action
- Leverage and strengthen social infrastructure, networks, and assets.

Puerto Rico also recognizes planning needs related to solving the issue of non-registered construction across the island. Undertaking an initiative to streamline information across government agencies and map parcel data using GIS technology will ensure that housing is properly accounted for and built to improved standards. Finally, the development of robust economic plans in partnership with the private sector is imperative to realizing an improved Puerto Rican economy for all.⁷¹

⁷¹ The planning activities associated with the design of the program / administration of the other funded programs (housing, etc.) are included in a separate budget line item and are not described as a planning “program” below.

WHOLE COMMUNITY RESILIENCE PLANNING		
PROGRAM TOTAL \$37,500,000	ADMINISTERING ENTITY PRDOH	NATIONAL OBJECTIVE N/A
MAX AWARD \$500,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Communities across Puerto Rico were severely impacted by the hurricanes and require long-term resilience planning to ensure recovery solutions are developed to protect life and property from future hazards.

ELIGIBLE ACTIVITIES

- Planning and Capacity Building (Section 105(a)(12) of the HCDA)

PROGRAM PRIORITIES

- High-risk communities, which are defined as communities situated in the floodway or flood-plain, landslide areas: areas of concentrated damage.

PROJECT ACCOMPLISHMENTS

- The Whole Community Resilience Planning Program will result in comprehensive community recovery plans, the benefit of which will allow communities to develop policy, planning, and management capacity so that they may more rationally and effectively determine their needs, set long-term goals and short-term objectives, devise programs and activities to meet goals and objectives, evaluate the progress of such programs in accomplishing these goals and objectives, and carry out management, coordination, and monitoring of activities necessary for effective planning implementation.

ELIGIBILITY CRITERIA

- Each municipio will receive \$10,000 to conduct a Phase 1 initial assessment. In Phase 2, some communities may receive a planning award of up to \$500,000 per community plan. The selection criteria for Phase 2 funding will be published in the 4th quarter of 2018.

METHOD OF DISTRIBUTION

- This program will use a Sub-recipient distribution model in which non-governmental or non-profit organizations, local governments, governmental or quasi-governmental entities will be part of the community-driven planning to integrate the needs, desires and resources of the residents in the reconstruction or relocation solutions.

PROGRAM OBJECTIVE & DESCRIPTION

The Whole Community Resilience Planning Initiative will craft recovery solutions for all communities, including high-risk areas to increase individual and collective preparedness to future events and ensure greater resiliency at both the community and national levels. A whole community approach ensures shared understanding of community needs and capabilities, greater empowerment and integration of resources from across the community, and a stronger social infrastructure. High risk areas

may include communities located in full or in part in the flood-plain, in landslide risk areas, or other areas with environmental or hazard risk.

Communities, like Caño Martín Peña, are encouraged to submit holistic plans for recovery to include items such as land-use, relocation, acquisition, and resilience measures. Communities may submit plans through an NGO, with assistance from professional planning firms and developers. NGOs may be established or developed to work jointly with communities in developing their approach. Plans should include a cost-benefit analysis to ensure feasibility of actions proposed and should be as comprehensive as possible to set the stage for next steps. Planning may include a range of items, such as examining structural mitigation measures at either a community or individual house level, housing innovation, and effective land-use. Regional planning and coordination are highly encouraged and municipios are encouraged to examine the needs of special communities.

The Puerto Rico Department of Housing will be the administering agency and will receive the community applications and final plans, as outlined in forthcoming guidelines. The Puerto Rico Planning Board will be consulted by PRDOH in the development of program guidelines to ensure consistency and a coordinated approach. Plans will lay the groundwork for effective and expedient housing, infrastructure and social investments as long-term recovery programs are funded.

AGENCY PLANNING INITIATIVES (GIS, PLANNING INTEGRATION)

PROGRAM TOTAL
\$25,000,000

ADMINISTERING ENTITY
PRDOH

NATIONAL OBJECTIVE
N/A

MAX AWARD
\$25,000,000

START-END DATE
DURATION OF GRANT

ELIGIBLE AREA
PUERTO RICO

HURRICANE IMPACT

Hurricane Maria magnified the issue of unregistered housing across the island. This may include housing without proper title, permits, plans, inspections, and insurance. Estimates indicate that as much as half of the island's housing stock has been built or added on to without proper permits, with many units situated in flood zones or other high-risk areas.

Most informally built housing units are not properly accounted for in critical systems such as the 911 database, property tax records, or GIS maps. Lack of ability to locate these units complicated emergency response efforts immediately following Hurricane Maria and will continue to impact public safety if unaddressed. With substantial federal investment and a commitment by residents and the government alike, Puerto Rico can build back better and realize a future where homes will be locatable by emergency response personnel, ownership, and parcel registry data.

ELIGIBLE ACTIVITIES

- Planning and Capacity Building (Section 105(a)(12) of the HCDA)

PROJECT ACCOMPLISHMENTS

- Development of a uniform parcel registry and GIS database
- Completing the parcel/ structure-level data sets for all unregistered properties

ELIGIBILITY

- Puerto Rico Planning Board

METHOD OF DISTRIBUTION

- Subrecipient Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

Through a direct allocation to the Puerto Rico Planning Board, The Agency Planning Initiative will be undertaken to build the data sets for property across the island to ensure land use is correctly permitted, planned, inspected, insured, and viewable to the municipios. The objective of this initiative will not provide title to unregistered properties, however it will identify which properties do not have title and which structures are informal or unregistered. This will set the stage for proper title transfers to take place. Reconstruction must marry land-use planning together with updated geographic data to ensure long-term rebuilding efforts leverage federal funds and are implemented in a way that addresses the incidence of informal housing, while enhancing the safety of the island's residents.

The Puerto Rico Planning Board provides unparalleled expertise in the administration of this program and will acquire parcel data to populate an integrated GIS database. This will assist with clarifying title and ownership records across the island in conjunction with the Municipal Revenue Collections Center (CRIM, for its Spanish acronym) system already in use. The initiative will lay the foundation to optimize Puerto Rican agencies and municipalities from a planning, land use, and taxing perspective and ensure that emergency response can better meet public safety standards and interagency efficiency is achieved.

The planning board is at the forefront of the processes and technology to promote, through effective and appropriate tools, the sustainable development of Puerto Rico. The planning Board provides a cybernetic portal, data, economic indicators, statistics and social indicators which provide a focused lens to guide the economic, physical and social development goals of the island. It also contains the plans, laws and regulations in force regarding the planning processes of Puerto Rico. Likewise, it has a Geographical Information System with a range of information that facilitates the planning of projects at all levels of the Island's socioeconomic development. This use of technology as an effective planning tool ensures that all sectors, public and private, can obtain reliable data and encourage investment in the Island.

The Planning Board provides interactive catalogs of official maps, digital files, geolocators, GIS, planning regulations, territorial plans, land use plans, flood insurance and case filing among other services. These services and tools position the Planning Board as a uniquely qualified partner to work with PRDOH and the people of Puerto Rico to provide capacity for development and planning initiatives.

ECONOMIC RECOVERY PLANNING		
PROGRAM TOTAL \$10,000,000	ADMINISTERING ENTITY DEPARTMENT OF ECONOMIC DEVELOPMENT AND COMMERCE	NATIONAL OBJECTIVE N/A
MAX AWARD \$10,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Prior to the hurricane, several factors generated perceived barriers to entry in Puerto Rico's economy. The hurricane accelerated this thinking as the economy was shaken by general infrastructure failures.

ELIGIBLE ACTIVITIES

- Planning and Capacity Building (Section 105(a)(12) of the HCDA)

PROJECT ACCOMPLISHMENTS

- Comprehensive economic recovery strategies, the benefit of which will allow communities to develop a policy, planning, and management capacity so that they may more rationally and effectively determine their needs, set long-term goals and short-term objectives, devise programs and activities to meet goals and objectives, evaluate the progress of such programs in accomplishing these goals and objectives, and carry out management, coordination, and monitoring of activities necessary for effective planning implementation.

ELIGIBILITY

- DDEC, Partner

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

PRDOH in partnership with the Department of Economic Development and Commerce (DDEC for its Spanish acronym) will lead an overarching planning effort to create strategies for job creation through promotion and communication (implemented apart from the planning initiative), efficient public service delivery, business creation, and public investments. Through the economic planning program, PRDOH and DDEC will determine priorities, resources, and actions that will guide economic stability and growth. Guiding principles will focus on the well-being of LMI workers and how larger economic planning efforts should enhance future job opportunities and inclusion in a recovering and expanding economy.

PRDOH and DDEC will leverage the planning experience from other successful efforts and draw on relevant stakeholders' experience in the private sector, including but not limited to:

- Pharmaceuticals
- Manufacturing
- Technology
- Construction
- Real Estate

By developing and implementing specific, effective economic recovery plans, the island will demonstrate to commercial entities from around the world the numerous industry opportunities Puerto Rico holds, and will attract critical investment to further grow the economy. Additionally, retention of existing Puerto Rican business is a vital component of the Island's post-disaster recovery. Working in conjunction with the other projects outlined in the Action Plan, strategies aligned with Puerto Rico's economic development plan will be identified and included and designed for implementation.

