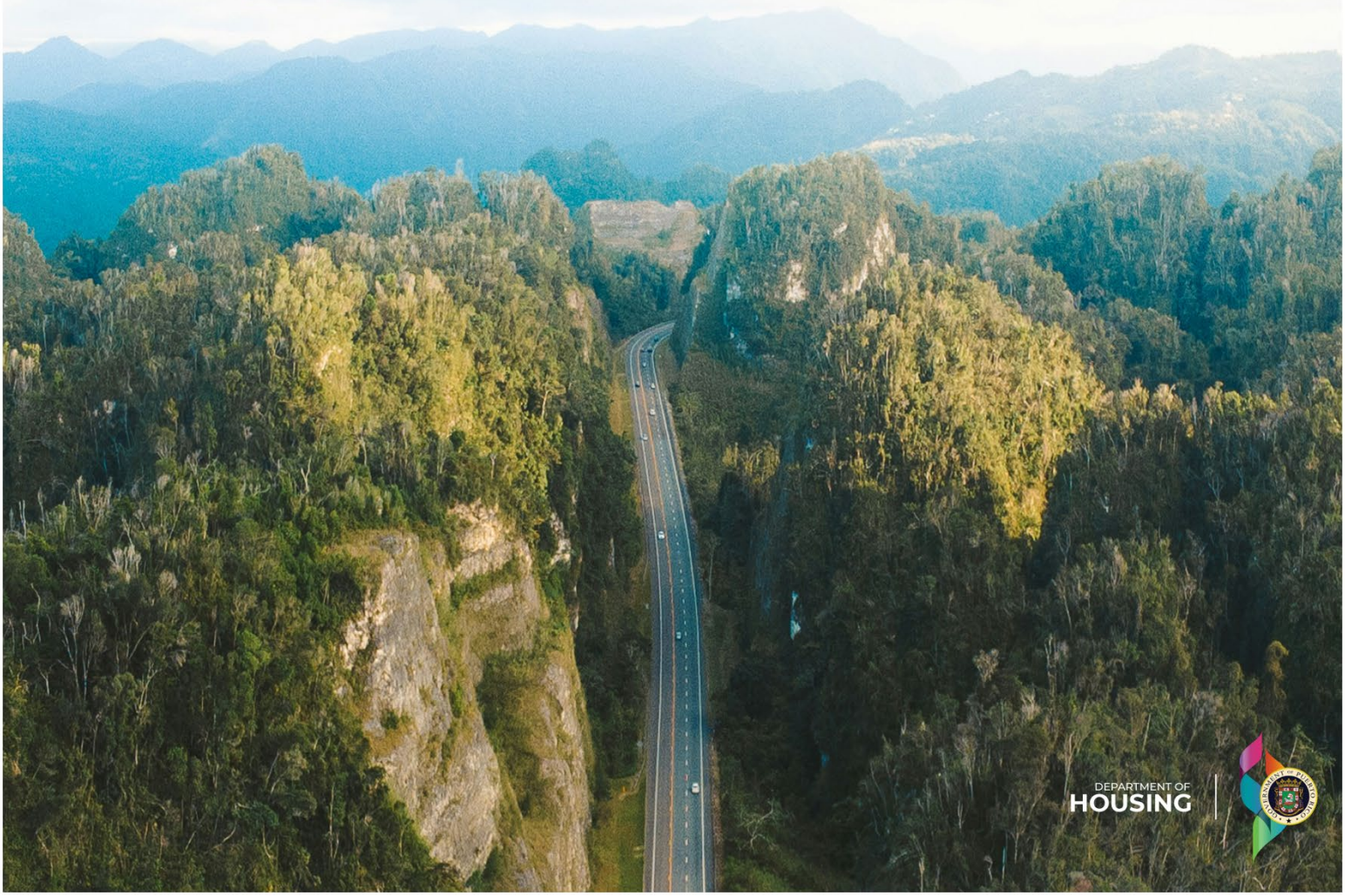
PUERTO RICO

DISASTER RECOVERY ACTION PLAN

For use of CDBG-DR Funds in response to Floods 2022 (DR-4649-PR) and Hurricane Fiona (DR-4671-PR)



ABSTRACT

The U.S. Department of Housing and Urban Development (**HUD**) announced that the Commonwealth of Puerto Rico will receive $166,312,000 in funding to support long-term recovery efforts following Severe Storm, Flooding and Landslides (DR-4649-PR), and Hurricane Fiona (DR-4671-PR) through the Puerto Rico Department of Housing (**PRDOH**). Community Development Block Grant- Disaster Recovery (**CDBG-DR**) funding is designed to address unmet needs after all other assistance has been exhausted.

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1. Executive Summary

Overview

The U.S. Department of Housing and Urban Development (**HUD**) announced that the Commonwealth of Puerto Rico will receive $166,312,000 in funding to support long-term recovery efforts following Severe Storm, Flooding and Landslides (DR-4649-PR), and Hurricane Fiona (DR-4671-PR) through the Puerto Rico Department of Housing (**PRDOH**). Community Development Block Grant- Disaster Recovery (**CDBG-DR**) funding is designed to address unmet needs after all other assistance has been exhausted. These fund allocations, published in the Federal Register Vol. 88 No. 96 (May 18, 2023), included the municipalities of Añasco, Arecibo, Barranquitas, Cabo Rojo, Caguas, Canóvanas, Dorado, Guayama, Hormigueros Humacao, Juana Diaz, Lajas, Las Piedras, Naranjito, Orocovis, Ponce, Salinas, San Lorenzo, Santa Isabel, Toa Baja, Vega Baja, Yabucoa, and Yauco.

On July 6, 2023, PRDOH submitted a consultation to HUD regarding possibly expanding the Most Impacted and Distressed (**MID**) Area in Puerto Rico. On July 12, 2023, HUD responded via e-mail to PRDOH to proceed with the request to add other municipalities in the MID Area with a data-driven analysis that illustrates the basis for designating additional areas as MID. On October 9, 2023, PRDOH requested an expansion of the HUD-identified MID Area with data-driven analysis based on the best available information to address needs in all the seventy-eight (78) municipalities. On December 1, 2023, HUD responded via e-mail with the approval of the expansion to the MID Area for the DR-4649-PR and DR-4671-PR. This expansion added twenty-five (25) municipalities to the MID Area identified in the 88 FR 32046, increasing the total MID Area to forty-eight (48) municipalities. The added municipalities are Adjuntas, Aguada, Aguadilla, Aibonito, Barceloneta, Bayamón, Carolina, Cataño, Cidra, Coamo, Comerío, Guayanilla, Isabela, Jayuya, Juncos, Mayagüez, Moca, Patillas, Peñuelas, Rincón, San Germán, San Juan, Toa Alta, Utuado, and Vega Alta.[1]

To meet disaster recovery needs, the statutes making CDBG-DR funds available have imposed additional requirements and authorized HUD to modify the rules that apply to the annual CDBG program to enhance flexibility and allow a quicker recovery. This allocation was made available through Continuing Appropriations

[1] See Appendix B included with this Action Plan.

Act, 2023 (Pub. L. 117-180, Division A) approved September 30, 2022, and Appropriations Act, 2023 (Pub. L. 117-328, Division L, Title II) approved December 29, 2022.

Hurricanes and Flooding

As stated in the Fourth National Climate Assessment, Chapter 20 explains that the U.S. Caribbean region historically has experienced relatively stable seasonal rainfall patterns, moderate annual temperature fluctuations, and various extreme weather events, such as tropical storms, hurricanes, and drought. [2] These patterns have changed over the years and are projected to be increasingly variable as atmospheric greenhouse gas concentrations increase. The region is sensitive to large-scale patterns of natural variability in the Atlantic and Pacific tropical basins, such as the El Niño- Southern Oscillation and the Atlantic Multidecadal Oscillation. While there is still much uncertainty in global climate model predictions of tropical cyclone formation, climate models project an increase in the frequency of strong hurricanes (Categories 4 and 5) in the Atlantic Basin, including the Caribbean. The 2021 Puerto Rico State Natural Hazard Mitigation Plan (**PRSNHMP**) identifies hurricanes and tropical storms as the most common natural hazards in Puerto Rico that cause the most extensive damage and loss of life and property. These weather events are viewed as the most dangerous because of their destructive potential, ability to affect large areas, capacity to form spontaneously, and unpredictability. Hurricanes are often accompanied by destructive natural events, such as high tides, storm surges, and heavy rains that cause landslides and flooding. A study released in 2020 based on surveys of land managers found that long-term planning for hurricane events is still uncommon compared to shorter-term preparedness and recovery activities.[3]

The **PRSNHMP** acknowledges the Island has tropical rainforests in the Sierra de Luquillo and the Cordillera Central, but semi-arid conditions prevail on the south and southwest coasts. Average annual rainfall totals range from thirty (30) inches in the southwest portion of the south coast up to 160 inches near the top of El Yunque National Forest. The reason for this is the combination of geographical location, topology, and tropical weather. Atmospherics and climate events

[2] https://nca2018.globalchange.gov/downloads/NCA4_Ch20_US-Caribbean_ExecSum.pdf
[3] S. Wiener, N. Álvarez-Berríos, A. Lindsey, *Opportunities and challenges for hurricane resilience on agricultural and forest land in the US, Southeast and Caribbean*, Sustainability 2020, 12, 1364, in: https://www.srs.fs.usda.gov/pubs/ja/2020/ja_2020_wiener_001.pdf (last visit, January 29, 2024).

like waves, tropical cyclones, El Niño and La Niña have the potential to cause peaks in rainfall or droughts. Also, flooding risks are highest during this period. The weather is warmest from June to September, thus, the risk of high-frequency atmospheric events such as tropical storms and hurricanes is highest.

Historic Hurricane and Flooding Events of Significance[4]	
Event	**Description**
Hurricane San Ciriaco, 1899	This hurricane was one of the most shocking tragedies in terms of loss of life: more than 3,000 people died, mostly drowned. Rainfall was recorded at twenty-three (23) inches in twenty-three (23) hours in the Municipality of Adjuntas.
Hurricane San Felipe, 1928	This hurricane is considered one of the most violent in its effects on Puerto Rico. Estimated death tolls ranged from 300 to 1,000, and many of the crops that supported the economy—coffee, sugar, tobacco—were destroyed.
Hurricane San Ciprián, 1932	This hurricane happened a year after Hurricane San Nicolás (September 1931), when the economy was still recovering. Two hundred twenty-five (225) people died.
Hurricane Donna, 1960	This hurricane passed over the Island 100 miles north of San Juan; however, heavy rains caused floods, killing one hundred and seven (107) people in the Municipality of Humacao.
Tropical depression, 1970	This depression was stationary from October 5 to October 10, 1970. It produced widespread flooding that led to Presidential Disaster Declarations in sixty (60) municipalities. The highest rainfall totals measured in Jayuya were more than thirty-eight (38) inches. Eighteen (18) people died, and damage quantified over $65 million.

[4] Source information pulled from the 2016 Puerto Rico Hazard Mitigation Plan. Accessed under file name "Puerto Rico Plan de Mitigación-Aprobado 02/08/2016" at the following website location: https://recovery.pr/en/document-library.