This will expand the Island's business community's capacity to retain and create new, sustainable jobs through economic development activities. Plans will inform and leverage the Economic Development projects for business loans and commercial development.

HOME RESILIENCE INNOVATION PROGRAM		
PROGRAM TOTAL \$750,000	ADMINISTERING ENTITY UNIVERSITY OF PUERTO RICO	NATIONAL OBJECTIVE N/A
MAX AWARD \$750,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Hurricane damage to aging power utility infrastructure caused an island-wide blackout immediately following the hurricanes and has been unstable through recovery efforts.

ELIGIBLE ACTIVITIES

- Planning and Capacity Building (Section 105(a)(12) of the HCDA)
- Energy Development Goals (Section 105(a) (16))

PROJECT ACCOMPLISHMENTS

- The Home Resilience Innovation Program will issue a Puerto Rico Resilience Innovation Guidebook
- Health of safety of residents through home energy resilience

ELIGIBILITY

- University of Puerto Rico

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

\$750,000 in Planning funds will be allocated to the University of Puerto Rico to develop a Resilience Innovation Program. This includes overseeing a competition for innovative solutions to address home-based renewable energy generation, energy storage, and home functions. Home functions may include, but are not limited to appliances for cooking, water heating, refrigeration, lighting, and cooling. The combined solutions will provide residents greater resilience to power interruptions, allowing them to remain in their homes with greater health, safety, and security. Additionally, community-wide resilience measures and innovative home design and construction methods are encouraged to be examined.

Proposed solutions will be evaluated by a multi-disciplinary panel to assess:

- Cost-benefit Analysis
- Length of Lifecycle
- Wattage
- Ease of Use
- Product Availability
- Customer Satisfaction

PRDOH and UPR will issue program guidelines outlining the innovation program process. Partici-

pants will not receive funding for their demonstration projects, however the most innovative solutions may be utilized as part of the long-term housing recovery mission in the future. The Home Resilience Innovation Program will issue a Puerto Rico Resilience Innovation Guidebook, outlining concrete strategies for implementing the innovations developed as part of the program. The program may include building a model and conducting community outreach.



HOUSING PROGRAMS

Understanding that funding is limited in the first CDBG-DR allocation, Puerto Rico has structured recovery programs for first-wave implementation that meet the immediate housing needs of the most vulnerable populations on the island by emphasizing housing programs that serve low-to-moderate income households and prioritize elderly persons. Units of General Local Government, UGLGs (municipios) have been consulted throughout the development of this plan and will remain active participants in the execution of recovery programs.

Through these programs, home repair and reconstruction will begin in earnest in a way that does not perpetuate building in high risk areas. Innovative construction and green building will modernize the housing stock while improving individual assets and household spending power. An increase in housing activity will generate layers of economic stimulus, creating jobs across multiple sectors, employing residents. Strategic revitalization of affordable housing will lead cost-burdened households to a fruitful long-term recovery. Applicants to housing recovery programs will have access to housing counseling services, which will provide them with a mechanism to connect with Volunteer Organizations Active in Disaster, and other federally funded programs like Housing Opportunities for Persons With AIDS (HOPWA), Continuum of Care (COC), Section 8 voucher program, and rental subsidy programs. Additionally, housing will be created for the most vulnerable of our residents, including the homeless, and HUD-certified housing counselors will be employed to guide impacted residents through their recovery. Additionally, PRDOH will be conducting outreach to residents in impacted multi-family buildings to inform a recovery strategy for rental and multi-family tenants, in addition to the units being created under the LIHTC program.

ANTI-DISPLACEMENT

All CDBG-DR funded activities will be designed to eliminate (or minimize) the occurrence of displacement. Puerto Rico will minimize displacement of persons or entities and assist persons or entities displaced as a result of implementing a project with CDBG-DR funds. This is not intended to limit the ability of Puerto Rico to conduct buyouts or acquisitions for destroyed and extensively damaged units or units in a floodplain.

Puerto Rico will ensure that the assistance and protections afforded to persons or entities under the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), and Section 104(d) of the Housing and Community Development Act of 1974, is available. The URA provides that a displaced person is eligible to receive a rental assistance payment that covers a period of 42 months. Given its priority to engage in voluntary acquisition and optional relocation activities to avoid repeated flood damage and improve floodplain management, Puerto Rico accepts the HUD waiver of the Section 104(d) requirements, which assures uniform and equitable treatment by setting the URA and its implementation regulations. Efforts to conduct voluntary buyouts for destroyed and extensively damaged buildings in a floodplain may not be subject to all provisions of the URA requirements. For LMI residents displaced by the CDBG-DR program, a temporary housing program may be available through the CDBG-DR program to allow time for new units to be rehabilitated or constructed.

The Whole Community Resilience planning activities outlined in the previous section will lay the groundwork for the next phase of housing recovery, building on the initial housing work done in this first action plan. Locally-driven planning will provide opportunities for direct involvement in how communities are rebuilt.

HOMEOWNER REPAIR, RECONSTRUCTION, OR RELOCATION PROGRAM		
PROGRAM TOTAL \$841,743,200	ADMINISTERING ENTITY PRDOH	NATIONAL OBJECTIVE LMI
MAX AWARD \$120K REBUILD \$48K REPAIR	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Tens of thousands of homes suffered hurricane damage and are still in need of repair. Residents may have applied for FEMA and were ineligible or received assistance, but they still face repair needs. There may also be residents that suffered damage and did not apply to FEMA.

ELIGIBLE ACTIVITIES

- Housing Construction, Acquisition, Green Building Standards (Section 105(a)(18) of HCDA)

PROGRAM PRIORITIES

- Prioritize elderly
- Relocation for families in hazard zones
 - Hazard zones are defined as areas situated in the floodplain, floodway, or areas vulnerable to landslide.

PROGRAM ACCOMPLISHMENTS

- Return displaced homeowners
- Reconstruct housing to higher resilience standard
- Revitalize weak and aging housing stock

ELIGIBILITY CRITERIA

- Confirmed damage to property
- Ownership of property structure (alternative methods)
- Must qualify as low or moderate income (below 80% Area Median Family Income)
- Must be an eligible single-family structure
- Must have occupied the property as a primary residence at the time of the storm
- Priority for the elderly
- To be eligible for reconstruction in place, property must not be located in a floodway, floodplain, or areas vulnerable to landslide. Applicants located in high-risk areas will be eligible for relocation.

METHOD OF DISTRIBUTION

- Direct Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

The Housing Reconstruction Program provides funding to homeowners to repair damaged homes or rebuild substantially damaged homes in place in non-hazard areas. Reconstruction activity returns otherwise displaced families to their homes in their same community. Homes become eligible for reconstruction when the property estimated cost of repair exceeds 50% of the current value – as

confirmed through program inspection, or a feasibility inspection determines that reconstruction is required. Homes meeting this damage threshold will be reconstructed to include resilient measures in structural materials. Homes that may not be rebuilt in place due to legal, engineering or environmental constraints (permitting, extraordinary site conditions, etc.) will not be reconstructed and the homeowner will be provided relocation options.

Homes with existing damage equal to or less than 50% of the current value will be rehabilitated to achieve HUD HQS standards and compliance with applicable building codes. Rehabilitation or reconstruction will be made to meet HUD Housing Quality Standards and will incorporate Green Building features to the extent possible. The homeowner must agree to own the home and use the home as their primary residence for a period of 15 years after reconstruction as secured through a forgivable promissory note and lien. If a homeowner moves or sells the home within the first three years, the entire (100%) amount of the benefit received must be repaid in full to PRDOH. If a homeowner moves or sells the home after three years but before completing the 15-year affordability period, the amount of benefit that must be repaid will be determined by the amortization schedule for the remaining years. PRDOH estimates that 9,000 units will be served by the repair, reconstruction, or relocation program.

Duplication of Benefit

In accordance with the Robert T. Stafford Act, as amended, Puerto Rico will implement policies and procedures to ensure no individual receives duplication of benefit for the same purpose and/or effect to recover from the hurricanes. Federal law prohibits any person, business concern, or other entity from receiving federal funds for any part of such loss as to which he has received financial assistance under any other program, from private insurance, charitable assistance or any other source.

If eligible and awarded, housing assistance award calculations are based on the following factors: damage/scope of project work needed; a review of funding from all sources to ensure no Duplication of Benefits (DOB); and availability of DOB funds, if any, for use in the project. Housing assistance awards will be determined after factoring in the inputs listed above, subtracting any unaccounted for DOB, and then factoring in the pre determined program caps that apply to the particular housing assistance activities to be used.