Tropical storm Eloísa, 1975	This storm caused flooding and landslides that killed thirty-four (34) people, and twenty-nine (29) were reported missing. Damage was estimated at $125 million.
Hurricane David and storm Federico, 1979	These events occurred on August 30 and September 4, 1979, respectively. Both events led to a Presidential Disaster Declaration in seventy-two (72) municipalities, and seven (7) people were killed. The federal allocation for individual and Public Assistance totaled $102 million.
Tropical depression, 1985	In May 1985, there was another Presidential Disaster Declaration because of flooding caused by a tropical depression that later became Hurricane Gloria. Two (2) people died, and damage totaled $37 million.
Tropical wave / Mameyes event, 1985	A tropical wave crossed the Island, causing flooding in some areas, depositing up to twenty-four (24) inches of rain in twenty-four (24 hours), causing flooding, landslides, and mudflows that interrupted basic services, blocked roads, destroyed bridges, damaged structures, and deposited silt, gravel, and debris on the roads. The works of flood control, drainage, and irrigation facilities were blocked. The Puerto Rico Aqueducts and Sewers Authority and the Electricity Puerto Rico Electric Power Authority suffered significant system damage. This tropical wave left fifty-three (53) people dead from floods; the community of Mameyes was buried because of a landslide, killing 127 people, and a bridge collapsed, killing twenty-nine (29) people. The flow of water that eroded the bridge passed by the Municipality of Coamo, destroying more than 600 homes. The water flow was higher than the expected recurrence of a 100-year flood. About five (5) bridges were damaged, leaving many communities isolated. In addition, seventeen (17) people died in Ponce as they were washed away by Las Batatas gully. There was a Presidential Disaster Declaration; twenty-eight (28) municipalities were eligible for Individual Assistance, and thirty-four (34) were eligible for Public Assistance. Federal Emergency Management Agency (**FEMA**) assistance totaled nearly $264 million.
Hurricane Hugo, 1989	This hurricane was a Category 4. To the east and northeast of Puerto Rico, there was an estimated storm surge of four (4) to six (6) feet in the vicinity of Fajardo and Ceiba. Higher storm surge totals were observed in Vieques and Culebra, and

	about ten (10) inches of rain in forty-eight (48) hours caused flooding in the northeastern part of the Island. Heavy losses in livestock, agriculture, and horticulture were recorded; twenty-seven (27) municipalities were eligible to receive federal aid. Damage was estimated at $2 billion. Carraízo Lake Dam suffered a power failure that prevented the floodgates from opening to allow water discharge. The water level rose, reaching the engine room and damaging the pump motors of the dam. These engines pump water to the Sergio Cuevas Filtration Plant, which serves two-thirds (2/3) of the San Juan Metropolitan Area and surrounding municipalities. Water service was restored nine (9) days later.
Floods of January 5-6, 1992	On January 5, 1992, a cold front, accompanied by a trough in the upper levels of the atmosphere, generated heavy rain and thunderstorms. It caused flash floods that killed twenty-one (21) people, eighteen (18) of whom died in their cars traveling at night, three (3) people went missing, and there was more than $50 million in property damage. Most deaths occurred when people in their cars were swept away by the river or as they were trying to cross rivers beyond their banks.
Hurricane Marilyn, 1995	The Islands of Vieques and Culebra were the hardest hit by this hurricane. An estimated one hundred and twenty (120) homes were destroyed, and another eight hundred twenty-nine (29) sustained damage. The waste treatment plant in the Municipality of Culebra was damaged, causing the lake to overflow creating a potential health risk to the community. The accumulation of debris was estimated at 4,000 cubic yards in Vieques and approximately 10,000 cubic yards in Culebra. Initially, estimated damage was $1.2 million for private residences and $9 million for municipal infrastructure. Twenty (20) deaths and eight (8) injuries were attributed to this disaster. The President signed Disaster Declarations for fourteen (14) municipalities.

Hurricane Hortense, 1996	This hurricane was Category 1 with eighty-five (85) mph winds. It caused an estimated $200 million in damage to public and private property and the death and disappearance of twenty (20) people, most of them because of flooding. About 10,500 people were displaced to shelters across the Island. Recorded rainfall data exceeded twenty (20) inches in twenty-four (24) hours. In the interior of the Island, rainfall exceeded the expected levels of a 100-year storm. Large tracts of land to the north, east, and southeast of Puerto Rico remained underwater. Many of the major rivers and their tributaries overflowed. About forty (40) roadways were blocked by flooding and landslides, and some bridges collapsed due to the speed of current flow or the accumulation of debris.
Hurricane Georges, 1998	This hurricane left a trail of damage due to high winds, rains, floods, mudslides, and surges. The greatest accumulation of rain occurred in the central mountainous interior, causing all rivers to overflow their banks, some of which set record discharges, and many created new channels. The storm surge values were estimated at ten (10) feet high in the municipality of Fajardo. Many parts of the West Coast experienced severe erosion of the beaches. The seventy-eight (78) municipalities were affected: 3.6 million people without drinking water, 600,000 people without phone service, one hundred percent (100%) of the electrical system was interrupted, 31,000 homeless, 100,000 houses damaged or destroyed, forty (40) bridges and miles of roads damaged or blocked, 2.5 million cubic yards of rubble, ninety-five percent (95%) of the total loss of banana crop, seventy percent (70%) total loss of coffee harvest, and sixty percent (60%) loss of poultry production. The number of refugees rose to 28,000 in 420 shelters spread throughout the Island. The economic impact was estimated at $2 billion.
Floods of November 2003	From November 12 to 14, 2003, a trough caused heavy rains on the island for three (3) consecutive days, affecting the southern region. Total damage was estimated at $4.3 million. The roads affected were PR-10 from Adjuntas to Ponce, PR-52 at Cayey, and PR-172 that connects Caguas to Cidra. In the town of Moca, a woman died after falling off a cliff in her car. Two (2) men died trying to walk across flooded bridges in the municipalities of Aibonito and Ciales. Three (3) bridges

	collapsed, and six (6) others were damaged. A total of 856 people had to be sheltered, forty percent (40%) of the public school system was closed, twenty (20) roads were impassable, 138,174 people were left without drinking water, and more than 12,600 families were left without electricity. One hundred percent (100%) of crops were damaged. In the Valle of Lajas, many cattle drowned. The Río Grande of Añasco came out of its banks, causing loss of the banana crop. President George Bush issued a Presidential Disaster Declaration covering twenty-one (21) municipalities, which qualified for Public Assistance and Individual Assistance.
November 10, 2005	There was a new Presidential Emergency Declaration in Puerto Rico due to severe storms causing landslides and floods across the Island. The most affected municipalities were: Adjuntas, Aibonito, Cayey, Guayanilla, Jayuya, Juana Díaz, Lares, Maricao, Orocovis, Peñnuelas, Ponce, Salinas, Santa Isabel, Utuado, Villalba, Yabucoa and Yauco.
October 1, 2008	Presidential Disaster Declaration (DR-1798-PR) due to severe storms and flooding from September 21, 2008, to October 3, 2008. The most affected municipalities were: Guayama, Humacao, Maunabo, Patillas, Ponce, Salinas, Santa Isabel, and Yabucoa. The total number of residences impacted was over 2,000, and the total assistance cost estimate was $43 million.
June 24, 2010	Presidential Disaster Declaration (DR-1919-PR) due to severe storms and flooding during the period of May 26 to 31, 2010. Ten (10) municipalities were affected: Arecibo, Barranquitas, Coamo, Corozal, Dorado, Naranjito, Orocovis, Utuado, Vega Alta, and Vega Baja. The total Public Assistance cost estimate was $6 million. This declaration also made Hazard Mitigation Grant Program assistance available for hazard mitigation measures in all municipalities within the Government of Puerto Rico as requested by the Governor.

Tropical storm Otto, October 26, 2010	Presidential Disaster Declaration (DR-1946-PR) due to severe storms, flooding, mudslides, and landslides associated with Tropical Storm Otto during the period of October 4 to 8, 2010. The most affected municipalities were: Adjuntas, Aibonito, Añasco, Guánica, Guayama, Jayuya, Lares, Las Marías, Maricao, Mayagüez, Morovis, Orocovis, Patillas, Ponce, Sabana Grande, Salinas, San Germán, Utuado, Villalba, Yabucoa, and Yauco. $20 million was obligated for Public Assistance.
July 14, 2011	Presidential Disaster Declaration (DR-4004-PR) due to severe storms, flooding, mudslides, and landslides during the period of May 20, 2011, to June 8, 2011. The most affected municipalities were Añasco, Caguas, Camuy, Ciales, Hatillo, Las Piedras, Morovis, Orocovis, San Lorenzo, San Sebastián, Utuado, Villalba y Yabucoa. Seven point five ($7.5) million was obligated for Public Assistance.
Hurricane Irene, August 22, 2011	Emergency Declaration (EM-3326-PR) due to severe rain, flooding, and landslides caused by Hurricane Irene during the period of [August] 21 to 24, 2011. The hurricane impacted infrastructure, housing, personal property, and vehicles in twenty-two (22) municipalities: Humacao, Naguabo, Ceiba, Fajardo, Luquillo, Loíza, Carolina, Caguas, Cidra, Cayey, Comerío, Aguas Buenas, Canóvanas, Gurabo, Juncos, Maunabo, San Lorenzo, Yauco, Orocovis, Villalba, Ponce, and Peñuelas.
Hurricane Irene, August 27, 2011	Presidential Disaster Declaration (DR-4017-PR) due to severe rain, flooding, and landslides caused by Hurricane Irene during the period of [August] 21 to 24, 2011. The Disaster Declaration included Individual Assistance for seven (7) municipalities: Caguas, Canóvanas, Carolina, Cayey, Loíza, Luquillo, and San Juan. It also had Public Assistance for local government and non-profit organizations in Aguas Buenas, Carolina, Cayey, Ceiba, Comerío, Juncos, Las Marías, Luquillo, Morovis, Naguabo, Orocovis, Utuado, Vega Baja, and Villalba. The total Individual Assistance cost estimate was over $30 million, and the total Public Assistance cost estimate was nearly $5 million, primarily for roads and bridges.
Tropical storm María,	Presidential Disaster Declaration (DR-4040-PR) due to severe rain, flooding, and landslides caused by Tropical Storm María from September 8 to 14, 2011. The Disaster Declaration

September 2011	included Individual Assistance for three (3) municipalities: Yabucoa, Juana Díaz, and Naguabo. The total Individual Assistance cost estimate was $7 million.
Hurricane Irma, September 2017	Irma was a category 5 hurricane when its eye passed within 30 miles (48 kilometers) of the Puerto Rico Island of Culebra on September 6, 2017, with over 10-15 inches (25 -38 centimeters) of rainfall recorded in 36 hours. Also, the hurricane caused storm surge flooding in a few areas on the north coast.[5]
Hurricane María, September 2017	On September 20, Maria made landfall as a Category 4 hurricane. Over 38 inches (96 centimeters) of rainfall was recorded in 48 hours, and a storm surge of over 6-10 feet (2 meters) was estimated above ground level to the east of Maria's landfall along the coasts of Humacao, Naguabo, and Ceiba, as well as the north central municipality of Arecibo. To the southeast, in Yabucoa, Maunabo, Patillas, and Arroyo, the maximum storm surge inundation was approximately 4–7 feet (1.2–2.1 meters). Along the remaining southern and northeastern coastline, maximum inundation of 3–5 feet (0.9–1.5 meters) occurred from the municipality of Ponce eastwards. The remaining coast generally experienced inundations ranging from 1 to 4 feet (0.3 to 1.2 meters). Additionally, the island of Vieques experienced 3–5 feet (0.9–1.5 meters) of maximum storm surge inundation.[6]
Tropical storm Isaías, July 2020	From July 29-31, 2020, Tropical Storm Isaías passed just south of Puerto Rico, impacting the island's southern area with significant flurries and rainfall. Rainfall accumulations ranged from four (4) to eight (8) inches over western and southwestern Puerto Rico, with some areas of the central interior and eastern of Puerto Rico reporting more than ten (10) inches during the event. There were several reports of impassable primary and secondary roads, as well as numerous landslides affecting local roads.[7]

[5] Source information pulled from the Mitigation Assessment Team Report. Accessed under file name "Hurricanes Irma and Maria in Puerto Rico Building Performance, Observations, Recommendations, and Technical Guidance" at the following website location: https://www.fema.gov/sites/default/files/2020-07/mat-report_hurricane-irma-maria-puerto-rico_2.pdf (last visit, January 31, 2024).
[6] *Id.*
[7] See, https://www.weather.gov/sju/isaias2020 (last visit, January 31, 2024).

Frontal boundary, February 2022	The convergent flow at low levels caused the higher moisture band to remain over northeastern Puerto Rico, leading to better precipitation efficiency that resulted in prolonged periods of heavy rainfall, especially in the western half of the metropolitan area. Accumulations across these areas ranged between 3 to 6 inches of precipitation, with a maximum of 10 inches of rainfall in some areas. Several rounds of heavy rainfall over the same areas only aggravated the flood problems the next day.[8]
Hurricane Fiona, September 2022	Based on preliminary information from the US Geological Survey Stream Gauge Network, 50 out of 108 river gauges rose above the USGS-NWS flood stage. Most river gauges along Río Grande de Manatí, Río Cibuco, Río Grande de La Plata, Río Grande de Arecibo, Río Grande de Loíza, and Río Guanajibo rose above moderate or major flood stage. Across southern and southeastern portions of the island, significant catastrophic flooding was observed due to sharp rises along rivers combined with storm surge/coastal flooding. Thousands of families were rescued in Salinas, where a Flash Flood Warning with a catastrophic threat tag was issued. Overall, around 50 Flash Flood Warnings and 30 Flood Warnings were issued between Sunday, September 18th and early Tuesday, September 20th.[9]

Landslides Caused by Heavy Rains

The 2021 **PRSNHMP** explains that many of the landslides in Puerto Rico are in a special category known as "debris flow," which occurs in mountainous areas with significant slopes during heavy rains. The rain saturates the soil and causes ground level and peel strength loss, usually where the ground contacts the bedrock.

Historic Landslide Events of Significance[10]	
Event	**Description**
Tropical storm Eloísa, 1975	This storm caused flooding and landslides, and unspecified damages.

[8] See, https://www.weather.gov/sju/flashflood_feb2022 (last visit, January 31, 2024).
[9] See, https://www.weather.gov/sju/fiona2022 (last visit, January 30, 2024).
[10] Source information pulled from the 2016 Puerto Rico Hazard Mitigation Plan. Accessed under file name "Puerto Rico Plan de Mitigación-Aprobado 02/08/2016" at the following website location: https://recovery.pr/en/document-library.

Tropical wave / Mameyes event, 1985	From October 4 to October 7, 1985, one of the most catastrophic events in recent decades in Puerto Rico and the United States history occurred, which led to a Presidential Disaster Declaration and federal allocation of $65 million. On this occasion, a tropical wave crossed the Island, causing flooding in some areas, dumping up to twenty-four (24) inches of rain in twenty-four (24) hours. There were 127 people killed by a landslide in the neighborhood of Mameyes, located in the municipality of Ponce. This informal community was situated on a steep slope, which experienced a massive rock release. The soil failed, partly because of the saturation of the ground caused by a leak from a water storage tank located at the top of the slope. This wiped out one hundred (100) homes that were literally buried under layers of earth and rocks. Another tragedy occurred during the night when the slab of a bridge collapsed on the road leading from San Juan to Ponce, on the stretch of Coamo due to soil erosion under one of the columns; about twenty-nine (29) people rushed down the bridge and died.
Rains on November 2003	Rains caused twenty-one (21) municipalities to be declared disaster areas by Presidential Disaster Declaration. Twenty-six (26) roads were impassable among them; PR-10 between Adjuntas and Ponce was blocked by a landslide of 1,300 cubic meters of mud. A pipe detachment blocked two lanes on Highway Luis A. Ferré in Cayey. A huge wall of forty (40) feet belonging to a housing project (Bairoa Wall) in the Municipality of Caguas collapsed in some areas, endangering the lives of more than a dozen (12) families who lived behind it. A family in the town of Moca became homeless when their three-story house collapsed; the family came out unharmed. The rains caused the ground to give way and split some of the columns, the land deposited outside the residence that gave way consisted of nineteen (19) feet of landfill and rough soil.

	Several landslides left some communities in the municipality of Utuado isolated; in the Barriada Nueva development, thirty (30) houses were in danger of collapsing as the river undermined the land of the local road which faces the residences. In the Monte Verde development, in the municipality of Manatí, three (3) families lost their homes in a sinkhole, and six (6) other houses sank, exposing the vents of other sinkholes. The construction of this development took place between hummocks and a total of eight (8) sinkholes that the developer fenced to isolate them from the 500 homes built.
Tropical storm Jeanne, September 17, 2004	By Presidential Disaster Declaration Number 1552, FEMA has provided financing for recovery for the effects of Tropical Storm Jeanne, which caused multiple landslides virtually across the island. A total of seventy-two (72) municipalities received assistance because of this event.
November 10, 2005	Presidential Emergency Declaration because of severe storms causing landslides and floods across the Island. The most affected municipalities were: Adjuntas, Aibonito, Cayey, Guayanilla, Jayuya, Juana Diaz, Lares, Maricao, Orocovis, Penuelas, Ponce, Salinas, Santa Isabel, Utuado, Villalba, Yabucoa and Yauco. Recovery assistance provided by FEMA was number 1613.
March and April 2008	Rainfall occurred during the months of March and April 2008, causing landslides. The effects of these events impacted the community of Carruzos in Carolina, the community Cerca del Cielo (Close to the Sky) in Ponce, and the community of Unibón in Morovis. The combination of geological, climatological and the inappropriate construction and development practices in urbanized areas, were the main causes for these landslides.

Tropical storm Otto, October 26, 2010	Presidential Disaster Declaration (DR-1946) was declared due to severe storms, flooding, mudslides, and landslides associated with Tropical Storm Otto during the period of October 4 to 8, 2010. The municipalities most affected were: Adjuntas, Aibonito, Añasco, Guánica, Guayama, Jayuya, Lares, Las Marías, Maricao, Mayagüez, Morovis, Orocovis, Patillas, Ponce, Sabana Grande, Salinas, San Germán, Utuado, Villalba, Yabucoa, and Yauco. $20 million was obligated for Public Assistance.
July 14, 2011	A Presidential Disaster Declaration (DR-4004) was declared due to severe storms, flooding, mudslides, and landslides during the period of May 20, 2011, to June 8, 2011. The municipalities most affected were: Añasco, Caguas, Camuy, Ciales, Hatillo, Las Piedras, Morovis, Orocovis, San Lorenzo, San Sebastián, Utuado, and Villalba. $7 million was obligated for Public Assistance.
Hurricane María, September 2017	Landslides associated with high rainfall occurred throughout Puerto Rico, blocking thousands of roads. The Hurricane triggered more than 70,000 landslides across Puerto Rico that caused loss of life and widespread damage to transportation, communication, and power-supply infrastructure, and to other public and private property.[11]
Frontal boundary, February 2022	In February, Puerto Rico experienced heavy floods, which caused landslides. The heavy rains produce severed land slippage and mudslides on major roadways.[12]
Hurricane Fiona, September 2022	In September 2022, the extreme rainfall (12-18 inches) from an intensifying hurricane resulted in widespread flooding and mudslides, causing damage to many homes, businesses, vehicles, and other infrastructure.[13]

[11] See, W. Schulz, "*Rainfall-Induced Landslides in Puerto Rico*", 2021, in: https://www.usgs.gov/programs/landslide-hazards/science/rainfall-induced-landslides-puerto-rico (last visit, January 30, 2024).
[12] See, K. Sullivan, "Recent Flooding Highlights Puerto Rico's Continued Vulnerabilities To Natural Disasters", 2022, in: https://pasquines.us/2022/02/28/recent-flooding-highlights-puerto-ricos-continued-vulnerabilities-to-natural-disasters/ (last visit, January 31, 2024).
[13] See, https://www.ncei.noaa.gov/access/billions/events/PR/2018-2023?disasters[]=all-disasters (last visit, January 31, 2024).

Winds from Tropical Cyclones and Hurricanes

The 2021 **PRSNHMP** notes that winds caused by hurricanes and tropical cyclones can cause significant damage to buildings and infrastructure because of their intensity and high-speed winds that can pick up and release debris.

Historic Wind Events of Significance[14]	
Event	**Description**
Hurricane San Felipe, 1928	This Category 5 hurricane is considered one of the largest cyclones in the North Atlantic. Maximum sustained winds were 160 mph, with gusts of two hundred (200) mph. It caused extensive damage on the estates and property, 312 people died, 83,000 people were without shelter, and it caused $50 million in losses.
Hurricane Hugo, 1989	This Category 4 hurricane passed through San Juan with sustained winds of 125 mph. A Presidential Disaster Declaration was issued in which fifty-seven (57) municipalities were declared eligible for Public Assistance and Individual Assistance. There was one (1) death and damage was estimated at $1 billion.
Hurricane Marilyn, 1995	On September 15, early in the morning, the center of the hurricane passed forty-five (45) miles east-northeast of San Juan with maximum sustained winds of 110 mph. It grew to be a Category 3 hurricane.
Hurricane Hortense, 1996	This hurricane damaged some 4,000 homes. Agriculture suffered severe damage, particularly in the mountainous area. Other damages associated with winds were falling trees, utility poles, and telephone poles. A Presidential Disaster Declaration was issued covering sixty-seven (67) municipalities.

[14] Source information pulled from the 2016 Puerto Rico Hazard Mitigation Plan. Accessed under file name "Puerto Rico Plan de Mitigación-Aprobado 02/08/2016" at the following website location: https://recovery.pr/en/document-library.

Hurricane Georges, 1998	This hurricane's 110 mph winds defoliated agricultural areas. About sixty percent (60%) of poultry production was lost, and a workforce of thirty-six thousand (36,000) agricultural jobs were affected. Heavy rains and strong winds caused $45 million in damage to roads. Winds defoliated and uprooted trees in forest areas, causing an accumulation of vegetative debris, mainly in urban areas. The United States Army Corps of Engineers indicated that the hurricane caused a total of approximately 2.5 million cubic yards of vegetative debris (trees, branches, and leaves), equivalent to three (3) fifty (50)-story buildings. The forest areas are classified as critical to the recovery of native and migratory bird species. An estimated 20,000 homes were destroyed, 38,000 homes suffered major damage, 63,000 homes reported minor damage, and 48,500 were affected. Two (2) days after the Hurricane, 31,500 people were in shelters. Puerto Rico's government estimated the hurricane's economic impact to businesses at $528 million. The government spent $371,500 in Public Assistance to repair damage to its infrastructure. The Presidential Disaster Declaration for seventy-eight (78) municipalities included all categories of disaster relief. It is the first time that all the municipalities of Puerto Rico are included in only one Presidential Disaster Declaration.
Tropical storm Otto, 2010	The indirect effects of Tropical Storm Otto from October 4 to October 8, 2010, caused flooding and mudslides, a Presidential Disaster Declaration (DR-1946) was issued covering twenty-five (25) municipalities. The municipalities included in the declaration were: Adjuntas, Aibonito, Añasco, Cayey, Ciales, Corozal, Guánica, Guayama, Jayuya, Lares, Las Marías, Maricao, Mayagüez, Morovis, Orocovis, Patillas, Ponce, Sabana Grande, Salinas, San Germán, San Lorenzo, Utuado, Villalba, Yabucoa and Yauco. $20 million has been obligated for Public Assistance.

Hurricane Irene, 2011	A Presidential Disaster Declaration (DR 4017) was declared due to the effects caused by Hurricane Irene during the period of [August] 21 to 24, 2011. The effects of Hurricane Irene included: severe rain, flooding, and landslides. The Disaster Declaration included Individual Assistance for seven municipalities: Caguas, Canóvanas, Carolina, Cayey, Loíza, Luquillo, and San Juan. Also included Public Assistance for local government and non-profit organizations in Aguas Buenas, Carolina, Cayey, Ceiba, Comerío, Juncos, Las Marías, Luquillo, Morovis, Naguabo, Orocovis, Utuado, Vega Baja, and Villalba. The total Individual Assistance cost estimate was $30 million, and the total Public Assistance cost estimate was nearly $5 million, primarily for roads and bridges.
Tropical storm María, 2011	A Presidential Disaster Declaration (DR-4040) due to severe rain, flooding, and landslides caused by Tropical Storm María during the period of September 8 to 14, 2011. The Disaster Declaration included Individual Assistance for three (3) municipalities: Yabucoa, Juana Díaz, and Naguabo. The total Individual Assistance cost estimate was more than $7 million.
Hurricane Irma, 2017	Peak wind gust speeds in Puerto Rico were over 120 miles per hour (mph) (193 kilometers per hour). Sustained winds in Puerto Rico were 58 mph (93 kph), with a gust of 89 mph (143 kph).[15]

[15] Source information pulled from the Mitigation Assessment Team Report. Accessed under file name "Hurricanes Irma and Maria in Puerto Rico Building Performance, Observations, Recommendations, and Technical Guidance" at the following website location: https://www.fema.gov/sites/default/files/2020-07/mat-report_hurricane-irma-maria-puerto-rico_2.pdf (last visit, January 31, 2024).

Hurricane María, 2017	Presented a diverse distribution of extreme winds across the island. This is because the distribution of winds across the hurricane structure is not homogeneous, according to the National Hurricane Center Tropical Cyclone Report the system swept through Puerto Rico as a high- level Category 4. Hurricane Maria's maximum wind intensity was estimated at 173 miles per hour. Besides, the increased wind intensity of 74 miles per hour for 24 hours on September 18 makes it the sixth highest intensity hurricane on record for the Atlantic Basin (NWS).[16]
Hurricane Fiona, 2022	Strong, gusty winds accompanied much of the stronger convection embedded within the hurricane. Hurricane-force gusts were observed over portions of southern Puerto Rico during the afternoon on Sunday. These gusty winds combined with ground saturation resulted in damage across the island due to fallen trees and power lines.[17]

Climate Change

The 2016 Puerto Rico Hazard Mitigation Plan (**PRHMP**) identifies climate change as an area of scientific research, analyzing the relationship between rising global temperatures and the effect on the polar caps melting, thus increasing sea levels and threatening coastal areas in all countries. The 2005 study by the Organization for Economic Cooperation and Development based in Paris, France, positioned the City of San Juan, Puerto Rico, in rank sixty-five (65) of 136 cities in terms of population exposed to floods.