Applicant awardees must subrogate any additional funds received for damage caused by hurricanes Irma or Maria back to the housing program. CDBG DR funding must be funding of last resort and if additional funds are paid to applicant awardees for the same purpose as the housing assistance award they receive through PRDOH funding (i.e., repair or replacement of the damaged structure) after PRDOH has completed the repair/rehabilitation project, those funds must be returned to Puerto Rico.

Relocation

The Housing Relocation Program provides homeowners with substantially damaged homes located in high risk areas an opportunity to relocate to a safer location. At the time it is determined that a homeowner is eligible for relocation, the homeowner will be provided with housing counseling services to inform the applicant of available housing options and information to assist the applicant in making an informed decision regarding housing options available under the relocation program. Relocation allows for the following two options:

- Option 1: PRDOH acquisition of the damaged property, coupled with a housing voucher which

allows the applicant to receive a home outside of a high-risk area. Homes will be existing units or units identified on a PRDOH-certified development roster. Units may be bank-foreclosed properties, on a PRDOH certified development roster, a market-listed unit, or a home in a condominium or co-op. Existing homes must be located in Puerto Rico and must meet HUD Housing Quality Standards (HQS), PRDOH home energy and resilience standards, and pass applicable environmental clearance and permit requirements before an applicant awardee may move in. Purchase prices and any required improvements will be capped at \$120k and must be market-reasonable. Purchase of existing homes is the preferred method of relocation and must be explored prior to exercising option 2. Program funds may be used to make improvements to the chosen, existing property.

- Option 2: PRDOH acquisition of the damaged property, coupled with construction of a program designed home on a new lot. New lots must be located outside of the floodplain and must comply with all applicable environmental regulations. This option may be exercised if no suitable options are available under option 1.

HUD-certified housing counselors will work with qualified applicants to first identify existing homes available for purchase with use of the program provided housing voucher. If the qualified applicant, under the guidance of a housing counselor, is unable to identify a suitable existing home to purchase with a voucher, the housing counselor will identify available vacant lots for purchase outside the floodplain. Limited legal services for applicants participating in the relocation program may be provided on a case by case basis.

Damaged properties acquired by PRDOH will be demolished and vacant lots will be maintained as green space. Homeowners who are relocated by the program must agree to occupy the new home as a primary residence for not less than 15 years, as secured through a forgivable promissory note and lien.

Program Caps

The maximum award for housing rehabilitation in place is \$48,000. The maximum award for relocation or reconstruction is \$120,000 per unit. However, program relocation may allow for additional costs in excess of the \$120,000 per unit reconstruction cap to account for demolition and environmental abatement, when necessary. Temporary relocation assistance may be available for applicants while program sponsored construction is underway. PRDOH estimates that 9,000 units will be served by the repair, reconstruction, and relocation program.

Caps for costs associated with relocation are as follows:

- \$5,000 for demolition of the storm impacted property
- Up to \$15,000 for the purchase of a new lot outside the floodplain. Purchase price for vacant lots should not exceed the standard single lot size in the community, up to \$15,000.
- Up to \$15,000 to rehabilitate a replacement home identified under option 1 so that it complies with HUD HQS standards. If a home identified under option 1 cannot be made HQS compliant for \$15,000 or less, it is not a suitable option and it may not be purchased by the program

PRDOH will work with the Permit Management Office (OGPE for its Spanish acronym) to establish a streamlined permitting process for the Disaster Recovery Program.

MORTGAGE CATCH-UP PROGRAM		
PROGRAM TOTAL \$45,000,000	ADMINISTERING ENTITY AFV	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$20,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

There are an estimated 130,000 households who currently hold mortgage debt. In the aftermath of the hurricanes, households have been faced with increased living costs and challenges to maintaining household income. HUD has issued an extended mortgage moratorium through May 18, 2018. Upon the expiration of this moratorium, thousands of households are expected to face challenges in paying arrears.

ELIGIBLE ACTIVITIES

- Direct Assistance (Section 105(a)(24) of the HCDA)

PROGRAM ACCOMPLISHMENTS

- This program will help homeowners to remain in their homes and prevent avoidable foreclosures.

ELIGIBILITY

AFV will administer the program in partnership with PODOH.

Eligible homeowners:

- Must have owned the home at the time of Hurricane Maria
- Must have been current on mortgage at the time of Hurricane Maria

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

This program will provide mortgage payment assistance for up to 100% of the principal, interest, tax, and insurance on arrears for up to 18 months (dating back to the time of hurricane impact) as indicated in the monthly mortgage statement. All participants in the mortgage catch-up program will be partnered with a housing counselor, who will provide homeownership counseling and financial management guidance. PRDOH has chosen to partner with the Housing Finance Authority (AFV, for its Spanish acronym) to administer this program.

AFV's mission is to promote the development of social interest housing and provide financing facilities, subsidies and incentives so that people can acquire or rent a decent home. The AFV's existing programs provide housing subsidies aimed at promoting the sale of homes, mortgage loans to low and moderate income citizens, mortgage loans to developers for the construction, improvement, operation and maintenance of housing for sale to low and moderate income families, mortgage loans to developers for the construction, improvement, operation and maintenance of housing for rent to low

and moderate income families, arrangement of re-owned properties, and subsidized housing program (Section 8).

Recovering homeowners participating in this program must complete a homeowner's education program designed to promote understanding of housing and financial options such as: financial literacy education, homeowner counseling, credit repair counseling, mitigate default/foreclosure proceedings, etc.

Puerto Rico will work with HUD-approved housing counseling agencies which are uniquely situated to assist with long-term recovery. They are regulated extensively by HUD to ensure they are trained, knowledgeable, unbiased and acting with the best interests of the household. Applicants may also be linked to workforce training or job creation programs to provide a path forward for financial stability.

The maximum award amount under the mortgage catch up program is \$20,000 or 18 months mortgage payments, whichever is lesser. PRDOH anticipates serving 2,250 homeowners under this program. As specified in 83 FR 5844, CDBG-DR funds may not be used for a forced mortgage payoff.

SOCIAL INTEREST HOUSING ASSISTANCE**PROGRAM TOTAL**
\$12,500,000**ADMINISTERING ENTITY**
PRDOH**NATIONAL OBJECTIVE**
LMI**MAX AWARD**
\$500,000**START-END DATE**
DURATION OF GRANT**ELIGIBLE AREA**
PUERTO RICO***HURRICANE IMPACT***

Residents with special needs become increasingly more vulnerable to recovery barriers caused by the impact of the hurricane. As a result, additional appropriate supportive housing is needed.

ELIGIBLE ACTIVITIES

- Housing Construction, Acquisition, Green Building Standards (Section 105(a)(18) of HCDA)

PROGRAM ACCOMPLISHMENTS

- Reduce and/or prevent homelessness
- Emergency housing for vulnerable populations

ELIGIBILITY CRITERIA

- Non-Governmental organizations NGO are eligible subrecipients

Eligible Projects

- Projects (multi-units) may not exceed \$500,000. An organization may submit for multiple projects.
- Eligible sites must comply with ADA standards.
- Eligible sites should be accessible to public transportation, grocery shopping, recreation and socialization, etc.
- Eligible sites should include on-site support services for the special needs population served or be located near a service facility.

METHOD OF DISTRIBUTION

- Subrecipient Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

This program creates housing capacity for special needs populations such as: homeless, senior citizens, domestic violence victims, persons with intellectual disability, persons with developmental and/or physical disability, persons living with HIV/AIDS, individuals recovering from addiction and individuals with other functional or access needs. Residents of social interest housing constructed through this program may have access to housing counseling services, which may connect the resident with support services such as HOPWA, Section 8, or rental subsidy programs. The goal for the program is to create high-quality, modern, resilient housing solutions for these populations in need.

Non-Governmental Organizations will provide project proposals for social interest housing. PRDOH will evaluate submissions based on cost reasonableness, number of beneficiaries served, project duration and shovel readiness. NGO's with projects approved by PRDOH will be responsible for execution of

the project under the guidance of PRDOH. Facilities may be overseen by HUD Continuum of Care Program providers and may supplement Emergency Solutions Grants (ESG) programs for a coordinated impact to:

- Provide essential services to shelter residents;
- Rapid re-housing of homeless individuals and families; and
- Prevention of families and individuals from becoming homeless.

Submissions may include proposals for more than one project. PRDOH estimates that 500 housing units will be created under this program.

HOUSING COUNSELING PROGRAM		
PROGRAM TOTAL \$7,500,000	ADMINISTERING ENTITY PR-DOH	NATIONAL OBJECTIVE LMI, UM
MAX AWARD \$750,000	START-END DATE PROGRAM DURATION	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Tens of thousands of homes suffered hurricane damage and are still in need of repair. Residents may have applied to FEMA and may not have been eligible.

ELIGIBLE ACTIVITIES

- Counseling Services (Section 105(a)(8) of the HCDA)

PROGRAM PRIORITIES

- Counseling assistance will help impacted residents stabilize their housing

PROGRAM ACCOMPLISHMENTS

- Housing counseling services will foster resilience through public education and advocacy, especially when delivered in conjunction with other forms of housing assistance.