National Objective

All programs supported by HUD CDBG-DR assistance must demonstrate benefit to individuals and communities by meeting one (1) of the program's three (3) National Objectives for all money spent on projects. These are: (1) benefiting low- and to moderate-income (**LMI**) persons, (2) aiding in the prevention or elimination

[16] Source information pulled from the Puerto Rico Emergency Management Bureau. Accessed under file name "2021 Puerto Rico State Natural Hazards Mitigation Plan" at the following website location: https://manejodeemergencias.pr.gov/wp-content/uploads/2021/10/2021-PR-State-Hazard-Mitigation-Plan_Aug2021-con-anejo-6.pdf (last visit, January 31, 2024).
[17] See, https://www.weather.gov/sju/fiona2022 (last visit, January 31, 2024).

of slums or blight, or (3) meeting a need having a 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 and updated annually by HUD. These income categories are grouped into the following classifications:

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

In compliance with the e Housing and Community Development Act of 1974 (**HCDA**), and as announced in 88 FR 32046, the primary objective of the HCDA 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 comply with this objective, the statute requires that not less than 70% of the aggregate of CDBG program funds be used to support activities benefitting LMI persons. The 70% 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 a compelling need for the reduction.

Disaster-Specific Overview

Puerto Rico was affected by heavy rainfall and a hurricane, resulting in severe floods and landslides. As the recovery needs in Puerto Rico increase with each disaster, the demand of a coordinated approach between agencies and local governments is necessary to allocate resources better to meet the necessities of the communities. The persistence of these challenges caused by nature mandates a collective response, emphasizing the importance of investing in resilient infrastructure and strategic risk management. The identified areas require

immediate attention to address current issues and fortify against future natural disasters. As Puerto Rico confronts these critical infrastructure challenges, it becomes paramount to prioritize the safety and accessibility of the communities, ensuring a more resilient future for all.

The February & September 2022 Puerto Rico Disasters

The Caribbean and Puerto Rico are at risk of cyclical natural hazards such as storms and hurricanes. According to the 2021 PRSNHMP, hurricanes and tropical storms, which produce extreme wind gusts resulting from intense turbulence, are the most frequent events in Puerto Rico. A hurricane is a tropical cyclonic system with a sustained wind intensity greater than 74 miles per hour. Tropical cyclone systems are categorized into 1) tropical depression, 2) tropical storm, and 3) hurricane. The warming of the waters feeds the pressure gradient that can generate extreme winds. These warm waters are the energy source in the formation of tropical cyclones. It also influences the density of water masses, the variation of sea level height, and the dynamics of atmospheric systems.

The year 2022 was one of extreme climate on the island: from droughts in January to a hurricane in September. Puerto Rico was struck by a severe storm which brought flooding and landslides between February 4 and 6, 2022. As a result, February ended as the wettest month on record. Later, on September 17, 2022, during the hurricane season, Category One Hurricane Fiona lashed the island with torrential rains and flooding. In addition, it produced 1 to 3 ft of storm surge inundation above ground level (**AGL**) along the southern coast of Puerto Rico. The hurricane caused catastrophic flooding. Many locations received 8-16 inches of rainfall during the event and higher rainfall totals over the southern and eastern portions of Puerto Rico. There were numerous observations of over two feet of rainfall, and a total maximum of 32.40 inches of rain was reported by the United States Geological Survey (**USGS**) rain gauge along the Rio Cerrillos near Ponce. This excessive rainfall resulted in significant flash flooding and landslides.[18]

Major Disaster Declaration DR-4649-PR & HUD CDBG-DR Allocation

The unusual climate instability in 2022 started with a frontal boundary, and the associated deep moisture moved over Puerto Rico on Friday, February 4th. This

[18] See, https://www.nhc.noaa.gov/data/tcr/AL072022_Fiona.pdf

atmospheric condition developed a low-level moisture convergence over northeast Puerto Rico, including the San Juan Metro area, producing rainfall accumulations of 1 to 3 inches in some spots. Additionally, rain that developed early that week led to locally high rainfall totals, causing more than 4 inches of rainfall in some areas, including San Juan, Carolina, Vega Alta, and Vega Baja. An upper-level feature combined with the remnants of the front developed another round of heavy rainfall. The convergent flow at low levels caused the higher moisture band to remain over northeastern Puerto Rico, leading to precipitation that resulted in prolonged periods of heavy rainfall with accumulations of 10 inches in some areas (Fig. 1).[19]

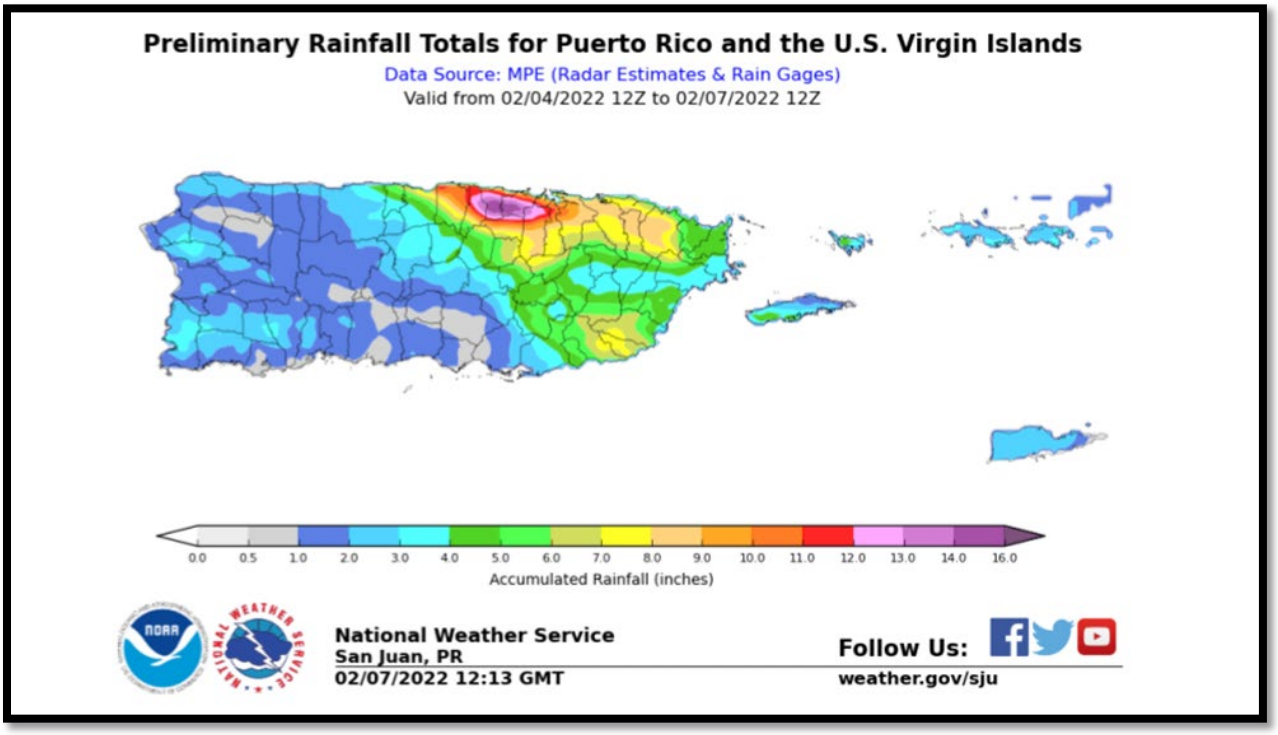

Figure 1: Rainfall estimates for the main rainfall event in February, where over 12 inches of rain were registered over north central Puerto Rico.

On March 8, 2022, the Governor of Puerto Rico, Pedro R. Pierluisi, requested a major disaster declaration due to the severe storm, flooding, and landslides that affected Puerto Rico between February 4 and 6, 2022. The Governor requested a declaration for FEMA's Individual Assistance (**FEMA IA**) for seven municipalities and FEMA's Hazard Mitigation Assistance (**FEMA HMA**) for the entire island.[20] On March

[19] See, https://www.weather.gov/media/sju/climo/monthly_reports/2022/2022.pdf
[20] See, https://www.fema.gov/sites/default/files/documents/PDAReport_FEMA4649DR-PR.pdf

29, 2022, Joseph R. Biden, President of the United States, declared that a major disaster impacted the Commonwealth of Puerto Rico. This declaration made the FEMA IA requested by the Governor available to affected individuals and households in Cataño, Dorado, Toa Baja, Vega Alta, and Vega Baja. Moreover, this declaration made FEMA's Hazard Mitigation Grant Program (**HMGP**) assistance requested by the Governor available for hazard mitigation measures for the entire commonwealth.[21]

Public Law 117-180 and 117-328 appropriated $166,312,000 through the CDBG-DR Program. The assigned funds are intended to address unmet needs assessment for selected 2022 disasters and provide any remaining funds to support mitigation activities. As per Federal Register 88 FR 32046, the Municipalities of Salinas, Añasco, Arecibo, Barranquitas, Cabo Rojo, Caguas, Canóvanas, Dorado, Guayama, Hormigueros Humacao, Juana Diaz, Lajas, Las Piedras, Naranjito, Orocovis, Ponce, San Lorenzo, Santa Isabel, Toa Baja, Vega Baja, Yabucoa, and Yauco were the HUD-identified MID Areas and were required to be given funding priority in the recovery from the Severe Storm, Floods, landslides of February 2022 and the Hurricane Fiona.

Figure 2: House in a Flooded Zone of the Municipality of Cataño, Puerto Rico, February 9, 2022[22]

[21] *Id.*
[22] See, https://www.fema.gov/sites/default/files/photos/fema_dr-4649-pda-catano-3.jpg

Major Disaster Declaration DR-4671-PR & Second HUD CDBG-DR Allocation

On September 17, 2022, Hurricane Fiona brought catastrophic flooding to several regions of Puerto Rico (Fig. 3). Due to the significant amount of rain, the drought was erased across Puerto Rico (Fig. 4). Aside from the rain, very warm temperatures persisted, nine heat advisories were issued, and the first-ever Extreme Heat Warning was registered in September 2022 (Fig. 5).[23]

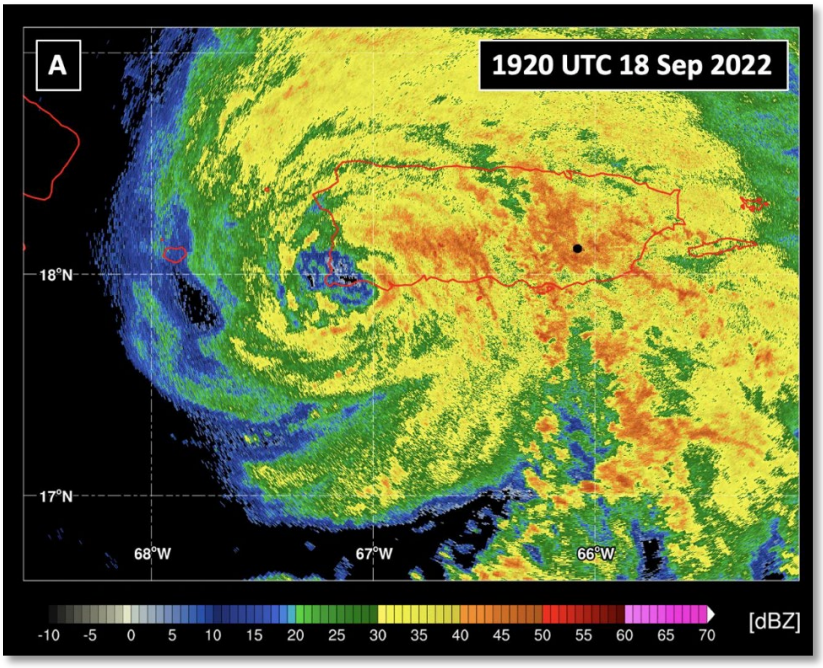

Figure 3: Radar images of Hurricane Fiona at landfall in Puerto Rico. Courtesy of NWS San Juan, National Hurricane Center Tropical Cyclone report.

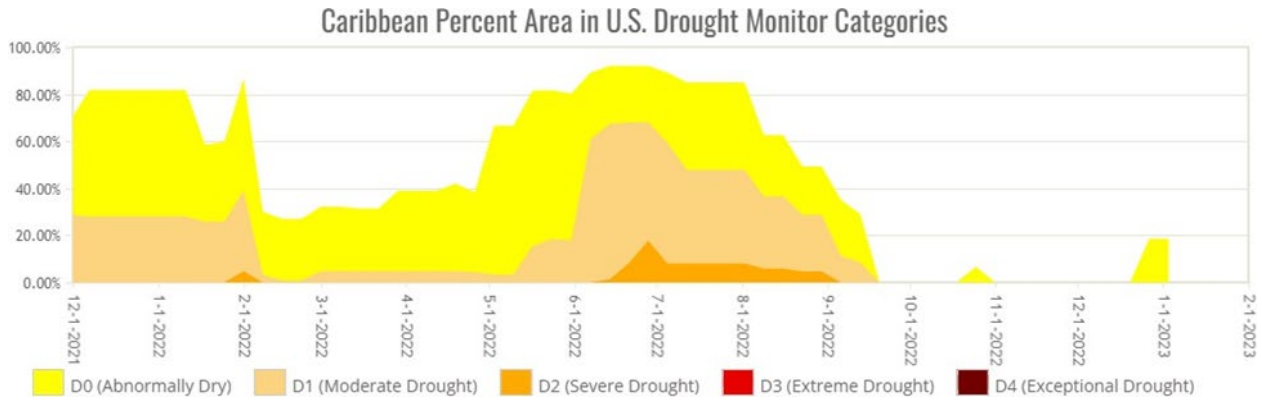

Figure 4: Time series of drought conditions across the island. Worst classifications from June to August 2022.

[23] See, https://www.weather.gov/media/sju/climo/monthly_reports/2022/2022.pdf

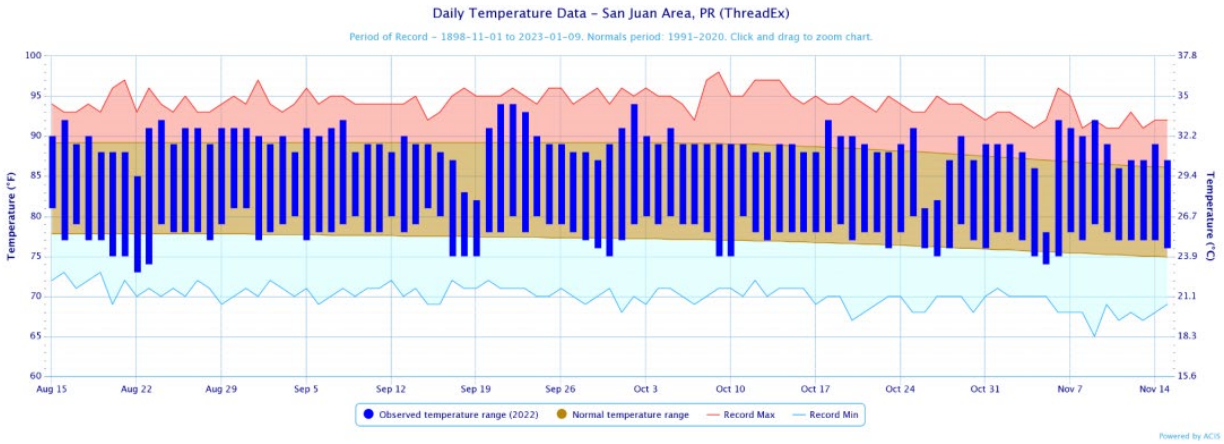

Figure 5: Daily Temperature Data from August to November 2022 period.

On September 20, 2022, Governor Pedro R. Pierluisi requested an expedited major disaster declaration due to Hurricane Fiona. The Governor also requested a declaration for FEMA IA and Public Assistance (**PA**) for all 78 municipalities and FEMA HMA for the entire island. On September 21, 2022, President Joseph R. Biden declared that a major disaster impacted the Commonwealth of Puerto Rico. This declaration made FEMA IA requested by the Governor, available to affected individuals and households in the municipalities of Adjuntas, Aguas Buenas, Aibonito, Arroyo, Barranquitas, Bayamón, Caguas, Canóvanas, Carolina, Cataño, Cayey, Ceiba, Ciales, Cidra, Coamo, Comerío, Corozal, Dorado, Fajardo, Florida, Guayama, Guayanilla, Guaynabo, Gurabo, Humacao, Jayuya, Juana Díaz, Juncos, Lares, Las Piedras, Luquillo, Maricao, Maunabo, Morovis, Naguabo, Naranjito, Orocovis, Patillas, Peñuelas, Ponce, Río Grande, Salinas, San Juan, San Lorenzo, Santa Isabel, Toa Alta, Toa Baja, Trujillo Alto, Utuado, Vega Alta, Vega Baja, Vieques, Villalba, Yabucoa, and Yauco.

Figure 6: Homes flooded in Salinas, PR. (Alejandro Granadillo – Associated Press)

This declaration also made assistance for debris removal and emergency protective measures (Categories A and B), including direct Federal assistance, available under the Public Assistance program for all 78 municipalities. Finally, this declaration made FEMA HMGP assistance, requested by the Governor, available for hazard mitigation measures for the entire island.[24]

Summary

Both disaster events arrived when all seventy-eight (78) Municipal governments were still recovering from the impacts of hurricanes Irma and María. Fiona was the third disaster declaration for those in the Southwest region in five years. Six (6) municipalities are still addressing the aftermath of the 2019-2020 seismic events. Moreover, because of the economic conditions on the island, municipalities lack the financial resources to rebuild or enhance infrastructure vital to community recovery and revitalization.

[24] See, https://www.fema.gov/sites/default/files/documents/PDAReport_FEMA4671DRexpedited-PR.pdf

CDBG-DR FUNDS

UNMET NEEDS ASSESSMENT

DEPARTMENT OF HOUSING

Unmet Need and Proposed Allocation

Category	Remaining Unmet Need	% of Unmet Need	Program Allocation Amount	% of Program Allocation
Infrastructure			$137,388,050	86.96%
MIT Set-aside			$20,608,350	13.04%
Total			$157,996,400	100%

Table 1: Unmet need and Proposed Allocation

***Allocation Amount includes project delivery costs and does not include administration and planning costs.**

2. Unmet Needs Assessment

Overview

HUD Identified 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, economic revitalization, and mitigation. For the major disaster declarations DR-4649-PR and DR-4671-PR, the methodology for the identification of the MID Areas detailed in 88 FR 32046 as of May 18, 2023, indicated that HUD designation is based on an analysis of FEMA and Small Business Administration (**SBA**) data. As a result, HUD identified the Municipalities of Salinas, Añasco, Arecibo, Barranquitas, Cabo Rojo, Caguas, Canóvanas, Dorado, Guayama, Hormigueros, Humacao, Juana Diaz, Lajas, Las Piedras, Naranjito, Orocovis, Ponce, San Lorenzo, Santa Isabel, Toa Baja, Vega Baja, Yabucoa, and Yauco as MID Areas, and was required to be given funding priority in the recovery from the disasters (Fig. 7).

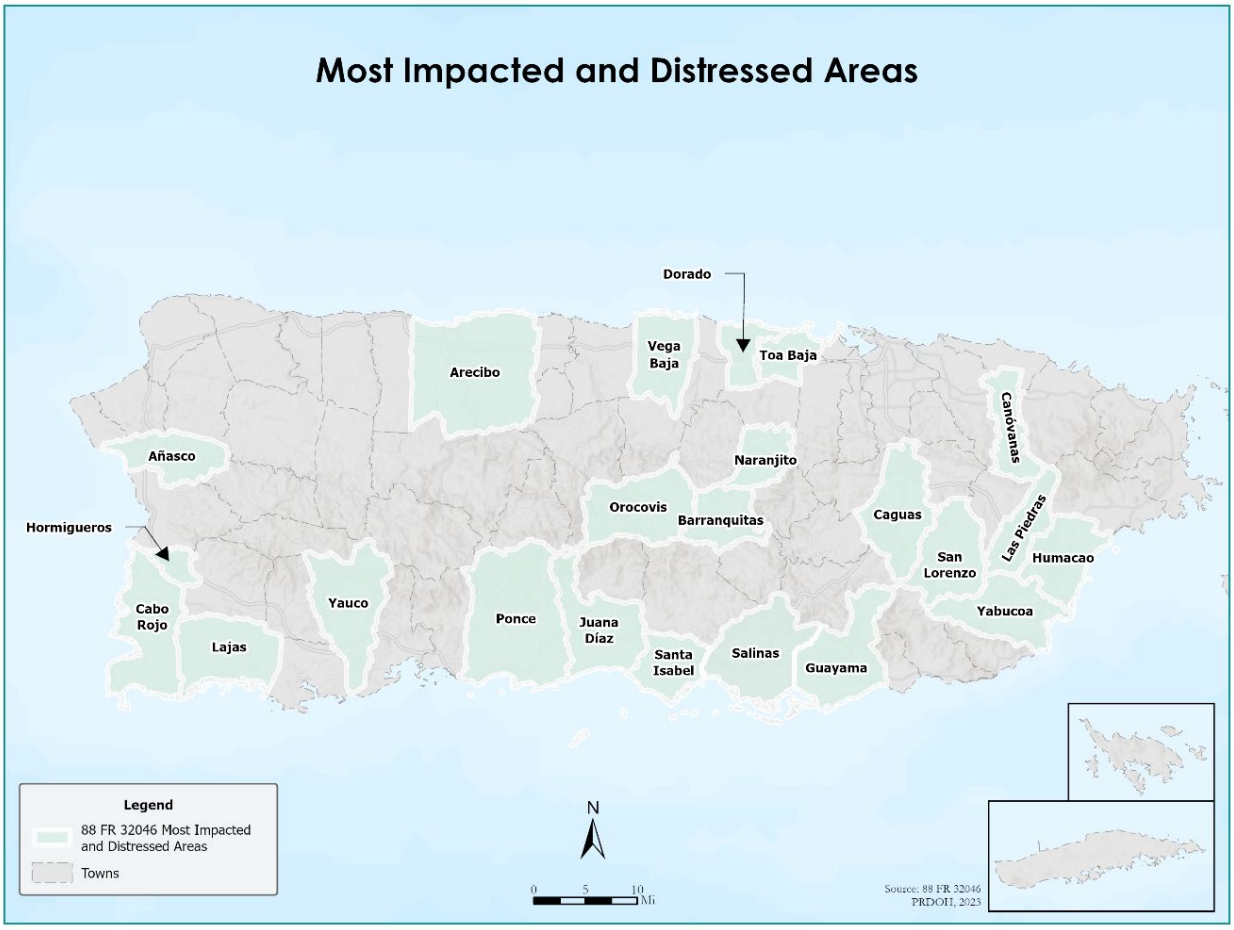

Figure 7: Map of Puerto Rico identifying the Municipalities designated in 88 FR 32046 as MMID Area.

On December 1, 2023, HUD approved an expansion of the MID Area for the DR-4649-PR and DR-4671-PR requested by PRDOH.[25] This expansion added twenty-five (25) municipalities to the original HUD MID Areas, including Adjuntas, Aguada, Aguadilla, Aibonito, Barceloneta, Bayamón, Carolina, Cataño, Cidra, Coamo, Comerío, Guayanilla, Isabela, Jayuya, Juncos, Mayagüez, Moca, Patillas, Peñuelas, Rincón, San Germán, San Juan, Toa Alta, Utuado, and Vega Alta. Based on this assessment, and as per the Federal Register Notice, no less than $133,049,600 must be expended for unmet recovery needs in the MID Areas, identified in (Fig. 8).

[25] See, Appendix B include with this Action Plan.