ELIGIBILITY CRITERIA

- Non-Governmental organizations NGO are eligible subrecipients
- This is a competitive grant program. Applicant entities must be a HUD-approved counseling agency to provide services under the program. All impacted residents may receive counseling services.

METHOD OF DISTRIBUTION

- Subrecipient Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

This program will provide recovering residents with wrap-around educational services to promote understanding of housing and financial options such as: financial literacy education, homebuyer counseling, credit repair counseling, mitigate default/foreclosure proceedings, etc. Housing Counselors will be equipped to connect program participants with resources including, but not limited to Voluntary Organizations Active in Disaster (VOAD), and other federally funded programs like COC and section 8, and rental subsidy programs.

Puerto Rico will work with HUD-approved housing counseling agencies which are uniquely situated to assist with long-term recovery. They are regulated extensively by HUD to ensure they are trained, knowledgeable, unbiased and acting with the best interests of the household. Most of them have worked in the communities for long periods of time, with neighborhood-based staff and board members, and are known and trusted by the residents.

The program will fund qualified entities to create and implement specialized counseling services.

Counseling services can range from individualized, one-on-one counseling to help homeowners identify and address barriers to permanent, safe and affordable housing, to advocacy with insurance and mortgage companies, to group education addressing how to remediate mold or how to avoid common scams. Services will be made accessible to individuals having wide-ranging disabilities including mobility, sensory, developmental, emotional, and other impairments.

The maximum award for a single housing counseling entity is \$750,000. PRDOH estimates that ten housing counseling programs will be implemented. If ten distinct Puerto Rican HUD-certified counseling organizations are unable to provide services, any remaining funds may be made available to one or more of the other contracted counseling providers.



CDBG-DR GAP TO LOW INCOME HOUSING TAX CREDITS (LIHTC)**PROGRAM TOTAL**
\$120,000,000**ADMINISTERING ENTITY**
AFV**NATIONAL OBJECTIVE**
LMI, UN**MAX AWARD**
VALIDATED GAP**START-END DATE**
DURATION OF GRANT**ELIGIBLE AREA**
PUERTO RICO***HURRICANE IMPACT***

Thousands of homes suffered damage from Hurricanes Irma and Maria, rental properties are no exception. Resilient affordable rental housing is needed.

ELIGIBLE ACTIVITIES

- Housing Construction, Acquisition, Green Building Standards (Section 105(a)(18) of HCDA)
- IRC §42, Low-Income Housing Credit

PROGRAM ACCOMPLISHMENTS

- Leveraging Low Income Housing Tax Credits (LIHTC) serves to extend the impact of CDBG-DR funding while creating much needed affordable rental housing units.

ELIGIBILITY CRITERIA

- AFV will administer the program in partnership with PODOH

ELIGIBLE PROJECTS

- Projects must be eligible for funding under LIHTC

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

Puerto Rico receives millions of dollars each year in Low Income Housing Tax Credits (LIHTC) and currently has more than \$1 billion in LIHTC 4% projects available to be leveraged. Additionally, at least eleven (11) projects under the 9% tax-credit program are shovel-ready and awaiting gap financing. PRDOH will provide gap funding, using CDBG-DR dollars, for properties being developed with LIHTC, thus maximizing the benefit provided by both federal funding streams.

PRDOH will partner with the Housing Finance Authority (AFV, for its Spanish acronym), to select projects proposed by developers qualified to use LIHTC. Projects will be evaluated based on cost reasonableness, developer capacity, number of beneficiaries served and shovel readiness. The LIHTC program will provide grant gap funding, coupled with loans (when needed) to developers with approved projects. Construction loan funding must be repaid to PRDOH in a period of 24 months or less. Repaid loan funding will be used to fund additional approved LIHTC projects. Any program income generated will be used to fund program activities or administrative costs.

The maximum total award (grant and any necessary loan funding) per project is contingent on proposals already submitted to AFV to qualify for the 9% tax credit roster. Additional project rosters will be

curated by AFV. The program will consist of \$120,000,000 for funding multiple projects, and projects will be funded to the extent that funds are available. Each project will include multiple individual housing units. Either 4% or 9% tax credit projects are eligible, as approved by AFV.

The Puerto Rico Housing Finance Authority (PRHFA) has participated in the rehabilitation of low-income housing projects throughout the Island using, among others, the Low-Income Housing Tax Credit Program (LIHTC). This program, established in 1988, has being instrumental in the rehabilitation of 19,507 units.

Currently, 1,533 units are in the pipeline with 9% low income housing tax credits program and will be completed within 24 months of each project start. CDBG-DR loans with 9% LIHTC will leveraged to stretch both funding sources and to create projects that accomplish several goals.

All projects must generate affordable LMI housing in a supply proportional to the area LMI population, and in compliance with HUD Fair Market rent rates for an affordability period. PRDOH will request a waiver to shorten the 20 year affordability period outlined in 83 FR 5844, to allow the affordability period for projects funded under this program to align with the fifteen year affordability period required by LIHTC.

HOME ENERGY RESILIENCE		
PROGRAM TOTAL \$36,000,000	ADMINISTERING ENTITY PRDOH	NATIONAL OBJECTIVE LMI
MAX AWARD \$6,000 (HOME ENERGY)	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

The power grid suffered massive hurricane damage and remains fragile. A portion of the island's population has not had power restored, and even those with power remain vulnerable to intermittent power outages. The entire island suffered an outage as recently as April 18 - 19, 2018.

ELIGIBLE ACTIVITIES

- Public Service - 24 CFR Part 570.201(e)

PROGRAM PRIORITIES

- Prioritize low-income, elderly applicants

PROGRAM ACCOMPLISHMENTS

- Promote energy efficiency and reliability

ELIGIBILITY CRITERIA FOR HOME ENERGY

- Households below 80% AMFI.
- Must currently own or rent and occupy the property as a primary residence

METHOD OF DISTRIBUTION

- Direct Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

The Island-wide power outages as a result of Hurricane Maria have complicated recovery across the entire spectrum. Businesses have closed, critical services have been disrupted, and residents have been unable to stay in their homes because of lack of light, cooking facilities, cooling, water heating, and refrigeration. This is especially perilous for families with special needs and medical conditions.

While the Island begins the larger process of transforming the power grid and distribution systems, residents must receive assurance that they can avoid displacement or threats to health and safety caused by interruptions to power service.

The Home Energy Resilience program will provide homeowners or renters a voucher for a gas or solar powered water heater, and/or gas-powered stove, installation and related appurtenances so that residents can perform basic functions such as showering and preparing meals at home in the event of a power outage. Vouchers may be used at PRDOH pre-qualified vendors and installers. The cap in value per applicant is \$6,000, with only one system installation per home. Equipment will be installed and affixed to the residence. Priority will be given to the elderly and limited to low-income residents. PRDOH anticipates providing home energy resilience improvements to at least 6,000 families under this program.

ECONOMIC RECOVERY PROGRAMS

Puerto Rico must take the opportunity to transform the economic landscape of the island by intentionally focusing efforts around post-storm recovery economic activities. Economic recovery programs are essential to the long-term success of housing recovery programs because they provide opportunities necessary to ensure homeowners and renters are financially able to care for and maintain their homes. The attraction, retention and return of businesses and jobs is critical to the long-term recovery of the island. With the large-scale rebuilding activities that have begun across the island and will continue throughout the coming years, opportunities exist to invigorate the island's workforce and small business sector and unleash local creativity and manpower for decades to come.

Through programs that enable local island contractors to participate in recovery projects, and training programs that ready the workforce for rebuilding efforts, Puerto Rico will match skillsets to the recovery tasks at hand and secure economic opportunities for its people. Additionally, by awarding small business loan funding and establishing small business incubators, the local economy will contribute to the overall long-term recovery of the island. Finally, undertaking a robust tourism and investment marketing campaign will ensure that lifeline sectors of the Puerto Rican economy substantially recover and that potential visitors and investors will continue to see Puerto Rico as an attractive destination and a viable option for travel, leisure, and business.

Due to their expertise in economic development, PRDOH will partner with the Economic Development and Commerce Department (DDEC, for its Spanish acronym) to administer a portfolio of economic development initiatives outlined in the following pages. DDEC currently implements and supervises the execution of economic development public policy for the following business sectors: manufacturing, commerce, tourism, and services. DDEC seeks to ensure a sustainable private sector within the globalization of the current economy. The Department is committed to the implementation of strategies that encourage investment, create jobs and improve the quality of life on the island. DDEC is composed of 11 government entities that include agencies and public corporations focused on different economic sectors and initiatives.

DDEC's Economic Development Plan of Puerto Rico is anchored in three pillars that work together to achieve sustained and long-term growth. These are to reinvent and reenergize established industries, develop high impact emblematic projects and utilize innovative strategies to advance Puerto Rico. These goals were developed to position the island as a unique destination for business and investments and aim to reinvent and reenergize established industries including manufacturing, tourism, and commerce.