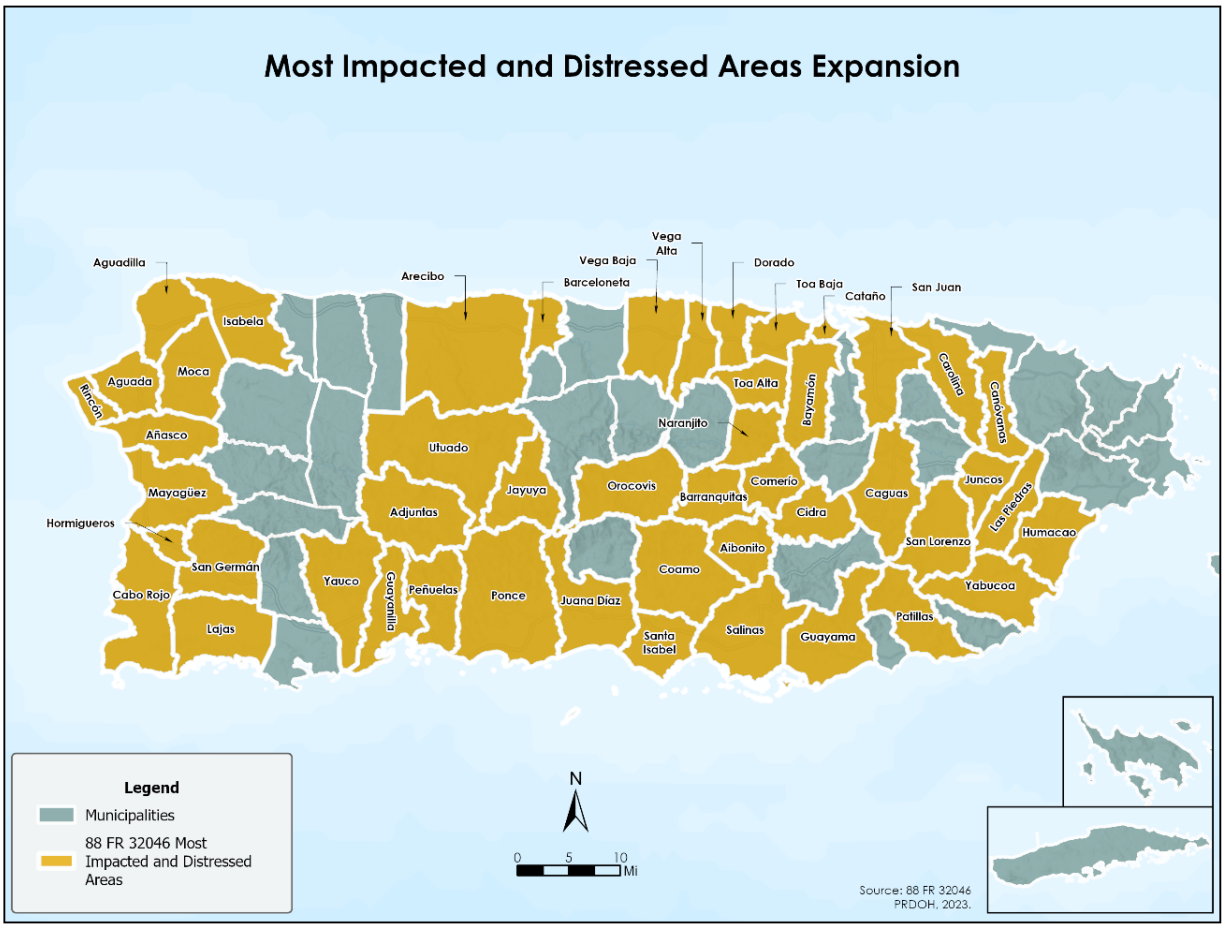

Figure 8: Map of Puerto Rico identifying the Municipalities in the Most Impacted and Distressed Area applicable to the 88 FR 32046 after expansion approved by HUD.

An Unmet Needs Total FR determined UNMET Needs

An unmet needs assessment was made for all municipalities, including those considered and not considered MID areas. The analysis prepared for this assessment considers repair estimates for seriously damaged (Major-Low, Major-High, Severe) owner-occupied units without insurance; repair estimates for seriously damaged rental units occupied by very low-income renters; repair and content loss estimate for small businesses with serious damage denied by the SBA; and estimated local cost-share for Public Assistance Categories C-G.

Consequently, an estimated total unmet need of $338,097,370 was determined for the 78 municipalities, with $279,059,107 arising from municipalities within the MID Area. Public Laws PL-117-180 and PL-117-328 provided a total allocation of $166,312,000 to address these unmet needs. Nevertheless, there remains a

balance of $171,785,370 to address the identified unmet needs across the seventy-eight municipalities.

It is important to take into consideration that non-MID municipalities did suffer damages from disasters 4649 and 4671. However, their inclusion as MID was limited due to constraints in available data. To address this situation, the grant distribution outlined in this Action Plan takes into account the recognition of these unmet needs, particularly prominent in housing and infrastructure. The Stakeholder Engagement Report in Appendix G provides a qualitative analysis conducted by PRDOH, revealing significant title ownership issues in affected properties. The absence of detailed data and the diverse nature of the damage make it challenging to establish a direct link between the disasters and current housing conditions. Many affected communities refrained from reporting damages due to title ownership complexities, resulting in a lack of updated quantitative damage assessment. The lack of reported damage presents a high risk of abuse and DOB for funds to address housing damages. Therefore, an infrastructure program that deals with community flooding and landslide risks is considered the best available option to mitigate future events and ensure the proper use of funds.

The table below shows the data available based on the factors described.

Municipality	Repair Estimates for seriously damaged (Major-Low, Major-High, Severe) owner-occupied units without insurance	Repair estimates for seriously damaged rental units occupied by very low income renters	Repair and content losses estimates for small businesses with serious damage denied by SBA	Estimated local cost-share for Public Assistance Categories C-G	Total FR determined UNMET Needs
Adjuntas	$3,139,798	$734,934	$53,451	$1,431,822	$5,360,005
Aguada	$4,879,274	$1,038,568	$181,441	$379,517	$6,478,800
Aguadilla	$5,863,196	$2,110,317	$308,014	$24,805	$8,306,332
Aguas Buenas	$5,833	$695,592	$145,658	$25,092	$872,175
Aibonito	$4,166	$1,323,029	$182,503	$569,561	$2,079,259
Añasco	$5,810,115	$1,497,680	$34,622	$286,242	$7,628,660
Arecibo	$12,247,927	$6,160,803	$65,981	$69,810	$18,544,521
Arroyo	$3,750	$837,495	$216,975		$1,058,220

Barceloneta	$3,305,187	$648,497	$226,917	$2,647	$4,183,248
Barranquitas	$3,750	$2,172,987	$406,484	$1,913	$2,585,134
Bayamón	-$7,068	$2,194,158	$833,001	$36,792	$3,056,883
Cabo Rojo	$7,195,084	$2,874,169	$688,930	$333,082	$11,091,264
Caguas	$18,116	$4,327,655	$706,072	$562,416	$5,614,259
Camuy	$3,953,510	$352,867	$120,894	$49,097	$4,476,368
Canóvanas	$6,666	$2,680,089	$272,929	$365,913	$3,325,598
Carolina	$9,583	$2,894,877	$1,331,929		$4,236,389
Cataño	$1,458,919	$1,308,908	$313,124	$8,015	$3,088,965
Cayey	$6,717	$841,425	$342,697	$149,964	$1,340,803
Ceiba	$1,667	$465,933	$5,896	$219,000	$692,495
Ciales	$2,129,853	$247,531	$28,886	$13,348	$2,419,618
Cidra	$5,000	$888,359	$98,634	$954,918	$1,946,910
Coamo	$10,833	$1,162,532	$611,187	$1,934,602	$3,719,153
Comerio	$5,416	$969,797	$104,475	$150,782	$1,230,470
Corozal	$8,333	$947,821	$126,792	$101,346	$1,184,292
Culebra	$0	$2,961	$79,510		$82,471
Dorado	$7,006,952	$1,991,792	$81,064		$9,079,808
Fajardo	$2,083	$690,270	$228,484	$81,689	$1,002,526
Florida	$1,420,568	$144,392	$31,666		$1,596,627
Guánica	$2,360,788	$599,989	$41,072	$49,525	$3,051,373
Guayama	$5,755	$2,179,901	$494,907	$12,235	$2,692,798
Guayanilla	$3,077,511	$825,665	$227,553		$4,130,729
Guaynabo	$11,300	$634,245	$432,068	$355,180	$1,432,793
Gurabo	$5,000	$657,021	$175,369	$43,264	$880,654
Hatillo	$4,111,403	$707,006	$248,134		$5,066,544
Hormigueros	$6,526,192	$2,788,414	$46,733	$533,417	$9,894,756
Humacao	$7,083	$4,448,477	$3,738,307	$567,635	$8,761,502
Isabela	$4,913,571	$1,190,151	$128,923	$5,083	$6,237,728
Jayuya	$2,705,099	$638,016	$60,704	$3,623,490	$7,027,309
Juana Díaz	$3,916	$2,123,258	$440,240	$16,962	$2,584,376
Juncos	$5,416	$1,957,755	$295,872		$2,259,044
Lajas	$4,282,680	$1,352,219	$235,753	$14,757	$5,885,409
Lares	$3,366,467	$422,618	$85,215	$144,380	$4,018,680
Las Marías	$1,128,028	$111,751	$14,151	$302,885	$1,556,815

Las Piedras	$3,333	$2,292,626	$87,558	$2,929,521	$5,313,038
Loíza	$2,917	$959,795	$38,517		$1,001,229
Luquillo	$0	$345,180	$103,879		$449,059
Manatí	$4,315,827	$665,693	$35,003	$36,544	$5,053,067
Maricao	$742,539	$188,215	$69,142		$999,896
Maunabo	$417	$503,530	$150,825	$13,944	$668,716
Mayagüez	$7,826,456	$2,945,521	$1,067,803	$154,275	$11,994,055
Moca	$4,715,269	$1,281,631	$320,861	$123,383	$6,441,144
Morovis	$3,696,522	$431,938	$53,190		$4,181,650
Naguabo	$2,500	$609,103	$80,753	$47,290	$739,646
Naranjito	$10,416	$1,148,756	$128,164		$1,287,336
Orocovis	$16,666	$1,538,672	$88,724	$285,800	$1,929,862
Patillas	$1,250	$598,854	$45,297	$1,916,384	$2,561,785
Peñuelas	$2,931,642	$795,711	$157,950		$3,885,303
Ponce	$30,841	$6,235,596	$2,600,932	$180,307	$9,047,677
Quebradillas	$2,657,894	$280,915	$22,042	$9,039	$2,969,890
Rincón	$2,156,190	$487,160	$84,265	$44,288	$2,771,903
Río Grande	$2,917	$616,834	$245,834	$210,661	$1,076,245
Sabana Grande	$3,035,602	$634,701	$43,392	$67,436	$3,781,131
Salinas	$35,573	$8,359,695	$193,078		$8,588,346
San Germán	$4,203,067	$831,061	$457,018	$8,643	$5,499,789
San Juan	$19,612	$11,039,990	$1,407,987		$12,467,590
San Lorenzo	$42,633	$1,083,496	$297,125	$684,945	$2,108,199
San Sebastián	$4,394,359	$403,007	$229,888	$118,988	$5,146,242
Santa Isabel	$3,750	$2,478,806	$322,133		$2,804,689
Toa Alta	$6,497	$1,051,185	$329,904		$1,387,585
Toa Baja	$2,426,410	$14,276,818	$389,859		$17,093,087
Trujillo Alto	$2,500	$1,290,031	$137,250		$1,429,781
Utuado	$4,077,602	$1,327,856	$209,560	$1,551,591	$7,166,609
Vega Alta	$4,445,513	$782,876	$528,594	$42,499	$5,799,482
Vega Baja	$8,826,813	$2,799,037	$325,061	$4,442	$11,955,353
Vieques	$417	$93,709	$3,926		$98,052
Villalba	$3,750	$651,452	$56,003		$711,205
Yabucoa	$4,247	$2,315,951	$181,884		$2,502,083
Yauco	$3,199,714	$1,354,816	$219,160	$651,194	$5,424,883
Total	**$154,847,093**	**$135,542,141**	**$25,205,777**	**$22,502,360**	**$338,097,370**

Table 2: Unmet Needs Total FR determined UNMET Needs based on repair estimates for seriously damaged (Major-Low, Major-High, Severe) owner-occupied units without insurance; repair estimates for seriously damaged rental units occupied by very low-income renters; repair and content loss estimate for small businesses with serious damage denied by the SBA; and estimated local cost-share for Public Assistance Categories C-G.

PRDOH has analyzed the best available data, reviewing planning, housing, and infrastructure efforts during the disaster events and the following year. These efforts include outreach and citizen participation strategies at the community level, ranging from focal groups, surveys, and participatory mapping exercises to public discussions. One of the main problems identified in relation to the availability of data on unmet needs from the 2022 disasters is linked with the necessity of legitimizing home-owner titles in areas impacted by the hurricane. This proves to be a recurring challenge for thousands of residents who still present inheritance/heirs situations such as; missing or unknown heirs, or internal/family conflicts that end up without cooperation. These circumstances account for over thirty percent (30%) of applications received in the CDBG-DR Title Clearance (**TC**) Program. In addition, a considerable number of cases present situations of lack of clearly defined property dimensions with land surveys, added to the fact that, after the deaths of ancestors, the family members continued to divide the land and build without permits, clearly defining property limits and required distances, among others. These situations make eventual approvals of the land survey plans difficult, which are the products that the TC Program manages. Aware of these issues, PRDOH continues to assist thousands of citizens around the island who lack a title to be eligible for federal assistance.

Based on the above, PRDOH understands that beyond proposing specific projects or programs, it is important to comprehend the existing infrastructure conditions affecting communities to improve, in a holistic manner, the constraints that limit recovery and mitigation efforts. Recent CDBG-DR Planning efforts at the community level by PRDOH have provided inclusive and participatory planning processes focused on existing community vulnerabilities and needs through the Whole Community Resilience Planning (**WCRP**) Program.[26] The Community Resilience Plans (**CRPs**) under development as part of the WCRP Program will help identify and prioritize resilience actions to reduce the communities' vulnerabilities,

[26] WCRP mapping tools, Interactive Social Capital Maps and the Interactive Vulnerability and Risk Maps can be found at: https://recuperacion.pr.gov/wcrp/tools.html

strengthen their capabilities, and mitigate future risks.[27] There have been over 200 engagement meetings across twenty-nine (29) Municipalities for the seventy-nine (79) participating communities between November 2022 and January 2024. The community has had a leading role in the data collection process. With the WCRP data collection program and planning process, the communities have been highlighting issues of emergency management needs and the physical accessibility of vulnerable citizens during disasters and floods due to rain, among others.

Moreover, the Municipal Recovery Planning (**MRP**) Program, created to respond to current and future municipal needs, has provided funding to municipalities to carry out planning activities that address the conditions created or exacerbated by natural disasters. The planning process in the MRP Program culminates with the preparation of Recovery Plans that serve as a guide to develop resilient communities in the municipalities of Puerto Rico. Seventy-seven (77) Municipalities signed an initial Subrecipient Agreement (**SRA**) with PRDOH between December 17, 2020, and February 14, 2022, to carry out the planning activities set forth for the MRP Program. Since November 2021, the MRP Program has facilitated over 166 community meetings across the island to document existing needs and vulnerabilities.

The Municipal Recovery Plans published on the PRDOH website detail information related to critical infrastructure and individual assistance needs, such as impacted roads, bridges, and homes flooded by Hurricane Fiona or Severe Storm, Flooding, and Landslides disasters related to this allocation.[28] Notably, forty-seven (47) out of forty-eight (48) Municipalities in the expanded MID Area participated in the MRP program. Based on the progress of their planning activities at the time (period after the disaster), twenty-eight (28) municipalities had the opportunity to present relevant and valuable information for this Action Plan development (detailed in Table 2). Each MRP contains an Operational Plan as well as community profiles which present data that can be related to issues, activities, and other critical needs:

- water control and management;

[27] WCRP program education modules can be found at: https://recuperacion.pr.gov/wcrp/education-module1.html
[28] Drafts and approved MRP Plans can be found at: https://recuperacion.pr.gov/en/municipal-recovery-planning/

- acquisition of properties to channel community waters along with stormwater drainage;
- installation of pump stations that can support discharge to nearby rivers for flood control and mitigation;
- mitigation measures for landslides and erosion;
- increasing water reservoir reforestation activities; and
- integrating green infrastructure mitigation actions into new constructions.

These CDBG-DR Planning Program efforts have highlighted the impact of Hurricane Fiona, detailing how the most significant damages were related to the resulting floods and landslides. Moreover, additional CDBG-DR Planning Program efforts from the Regional Planning Phase and Individual and Specialized Planning Analysis Phase of the MRP Program include six (6) of the forty-eight (48) Municipalities of the expanded MID Area which have submitted proposals with specific strategies related to flood risk management, which may result in future flood recovery and mitigation projects.

Municipality	Municipal Recovery Plan Status	Planning Phase Period
Adjuntas	Approved by PRDOH	03/15/2022 - 03/18/2023
Aguada	Approved by PRDOH	03/11/2022 - 03/30/2023
Aguadilla	Approved by PRDOH	09/09/2022 - 05/31/2023
Aibonito	Approved by PRDOH	08/27/2021 - 09/30/2022
Arecibo	In Process (3/4 Documents Approved)	12/16/2022 -
Añasco	Approved by PRDOH	03/24/2022 - 06/29/2023
Barceloneta	Approved by PRDOH	03/03/2022 - 06/23/2023
Barranquitas	Approved by PRDOH	11/03/2021 - 08/31/2022
Bayamón	Did not participate in Program	N/A
Cabo Rojo	In Process (0/4 Documents Approved)	08/09/2022 -

Municipality	Municipal Recovery Plan Status	Planning Phase Period
Caguas	Approved by PRDOH	10/03/2022 - 10/27/2023
Canóvanas	Approved by PRDOH	06/08/2022 - 12/30/2023
Carolina	In Process (3/4 Documents Approved)	12/06/2022 -
Cataño	Approved by PRDOH	08/27/2021 - 09/25/2023
Cidra	Approved by PRDOH	03/14/2022 - 07/17/2023
Coamo	Approved by PRDOH	05/03/2022 - 09/19/2023
Comerío	Approved by PRDOH	10/26/2021 - 08/31/2022
Dorado	Approved by PRDOH	08/27/2021 - 09/30/2022
Guayama	Not started	Not started
Guayanilla	Approved by PRDOH	02/10/2022 - 04/28/2023
Hormigueros	Approved by PRDOH	04/13/2022 - 05/01/2023
Humacao	Approved by PRDOH	02/04/2022 - 05/31/2023
Isabela	In Process (3/4 Documents Approved)	11/15/2022 -
Jayuya	Approved by PRDOH	10/04/2022 - 12/30/2023
Juana Diaz	Approved by PRDOH	02/09/2022 -06/16/2023
Juncos	Approved by PRDOH	04/27/2022 - 08/30/2023
Lajas	Approved by PRDOH	03/04/2022 - 07/31/2023
Las Piedras	Approved by PRDOH	01/25/2022 - 02/28/2023
Mayagüez	In Process (3/4 Documents Approved)	06/06/2022 -
Moca	Approved by PRDOH	03/11/2022 - 04/28/2023
Naranjito	Not started	Not started

Municipality	Municipal Recovery Plan Status	Planning Phase Period
Orocovis	Approved by PRDOH	10/14/2021 - 09/30/2022
Patillas	Approved by PRDOH	03/17/2022 - 05/01/2023
Peñuelas	Approved by PRDOH	03/25/2022 - 07/19/2023
Ponce	In Process (3/4 Documents Approved)	08/01/2022 -
Rincón	Approved by PRDOH	04/08/2022 - 04/24/2023
Salinas	In Process (2/4 Documents Approved)	08/18/2022 -
San Germán	Approved by PRDOH	09/20/2021 - 11/30/2022
San Juan	In Process (2/4 Documents Approved)	12/21/2022 -
San Lorenzo	Approved by PRDOH	02/04/2022 - 02/19/2023
Santa Isabel	Approved by PRDOH	02/17/2022 - 07/19/2023
Toa Alta	In Process (3/4 Documents Approved)	11/22/2022 -
Toa Baja	In Process (3/4 Documents Approved)	05/23/2023 -
Utuado	In Process (0/4 Documents Approved)	08/02/2022 -
Vega Alta	In Process (2/4 Documents Approved)	02/15/2023 -
Vega Baja	I In Process (1/4 Documents Approved)	06/23/2023 -
Yabucoa	Approved by PRDOH	10/20/2021 - 11/30/2022
Yauco	Approved by PRDOH	01/31/2022 - 03/10/2023

Table 3: MID Area Municipal Recovery Plan status and MRP Individual Municipal Planning phase period as of January 2024.

a. Housing Unmet Need

Assessment Disaster DR-4649-PR Severe Storm, Landslides, and Floods

PRDOH has analyzed the best available data, which indicates approximately 1,156 registrations for FEMA's Individual Assistance (**IA**) Program. From 901 referrals, only 499 were approved for IA related to the declared disaster FEMA-4649-DR with an estimated damage within FEMA IA of $1,496,881.99. Furthermore, the housing assistance applications represented a total of $837,936.88 based on 834 referrals, with 229 approved applications. Data from the OpenFEMA Dataset: Housing Assistance Program Data – Owners – v2 for Individual Assistance by FEMA's Enterprise Coordination & Information Management (**ECIM**) included 830 valid registrations. The average inspected damage by case was $34,252.33.

Moreover, 710 inspected housing units received valid registration, with a total damage of $1,329,145.49. Based on data from the SBA, a total home damage of $5,807,148.33 was a verified loss reported. This includes a real estate loss of $4,014,410.83 and content of $1,792,738.00. The total loans amount approved was $2,408,200.00, $1,673,100.00 for real estate, and $733,226.13 for content. For this disaster, FEMA highlighted the municipalities of Vega Baja, Vega Alta, Dorado, Toa Baja, and Cataño based on the disaster declaration (Fig. 9).

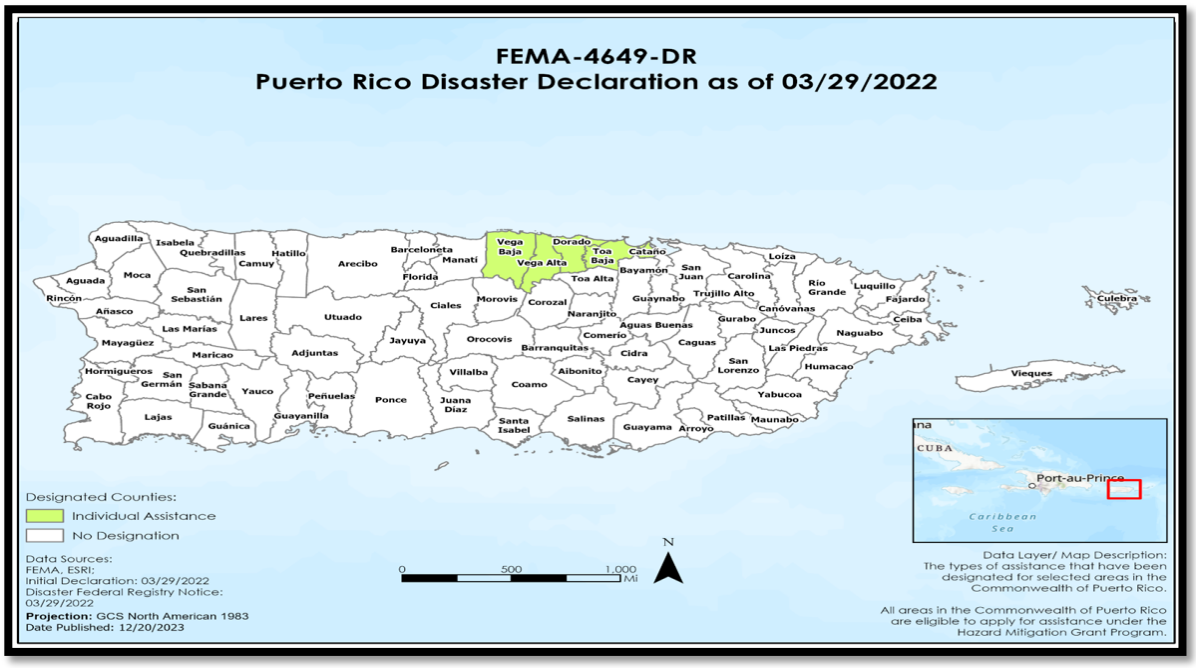

Figure 9: FEMA's Map of Puerto Rico highlighting the municipalities of Vega Baja, Vega Alta, Dorado, Toa Baja, and Cataño based on the disaster declaration FEMA-4649-DR.

Assessment of Disaster DR-4671-PR (Hurricane Fiona)

PRDOH has analyzed the best available data, which indicates approximately 1,242,033 registrations for FEMA IA for this disaster. Of the 885,825 referrals, only 741,067 FEMA IA were approved for the declared disaster FEMA-4671-DR with a total assistance of $648,941,798.85 Moreover, from 302,091 referrals, 19,775 were approved for Housing Assistance, totaling $73,416,051.82. For this disaster, FEMA obtained information from the 78 municipalities of Puerto Rico (Fig. 10). The total approved FEMA assistance for the inspected houses was 466,707, totaling $575,525,747.03. Moreover, based on data obtained by SBA, a total home damage of $117,134,458.70 verified loss was reported. This total includes a real estate loss of $89,653,307.91 and content of $27,481,150.76. The total loans amount approved was $71,711,036.00, $56,194,499.00 for real estate and $15,484,647.48 for content.