CONSTRUCTION REVOLVING LOAN		
PROGRAM TOTAL \$35,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$1,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Due to the tightening of the financial markets, and as a direct impact of the hurricanes, mid-size Puerto Rican contractors have seen sharp reductions in their access to credit as banks seek to mitigate risk, even without a change in the contractor's performance or repayment history. Because of this, mid-size contractors may not have access to financial resources to maintain cash-flow in the first few months of project work before the initial invoicing benchmarks are met and they receive payment from the housing or infrastructure grantee. Contractors that are able to maintain their lines of credit may be constrained by the funding timelines of traditional banks, which can take upwards of 90 days. This places local construction contractors at a disadvantage in a competitive market.

ELIGIBLE ACTIVITIES

- Economic Development (Section 105 (a) (15) of HCDA)

PROGRAM ACCOMPLISHMENTS

- Increase the number of local contractors and suppliers participating in the recovery process.

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

Eligible businesses will be:

- Organized as a Puerto Rican business as of September 2017
- Meet underwriting criteria for performance capabilities

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

The recovery funds serving to rebuild the island's housing and infrastructure will serve as a vital injection of funds into the local economy if properly structured. Providing local contractors access to start-up and mobilization capital will build local reconstruction capacity and maximize the amount of funds recirculated into the island's economy.

On that basis, the Department of Economic Development and Commerce (DDEC) will administer a revolving loan program, either directly or through Banks, Credit Unions (Cooperatives), or Governmental Agencies designed to provide qualified contractors access to start-up capital for mobilization and initiation of work on CDBG-DR programs. Contractors and suppliers must meet underwriting criteria for performance capabilities, and may receive a maximum of \$1,000,000 for a loan which must be repaid on a schedule as outlined in their loan agreement.

A revolving fund, for this purpose, is a separate fund maintained with a set of accounts that are independent of other program accounts, established to carry out specific activities which, in turn, generate payments to the fund for use in carrying out such activities. Program income will be generated by the loan and tracked and managed by DDEC in the continued administration of the loan program.

SMALL BUSINESS LOANS		
PROGRAM TOTAL \$50,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$1,000-\$50,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Due to the tightening of the financial market on the island, and as a direct impact of the hurricanes, small business has limited access to critical capital to create and retain jobs.

ELIGIBLE ACTIVITIES

- Economic development, Job creation and retention (Section 105 (a) (15) of HCDA)

PROGRAM ACCOMPLISHMENTS

- Generate a quantifiable number of new jobs based on program allocation
- Incentivize entrepreneurship and economic return

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

Eligible businesses include:

- Small businesses as defined by SBA by their sector
- A microenterprise, defined as a commercial enterprise that has five or fewer employees, one or more of whom owns the enterprise.
- Businesses that create and maintain permanent jobs for no less than 1 year

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

The Small Business Loan Program provides loans, very small loans, or forgivable loans, to start-up, newly established, or growing small business who are otherwise unable to secure financing from traditional lenders and need assistance in accessing safe, affordable capital. Eligible businesses also receive technical assistance throughout the life of the loan by connecting them to any additional tools needed to operate successfully.

Applicant businesses may be reviewed for loan eligibility based on credit, capacity, collateral, capital and character. Loan funds can be used for capital, purchase of inventory, supplies, raw materials, and machinery or equipment. Loan repayment terms may involve incremental forgiveness over the life of the loan based on the creation and retention of jobs. The maximum loan amount is \$50,000, however not all businesses will receive the maximum amount. Loan amounts will be in proportion to the size of the business, the need, and the business strategy. At least 1,000 small businesses will receive assistance under this program. Start-ups supported under the incubator program may be prioritized for assistance under the Small Business Loan program.

SMALL BUSINESS INCUBATORS		
PROGRAM TOTAL \$10,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$1,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Due to the tightening of the financial market, and as a direct impact of the hurricanes, new and start-up businesses are in need of support to participate in the economic rebirth of the Island.

ELIGIBLE ACTIVITIES

- Economic development, Job creation and retention (Section 105 (a) (15) of HCDA)

PROGRAM ACCOMPLISHMENTS

- The development of new businesses and job creation
- Job retention or creation

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

Eligible businesses include:

- Non-profit, governmental and for-profit organizations to repair existing Small Business Incubators or build new ones

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

A business incubator program supports the acceleration of growth and success for start-ups and new businesses in the early stages of operation. Business incubators will be encouraged to incorporate resilience measures to allow for continuity of business operations in the event of power outages, natural disasters, or other disruptive events.

DDEC will oversee this program and will fund incubator activities with units of local government, non-profit organizations, private or governmental, quasi-government agencies with proven experience in the implementation of business incubators. Through this program, burgeoning businesses will gain access to shared office space and supportive operational resources such as office equipment, telecommunication services, and conference space. Daily work in a shared, collaborative office environment provides for ongoing access to mentoring services, professional networking, idea-exchange, and hands-on management training. This will help support start-up and new companies in the early stage of operation. Start-ups supported under the incubator program may be prioritized for assistance under the Small Business Loan program.

The grant maximum is \$1,000,000; however, it is possible that not all incubators will receive the maximum amount. Funding will be based on incubator capacity as proposed in the submittal to DDEC.

WORKFORCE TRAINING PROGRAM		
PROGRAM TOTAL \$8,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$2,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Recovery needs have created a demand for skilled labor to rebuild safe and sustainable homes and code compliant businesses and public infrastructure with incorporated hazard mitigation measures.

ELIGIBLE ACTIVITIES

- Economic development, Job creation and retention (Section 105 (a) (15) of HCDA); Public Service (Section 105(a)(24) of HCDA)

PROGRAM PRIORITIES

- Section 3 Residents

PROGRAM ACCOMPLISHMENTS

- Creation of economic opportunity for unemployed and underemployed

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

This program will help unemployed and underemployed residents find employment by providing job training in skill areas related to recovery efforts. Training curriculum offered will depend on the industries and areas with the greatest lack of capacity based on community unmet need in those industries and areas.

Units of local government, non-profit organizations, and governmental and quasi-governmental agencies will be invited to propose workforce training programs to DDEC under program guidelines as approved by PRDOH. DDEC will evaluate proposed training programs based on the entity's capacity to administer training, relationship of training material to job-readiness of participants and cost reasonableness. Entities interested in administering training programs are encouraged to develop and administer programs in partnership with institutions of higher education, workforce investment boards, business groups or trade organizations, labor or community-based organizations and learning facilities. It is suggested that curriculum be developed in collaboration with subject matter experts in the areas of code enforcement, lead paint abatement, green building, and disaster mitigation and recovery techniques.

Workforce training programs will be developed in those industry sectors identified in the economic de-

velopment plan and may support recovery activities can be offered in the following categorical areas:

- Code enforcement
- Construction
- Green building and energy efficiency
- Green Enterprise Development Hazard Mitigation
- Home Health Hazard Inspection/Professionals
- Lead risk and abatement
- Weatherization/ Sustainable Retrofitting

TOURISM & BUSINESS MARKETING PROGRAM		
PROGRAM TOTAL \$15,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$15,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Prior to the storm, tourism represented 8% of the Puerto Rico economy. Unfortunately, the prolonged loss of power across the island and national media reports on the devastation has deterred visitors for some months causing significant impact to this sector of the economy. As a result, potential tourists and business investors are unaware of recovery efforts and which areas of the island are open for business. One of the biggest challenges for the tourism and commercial sectors is communicating to the US and abroad that Puerto Rico is open for business. Though some parts of the island are still badly damaged, San Juan and other areas have functional infrastructure and can receive tourists. While industries are slowly recovering, the island needs full-scale tourism and business marketing campaigns to fully rebound from the effects of the storm.

ELIGIBLE ACTIVITIES

- Economic development, Job creation and retention (Section 105 (a) (15) of HCDA)

PROGRAM ACCOMPLISHMENTS

- Continued stabilization or increase in tourism-related revenues and increase in businesses moving to Puerto Rico

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

- Subrecipients may include non-profit organizations, governmental, and quasi-governmental agencies.

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

Given the impacts of Hurricane Maria on tourism assets and long-term economic conditions, PRDOH in partnership with DDEC, will fund subrecipients to develop a comprehensive marketing effort to promote outside the island that the area is open for business.

Additionally, Puerto Rico will create and implement strategies promoting Puerto Rico as an ideal place to do business. This will attract new businesses of external capital that can contribute additional capital to the economy. Marketing Puerto Rico as a pro-business jurisdiction will encourage new external investments, promote economic development and create new jobs.

The projected use of funds for marketing and outreach efforts will be focused on advertising creation

and media placement (television/radio/digital and out-of-home advertising) outside of Puerto Rico, as well as promoting Puerto Rico as an ideal place to do business.

Puerto Rico will request a waiver to HUD for this activity.

COMMERCIAL REDEVELOPMENT		
PROGRAM TOTAL \$25,000,000	ADMINISTERING ENTITY DDEC	NATIONAL OBJECTIVE LMI, UN
MAX AWARD \$25,000,000	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

Due to the tightening of the financial market on the island, and as a direct impact of the hurricanes, commercial infrastructure was heavily impacted, including roads, water, technology, and power.

ELIGIBLE ACTIVITIES

- Section 101(c), Section 104(b), Section 105(c) of the HCDA

PROGRAM ACCOMPLISHMENTS

- Create and retain jobs through commercial investment and by making improvements to commercial/retail districts.
- Incentivize entrepreneurship and economic return

ELIGIBILITY CRITERIA

DDEC will administer the program in partnership with PRDOH

- DDEC will develop program guidelines defining eligible subrecipients

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

Commercial rehabilitation activities are designed to bring commercial structures up to code or improve their facades. If the commercial structure is owned by a private, for-profit entity, the following limitations apply: Rehabilitation is limited to the exterior of the building and the correction of code violations; Any other improvements are carried out under the special economic development activities category.

Special economic activities provide for the acquiring, constructing, reconstructing, rehabilitating, or installing commercial or industrial buildings, structures, and other real property equipment and improvements, including railroad spurs or similar extensions. These are economic development projects undertaken by nonprofit entities and grantees (public entities).

INFRASTRUCTURE COORDINATION

Infrastructure recovery will be a whole community approach, consisting of extensive, multi-billion dollar, years-long programs.

As public assistance projects are developed, and additional mitigation funds are sought through FEMA, Puerto Rico will align future allocations with infrastructure needs. At this time, with the severity of the unmet housing needs and the Stafford Act restrictions regarding Duplication of Benefit, the infrastructure approach will be centered around planning activities (funded under the Planning programs) and close coordination with FEMA. PRDOH is aware of the vital infrastructure needs of communities across the island, as identified by the municipios, and will continue to work closely with FEMA and the COR3 as project worksheets are developed.



FEMA COORDINATION		
PROGRAM TOTAL \$0	ADMINISTERING ENTITY PRDOH IN COORDINATION WITH COR3	NATIONAL OBJECTIVE LMI, UN, SB
MAX AWARD \$0	START-END DATE DURATION OF GRANT	ELIGIBLE AREA PUERTO RICO

HURRICANE IMPACT

FEMA's HMGP requirement of local match creates the burden on a Grantee/Sub-grantee which can be cost prohibitive to the implementation of much needed mitigation measures.

ELIGIBLE ACTIVITIES

- Section 105(a)(9) of the HCDA

PROGRAM PRIORITIES

- Projects that benefit LMI persons

PROGRAM ACCOMPLISHMENTS

- Ease local cost share burden to qualify projects and potentially expedite HMGP project funding through coordinated match.

ELIGIBILITY CRITERIA

- The PA/HMGP project must meet a National Objective (usually Unmet Need or LMI) and be a CDBG eligible activity as well as a FEMA HMGP eligible activity.

METHOD OF DISTRIBUTION

- Partnership Distribution Model

PROGRAM OBJECTIVE & DESCRIPTION

Long-term resilience measures and infrastructure improvements are critical to the ongoing recovery of Puerto Rico. To fortify infrastructure with resilience measures, it will be of the utmost importance to leverage CDBG-DR dollars in conjunction with other funding streams. PRDOH will maximize the benefit achieved through the expenditure of CDBG-DR funds, PRDOH may combine funding from FEMA's Hazard Mitigation Grant Program (HMGP) with CDBG-DR funds to complete resilience projects in the future.

Amendment five of the notice FEMA-4339-DR, authorizes a 90% federal share for permanent work under FEMA categories C - G. It is allowable that CDBG-DR funds be used as part of a coordinated match or global match to provide all or a portion of the non-federal share. Using a Global Match, the non-federal share for each project need not be 10%, so long as the combined value of all eligible projects submitted equals or exceeds 10% for the overall disaster.

PRDOH seeks approval to submit HMGP eligible activities, as defined in FEMA's Hazard Mitigation Guidance, funded with CDBG-DR dollars to contribute to a FEMA Global Match. Puerto Rico will coordinate with FEMA and HUD to ensure all eligibility requirements are met for all project applications

submitted for Global Match.

This funding mechanism provides the local requirement of matching the FEMA federal funding for identified projects, while easing the financial burden on Puerto Rico.



CITIZEN PARTICIPATION

A Citizen Participation Plan has been developed in compliance with § 24 CFR 91.115 and applicable HUD requirements to set forth the policies and procedures applicable to citizen participation, intended to maximize the opportunity for citizen involvement in the planning and development of the Puerto Rico CDBG DR recovery program including but not limited to:

- The amount of assistance expected to be received by impacted communities;
- The range of eligible activities to be undertaken; and
- Other Action Plan and program activities.

The goal of the Citizen Participation Plan is to provide all of Puerto Rico's residents with an opportunity to participate in the planning and assessment of the PRDOH's CDBG DR recovery programs. In order to facilitate citizen involvement, Puerto Rico Department of Housing has laid out target actions to encourage participation and allow equal access to information about the program by all citizens, especially those of low and moderate income, those living in slum and blighted areas and in areas identified for recovery through CDBG DR, and other disadvantaged populations. In addition to citizen involvement, RPDOH encourages the participation of regional and island wide institutions.

PRDOH will consider any and all comments received in writing, via email, or expressed in person at official public hearing events. Additionally, in an effort to permit public examination and public accountability, PRDOH will make the above information available to citizens, public agencies, and other interested parties upon request.

Public Hearings

PRDOH held a series of initial public hearings during Action Plan development to collect early input from citizens impacted by hurricanes Irma and Maria. Notice of public hearings were published in the local newspaper. The hearings were held at a time and location convenient to potential and actual beneficiaries. The public hearings commenced on Monday, March 5th, 2018 and concluded on Saturday, March 10th, 2018. The schedule of the hearings ran as such:

- I. March 5, 2018 – East and Metropolitan
Municipality of Bayamón
Community Center of Jardines de Caparra
9:00 am – 5:00 pm

- II. March 6, 2018 – Central/ Mountain
Municipality of Cidra
Mayor's Office 3rd Level, Activities Room
9:00 am – 5:00 pm

- III. March 7, 2018 – Southeast
Municipality of Caguas
Center of Science and Technology 59 Ave., Gautier Benitez, Caguas
9:00 am – 5:00 pm

- IV. March 8, 2018 – West
Municipality of Mayaguez
Yaguez Theatre
9:00 am – 5:00 pm

- V. March 9, 2018 – South
Municipality of Ponce
Añoranza Room 1st Floor Ponce’s Casino
9:00 am – 5:00 pm

- VI. March 10, 2018 – North
Municipality of Arecibo
Manuel Petaca Iguana Coliseum
9:00 am – 5:00 pm

Interpreters were made available at the hearings to assist those participants in need of Spanish, English or sign language medium. The Puerto Rico Department of Housing accepted all comments and proposals of citizens in writing, orally at the public hearing or sent to the designated email, infocdbg@vivienda.pr.gov. A summary of each oral or written comment, coupled with a response by Department of Housing, is included in this plan. All written proposals received are attached in their entirety in the Citizen Partation Plan and available for public consumption at www.cdbg-dr.pr.gov.



MAYORAL MEETINGS AND MUNICIPIO ENGAGEMENT

Since February 2018, PRDOH has conducted outreach meetings with mayors and other municipal staff to discuss each community's unmet needs, resulting from Hurricanes Irma and María. PRDOH staff continues to reach out to ensure that all municipalities are expressing their needs. Since February 2018, PRDOH has received written comments from the following 67 municipios.

MUNICIPIO COMMENT SUBMITTED

- Aguada
- Aguadilla
- Aguas Buenas
- Aibonito
- Añasco
- Arecibo
- Arroyo
- Barranquitas
- Bayamón
- Cabo Rojo
- Caguas
- Camuy
- Canóvanas
- Carolina
- Cataño
- Cayey
- Ceiba
- Ciales
- Cidra
- Coamo
- Comerío
- Corozal
- Dorado
- Fajardo
- Florida
- Guayama
- Guayanilla
- Guaynabo
- Guánica
- Hormigueros
- Isabela
- Jayuya
- Juana Díaz
- Juncos
- Lajas
- Lares
- Las Marías
- Las Piedras
- Loíza
- Luquillo
- Manatí
- Maricao
- Mayagüez
- Moca
- Morovis
- Naranjito
- Orocovi
- Ponce
- Quebradillas
- Rincón
- Rio Grande
- Sabana Grande
- Salinas
- San Germán
- San Juan
- San Lorenzo
- San Sebastián
- Toa Alta
- Toa Baja
- Trujillo Alto
- Utuado
- Vega Alta
- Vega Baja
- Vieques
- Villalba
- Yabucoa
- Yauco

AGENCY, NGO AND CITIZEN ENGAGEMENT

In addition to collaboration focused at the municipal level, PRDOH has taken into consideration unmet community needs and input for potential recovery efforts from governmental agencies and non-governmental organizations (NGO), non-profit entities, community organizations and citizens. These agencies and citizens have played an active role in the development of this Action Plan. Many attended and spoke at the various public hearings held across the island and to date, 63 formal written submissions have been received from organizations and individuals listed in the table below.

GOVERNMENT AGENCY COMMENT SUBMITTED

- Municipio de Carolina: Vivienda Desarrollo Comunal
- Universidad de Puerto Rico - Recinto Ponce
- Autoridad de Carreteras de Puerto Rico
- Hon. José "Memo" González
- Hon. Joel Franqui Atilés
- Proyecto Agrícola Comunitario
- Puerto Rico State Office of Public Energy Policy
- Oficina para el Desarrollo Socioeconómico y Comunitario de Puerto Rico
- Municipio de Morovis: Proyectos Adicionales
- Legislatura Municipal de Ponce
- Departamento de Recreación y Deportes
- Municipio de Ponce: Alumbrado Fotovoltaico
- Municipio de Ponce: Agua para el Campo
- Proyecto Barriada Juana Matos, Cataño
- Autoridad para el Financiamiento de la Vivienda de Puerto Rico
- Banco de Desarrollo Económico
- Municipio de Rincón: Proyectos
- BLUE TIDE Initiative, Department of Commerce

NON-GOVERNMENTAL AGENCY COMMENT SUBMITTED

- Proyecto Villa Ponce II
- Corporación para el Desarrollo Económico de Trujillo Alto
- Fundación Fondo de Acceso a la Justicia
- Fideicomiso de Vivienda y Desarrollo Humano
- Boys & Girls Club of Puerto Rico
- Proyecto Enlace Caño Martín Peña
- Foundation for Puerto Rico
- Comisión Asesora Para un Puerto Rico Resiliente
- Disaster Housing Recovery Coalition
- Instituto para el Desarrollo Económico y de Vivienda de Puerto Rico Inc.
- Asociación de Constructores de Hogares de Puerto Rico
- Habitat for Humanity
- Sociedad Puertorriqueña de Planificación
- Scuba Dogs Society
- Grupo de Caficultores de la Asociación de Agricultores
- Inundación La Fe, Residentes Juana Díaz

NON-GOVERNMENTAL AGENCY COMMENT SUBMITTED

- Comunidad La Yuca Ponce
- Tamandre Travel, LLC
- Sr. Porfidio Nino Román, Barrios de Camuy
- Coalition for Environmentally Responsible Economies (CERES) Environmental Inc.
- Arecibo Development Group
- ALC Legal Services Group
- E&F Development
- Nature Housing Senior Community
- Los Pescadores de la Villa del Ojo de Crash Boat de Aguadilla
- Residentes Calle Robles de Cidra
- Harrison Consulting Group
- American Association of Retired Persons
- Arecibo Development Group, Plan Maestro de Mejoras
- Cambio
- La Perla de Gran Precio
- McCormack, Baron & Salazar: Bayshore Villas
- McCormack, Baron & Salazar: Renaissance Square
- McCormack, Baron & Salazar: JG Benitez Multifamily and Eldery developments
- Colegio de Abogados y Abogadas de Puerto Rico (CAAPR)
- ERS Consulting Group, LLC
- Fernando L. Sumaza & Company Inc
- Fundación Comunitaria de Puerto Rico
- Fundación de Desarrollo Comunal de P.R., Inc. (FUNDESCO)
- LA Design Group: Brisas del Mar
- LA Design Group: Galicia del Mar
- LA Design Group: Palomino Hills
- LA Design Group: Parque Miramonte
- Urbe Apie
- Lucha Contra el SIDA, Inc. (LUCHA)

PRDOH HAS ALSO IMPLEMENTED A COMPREHENSIVE PUBLIC ENGAGEMENT STRATEGY TO ENCOURAGE ENGAGEMENT DURING THE PUBLIC COMMENT PERIOD FOR THE ACTION PLAN DRAFT. THE STRATEGY UTILIZES VARIOUS METHODS FOR CITIZEN PARTICIPATION AS OUTLINED IN THE HUD TOOLKIT FOR CITIZEN PARTICIPATION INCLUDING:

- Website publications
- Email announcements
- Collaboration with private stakeholders
- Alternative methods of public notice
- Alternative language media targeting
- Local television and radio
- Social media

ACTION PLAN CERTIFICATIONS

The Commonwealth of Puerto Rico makes the following certifications with its action plan:

- a. Puerto Rico certifies that it has in effect and is following a residential anti-displacement and relocation assistance plan in connection with any activity assisted with funding under the CDBG program.
- b. Puerto Rico certifies its compliance with restrictions on lobbying required by 24 CFR part 87, together with disclosure forms, if required by part 87.
- c. Puerto Rico certifies that the action plan for disaster recovery is authorized under State and local law (as applicable) and that Puerto Rico, and any entity or entities designated by Puerto Rico, and any contractor, subrecipient, or designated public agency carrying out an activity with CDBG–DR funds, possess(es) the legal authority to carry out the program for which it is seeking funding, in accordance with applicable HUD regulations and this notice. The grantee certifies that activities to be undertaken with funds under this notice are consistent with its action plan.
- d. Puerto Rico certifies that it will comply with the acquisition and relocation requirements of the URA, as amended, and implementing regulations at 49 CFR part 24, except where waivers or alternative requirements are provided for in this notice.
- e. Puerto Rico certifies that it will comply with section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u), and implementing regulations at 24 CFR part 135.
- f. Puerto Rico certifies that it is following a detailed citizen participation plan that satisfies the requirements of 24 CFR 91.115 or 91.105 (except as provided for in notices providing waivers and alternative requirements for this grant). Also, each local government receiving assistance from Puerto Rico as a State grantee must follow a detailed citizen participation plan that satisfies the requirements of 24 CFR 570.486 (except as provided for in notices providing waivers and alternative requirements for this grant).
- g. Puerto Rico certifies that it has consulted with affected local governments in counties designated in covered major disaster declarations in the non-entitlement, entitlement, and tribal areas of the State in determining the uses of funds, including the method of distribution of funding, or activities carried out directly by the State.
- h. Puerto Rico certifies that it is complying with each of the following criteria: (1) Funds will be used solely for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing and economic revitalization in the most impacted and distressed areas for which the President declared a major disaster in 2017 pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5121 et seq.). (2) With respect to activities expected to be assisted with CDBG–DR funds, the action plan has been developed so as to give the maximum feasible priority to activities that will benefit low- and moderate-income families. (3) The aggregate use of CDBG–DR funds shall principally benefit low- and moderate-income families in a manner that ensures that at least 70 percent (or another percentage permitted by HUD in a waiver published in an applicable Federal Register notice) of the grant amount is expended for activities that benefit such persons. (4) The grantee will not attempt to recover any capital costs of public improvements assisted with CDBG–DR grant funds, by assessing any amount against properties owned and occupied by persons of low- and moderate income, including any fee charged or assessment made as a condition of obtaining access to such public improvements, unless: (a) Disaster recovery grant funds are used to pay the proportion of such fee or assessment that relates to the capital costs of such public improvements that are financed from revenue sources other than under this title; or (b) for purposes

of assessing any amount against properties owned and occupied by persons of moderate income, the grantee certifies to the Secretary that it lacks sufficient CDBG funds (in any form) to comply with the requirements of clause (a).

i. Puerto Rico certifies that the grant will be conducted and administered in conformity with title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), the Fair Housing Act (42 U.S.C. 3601– 3619), and implementing regulations, and that it will affirmatively further fair housing.

j. Puerto Rico certifies that it has adopted and is enforcing the following policies, and, in addition, must certify that they will require local governments that receive grant funds to certify that they have adopted and are enforcing: (1) A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in nonviolent civil rights demonstrations; and (2) A policy of enforcing applicable State and local laws against physically barring entrance to or exit from a facility or location that is the subject of such nonviolent civil rights demonstrations within its jurisdiction.

k. Puerto Rico certifies that it (and any subrecipient or administering entity) currently has or will develop and maintain the capacity to carry out disaster recovery activities in a timely manner and that the grantee has reviewed the requirements of this notice. Puerto Rico certifies to the accuracy of its Public Law 115–56 Financial Management and Grant Compliance certification checklist, or other recent certification submission, if approved by HUD, and related supporting documentation referenced at A.1.a. under section VI and its Implementation Plan and Capacity Assessment and related submissions to HUD referenced at A.1.b. under section VI.

l. Puerto Rico certifies that it will not use CDBG–DR funds for any activity in an area identified as flood prone for land use or hazard mitigation planning purposes by the State, local, or tribal government or delineated as a Special Flood Hazard Area (or 100-year floodplain) in FEMA’s most current flood advisory maps, unless it also ensures that the action is designed or modified to minimize harm to or within the floodplain, in accordance with Executive Order 11988 and 24 CFR part 55. The relevant data source for this provision is the State, local, and tribal government land use regulations and hazard mitigation plans and the latest issued FEMA data or guidance, which includes advisory data (such as Advisory Base Flood Elevations) or preliminary and final Flood Insurance Rate Maps.

m. Puerto Rico certifies that its activities concerning lead-based paint will comply with the requirements of 24 CFR part 35, subparts A, B, J, K, and R.

n. Puerto Rico certifies that it will comply with environmental requirements at 24 CFR part 58.

o. Puerto Rico certifies that it will comply with applicable laws. Warning: Any person who knowingly makes a false claim or statement to HUD may be subject to civil or criminal penalties under 18 U.S.C. 287, 1001 and 31 U.S.C. 3729.

Signature _____

Date _____

Fernando Gil Enseñat

Secretary

Department of Housing

Puerto Rico

APPENDICES



APPENDIX A: UNMET NEEDS DATA SOURCES

- FEMA IA – FEMA FIDA 31621 as of 4/2/2018
- FEMA PA Cat A/B – Public Assistance Funded Project Details (Accessed 4/12/18)
- SBA individual and business
 - o Individual – SBA DCMS Home Applicant Report (3/18/18)
 - o Business – SBA DCMS Business Applicant Report (3/18/18)
- HUD Mortgage data
- Insurance Commissioner Data
 - o Domestic Insurers P & C Summary Report (2/28/18)
 - o Foreign Insurers P & C Summary Report (2/28/18)
- Public Housing Data –
 - o Puerto Rico Public Housing Administration, Hurricane Deductible – Tax Credit
 - o Puerto Rico Public Housing Administration, Hurricane Deductible – State Project
 - o Puerto Rico Public Housing Administration, Hurricane Deductible
- NFIP Data – Personal Communication from FEMA representative/ 4/26/2018
- Flood Zone Data – FEMA Map Service Center, <https://msc.fema.gov/portal>
 - o Effective flood zone for Puerto Rico – effective date 11/18/2009 (accessed 4/25/18)
- Federal Register – Used for numbers in housing and business unmet needs - Federal Register/Vol. 83, No. 28/Friday, February 9, 2018
- Build Back Better Report, Office of Governor Ricardo Rosselló, November 2017 (http://nlihc.org/sites/default/files/Build_Back_Better_PR_Request_94B.pdf)
- Situación Industria Vivienda Asociación Constructores Report
- Institute of Statistics of Puerto Rico (<http://www.estadisticas.gobierno.pr/iepr/>)
- U.S. Census Data 2010 (<https://www.census.gov/en.html>)
- American Community Survey 2012- 2016 (<https://censo.estadisticas.pr/EncuestaComunidad>)
- Child Instituto Desarrollo Juventud (<http://juventudpr.org/>)
- Puerto Rico Department of the Family <http://www2.pr.gov/agencias/secretariado/ProgramasServicios/Documents/Informe%20Conteo%20Personas%20sin%20hogar%20-%202015.pdf>
- HOPWA and ESG <https://www.hudexchange.info/grantees/puerto-rico/>

Municipio	Median Income	Very Low Inome (50%)								Extremely Low Income								Low Income (80%)													
		<i>(Persons in Family)</i>								1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6
Adjuntas	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Aguada	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Aguadilla	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Aguas Buenas	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Aibonito	\$16,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Añasco	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Arecibo	\$21,400	9,400	10,750	12,100	13,400	14,500	15,550	16,650	17,700	5,650	6,450	7,250	8,050	8,700	9,350	10,000	10,650	15,050	17,200	19,350	21,450	23,200	24,900	26,600	28,350						
Arroyo	\$18,000	9,950	11,350	12,750	14,150	15,300	16,450	17,550	18,700	5,950	6,800	7,650	8,500	9,200	9,900	10,550	11,250	15,900	18,150	20,400	22,650	24,500	26,300	28,100	29,900						
Barceloneta	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Barranquitas	\$16,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Bayamón	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Cabo Rojo	\$18,400	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Caguas	\$26,400	10,350	11,800	13,300	14,750	15,950	17,150	18,300	19,500	6,200	7,100	8,000	8,850	9,600	10,300	11,000	11,700	16,550	18,900	21,250	23,600	25,500	27,400	29,300	31,200						
Camay	\$21,400	9,400	10,750	12,100	13,400	14,500	15,550	16,650	17,700	5,650	6,450	7,250	8,050	8,700	9,350	10,000	10,650	15,050	17,200	19,350	21,450	23,200	24,900	26,600	28,350						
Canóvanas	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Carolina	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Cataño	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Cayey	\$26,400	10,350	11,800	13,300	14,750	15,950	17,150	18,300	19,500	6,200	7,100	8,000	8,850	9,600	10,300	11,000	11,700	16,550	18,900	21,250	23,600	25,500	27,400	29,300	31,200						
Ceiba	\$21,600	10,100	11,550	13,000	14,400	15,600	16,750	17,900	19,050	6,100	6,950	7,800	8,650	9,350	10,050	10,750	11,450	16,150	18,450	20,750	23,050	24,900	26,750	28,600	30,450						
Ciales	\$16,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Cidra	\$26,400	10,350	11,800	13,300	14,750	15,950	17,150	18,300	19,500	6,200	7,100	8,000	8,850	9,600	10,300	11,000	11,700	16,550	18,900	21,250	23,600	25,500	27,400	29,300	31,200						
Coamo	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Comerio	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Corozal	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Culebra	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Dorado	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Fajardo	\$21,600	10,100	11,550	13,000	14,400	15,600	16,750	17,900	19,050	6,100	6,950	7,800	8,650	9,350	10,050	10,750	11,450	16,150	18,450	20,750	23,050	24,900	26,750	28,600	30,450						
Florida	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Guánica	\$17,000	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Guayama	\$18,000	9,950	11,350	12,750	14,150	15,300	16,450	17,550	18,700	5,950	6,800	7,650	8,500	9,200	9,900	10,550	11,250	15,900	18,150	20,400	22,650	24,500	26,300	28,100	29,900						
Guayanilla	\$17,000	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Guaynabo	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Gurabo	\$26,400	10,350	11,800	13,300	14,750	15,950	17,150	18,300	19,500	6,200	7,100	8,000	8,850	9,600	10,300	11,000	11,700	16,550	18,900	21,250	23,600	25,500	27,400	29,300	31,200						
Hatillo	\$21,400	9,400	10,750	12,100	13,400	14,500	15,550	16,650	17,700	5,650	6,450	7,250	8,050	8,700	9,350	10,000	10,650	15,050	17,200	19,350	21,450	23,200	24,900	26,600	28,350						
Hormigueros	\$23,600	9,950	11,350	12,750	14,150	15,300	16,450	17,550	18,700	5,950	6,800	7,650	8,500	9,200	9,900	10,550	11,250	15,900	18,150	20,400	22,650	24,500	26,300	28,100	29,900						
Humacao	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Isabela	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Jayuya	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Juana Díaz	\$22,300	9,550	10,900	12,250	13,600	14,700	15,800	16,900	18,000	5,750	6,550	7,350	8,150	8,850	9,500	10,150	10,800	15,300	17,450	19,650	21,800	23,550	25,300	27,050	28,800						
Juncos	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Lajas	\$18,400	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Lares	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Las Marías	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Las Piedras	\$26,6																														

Municipio	Median Income	Very Low Inome (50%)								Extremely Low Income								Low Income (80%)													
		<i>(Persons in Family)</i>								1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6
Salinas	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
San Germán	\$18,400	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
San Juan	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
San Lorenzo	\$26,400	10,350	11,800	13,300	14,750	15,950	17,150	18,300	19,500	6,200	7,100	8,000	8,850	9,600	10,300	11,000	11,700	16,550	18,900	21,250	23,600	25,500	27,400	29,300	31,200						
San Sebastián	\$18,700	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Santa Isabel	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Toa Alta	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Toa Baja	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Trujillo Alto	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Utuado	\$19,200	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						
Vega Alta	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Vega Baja	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Vieques	\$15,800	8,400	9,600	10,800	12,000	13,000	13,950	14,900	15,850	5,050	5,800	6,500	7,200	7,800	8,400	8,950	9,550	13,450	15,400	17,300	19,200	20,750	22,300	23,850	25,350						
Villalba	\$22,300	9,550	10,900	12,250	13,600	14,700	15,800	16,900	18,000	5,750	6,550	7,350	8,150	8,850	9,500	10,150	10,800	15,300	17,450	19,650	21,800	23,550	25,300	27,050	28,800						
Yabucoa	\$26,600	11,300	12,900	14,500	16,100	17,400	18,700	20,000	21,300	6,800	7,750	8,700	9,650	10,450	11,200	12,000	12,750	18,050	20,600	23,200	25,750	27,850	29,900	31,950	34,000						
Yauco	\$17,000	8,850	10,100	11,350	12,600	13,650	14,650	15,650	16,650	5,300	6,050	6,800	7,550	8,200	8,800	9,400	10,000	14,150	16,150	18,150	20,150	21,800	23,400	25,000	26,600						