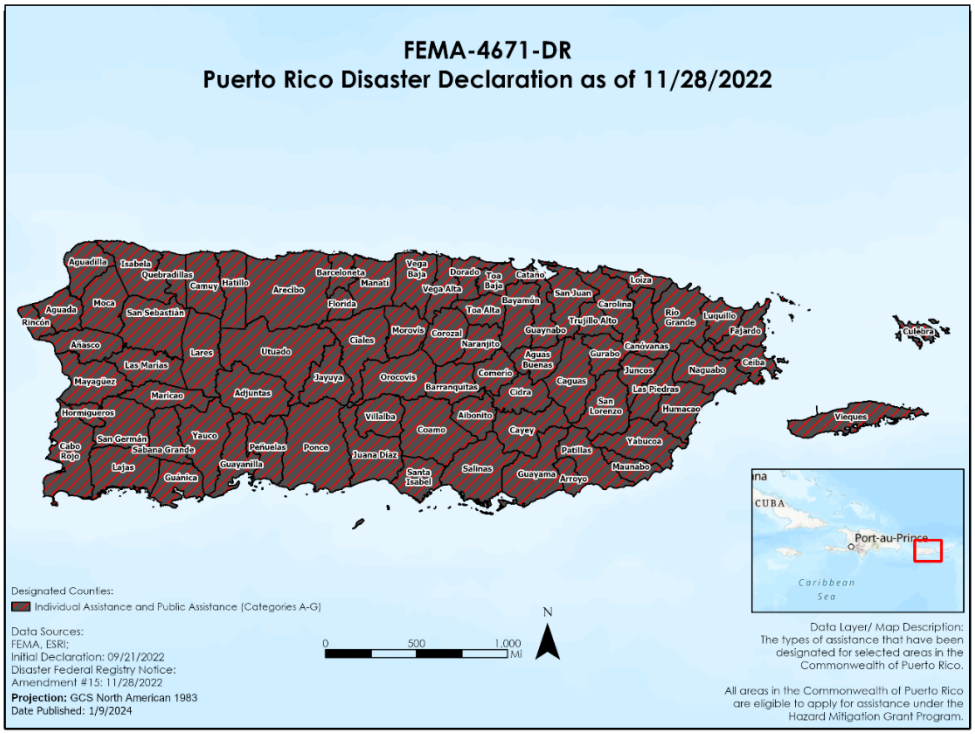

Figure 10: Disaster Declaration FEMA-4671-DR Map of Puerto Rico identifying the 78 Municipalities as designated Counties with individual and public assistance.

Disaster 4649 and 4671 Assessment

Using the best available information at the time, the 88 FR 32046 identified twenty-three (23) of Puerto Rico's seventy-eight (78) municipalities as MID areas. The Federal Register indicates that eighty percent (80%) of allocated funds be spent

in these areas and provides an allocation methodology for calculating disaster impacts and unmet needs, identifying MID areas as those "counties" exceeding $10 million in serious unmet housing needs and the most impacted zip codes with $2 million or more of serious unmet housing needs. The unmet need allocations are based on the sum of the following factors: (1) Repair estimates for seriously damaged owner-occupied units without insurance in most impacted areas after FEMA and SBA; (2) Repair estimates for seriously damaged rental units occupied by very low-income renters; (3) Repair and content loss estimates for small businesses with serious damage denied by SBA; and (4) The estimated local cost share for FEMA Public Assistance Category A – G projects.

PRDOH has utilized methodologies based on HUD frameworks and applied indicators to extrapolate impact for residents who may not have been thoroughly evaluated in the initial assessments. Data from prior disasters indicates that initial FEMA loss estimates often under-represent the full breadth of impact through unit counts or loss estimates. PRDOH created an assessment with an analytic approach which reproduces the Federal Register method for MID identification. This approach uses the summary of impacts to homeowners (without insurance) classified as major-low or greater damage, low-income renters, small businesses, and public infrastructure and use the methods provided in the Federal Register. The minimal "Total FR Determined Unmet Needs" ($1,039,337) across all municipalities identified in the Federal Register was used to appraise all other municipalities in terms of their total loss. This approach produced an additional twenty-five (25) municipalities with greater FR Unmet Needs than those already identified as MID areas. Forty-eight (48) municipalities would be classified as MID using this approach. Using this approach, the repair estimates for seriously damaged (Major-Low, Major-High, Severe) owner-occupied units without insurance was $30,111,683. The repair estimate for seriously damaged rental units occupied by very low-income renters was $90,904,379. In addition, the repair and content losses estimate for small businesses with serious damage denied by SBA was $21,612,667. Moreover, the estimated local cost-share for Public Assistance Categories C-G was $20,463,688. This approach's total Federal Register determined Unmet Needs calculation to be $163,092,416.[29]

[29] See, Appendix B included with this Action Plan.

Disaster Damage and Impacts

Disaster 4649 Severe Storm, Landslides, and Floods Impact

On February 4, 2022, a frontal boundary and an associated deep moisture moved over Puerto Rico, producing rainfall accumulations of one (1) to three (3) inches in some spots. A saturated soil was observed in many areas, especially along the north coast of Puerto Rico and portions of the San Juan metro area. On February 5th and 6th, 2022, a strong upper trough slowly moved southward over Puerto Rico providing a very unstable environment across the region. This upper-level feature, combined with the remnants of the front lingering over the region, supports the development of another round of heavy rainfall. The high moister band over northern Puerto Rico led to heavy rain on the western half of the metropolitan area on Saturday, February 5th. The accumulation of water ranged between three (3) and six (6) inches, with a maximum of ten (10) inches in some areas (Fig.11).[30]

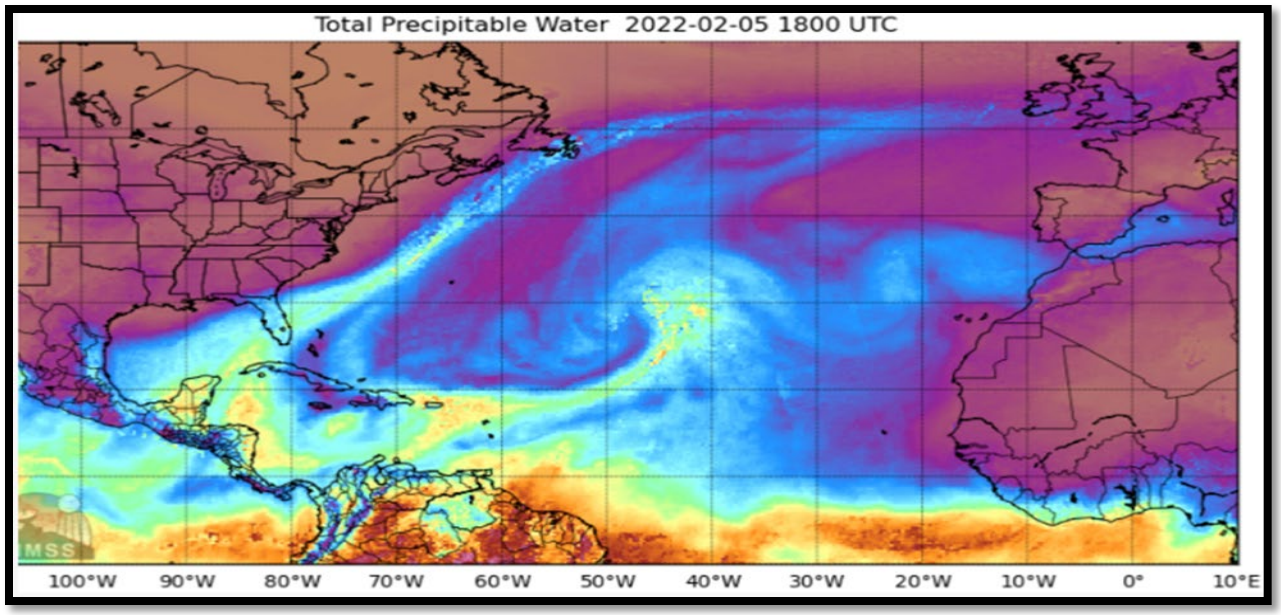

Figure 11: CIMSS Precipitable Water analysis on February 5th, 2022. Source: National Weather Service.

These atmospheric events affected the municipalities of Cataño and Toa Baja, where several reports of flooded streets and houses were affected by the

[30] See, https://www.weather.gov/sju/flashflood_feb2022#.

excessive runoff and poor drainage. Also, Dorado and Vega Alta municipalities reported flooded urban areas and landslides.

Disaster 4671 (Hurricane Fiona) Impact

On September 18, 2022, around 3:20 PM, hurricane Fiona landed near Punta Tocón in Lajas, Puerto Rico. Hurricane-force gusts were observed over portions of southern Puerto Rico during the afternoon on Sunday, September 18th. The extreme rainfall caused the greatest hazard and impacts, especially from southern into eastern Puerto Rico. In areas along the Cordillera and around El Yunque, widespread rainfalls total more than sixteen (16) inches. Preliminary estimates suggest that more than two (2) feet of rain were seen locally, mostly around Cayey and southern Caguas and Aibonito to southern Jayuya. Widespread flooding was reported, mostly in southern and central Puerto Rico. Numerous landslides were also reported throughout the affected areas of steep terrain. Moisture continued to be pulled across the archipelago through Monday, September 19, into Tuesday, September 20, with a total rainfall accumulation of more than thirty (30) inches in Ponce, Caguas, and San Lorenzo (Fig.12). [31]

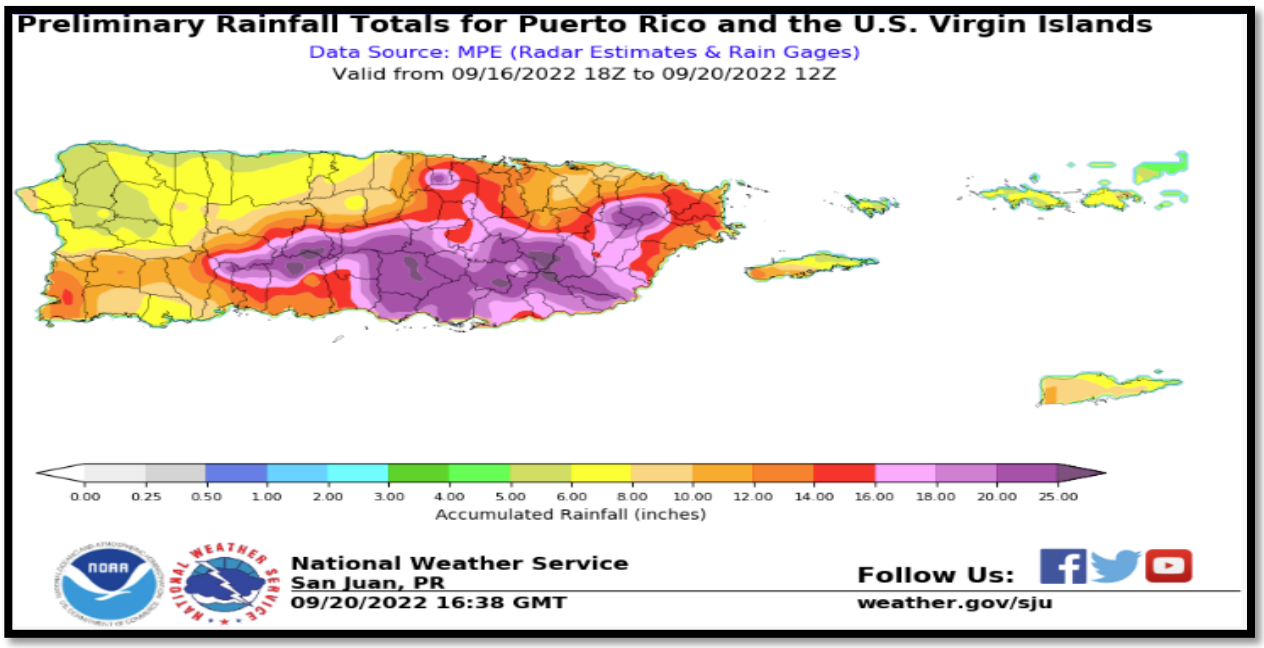

Figure 12: 72-hours rainfall accumulation associated with Hurricane Fiona. Source: National Weather Service.

[31] See, https://www.weather.gov/sju/fiona2022

Based on preliminary information from the US Geological Survey Stream Gage Network, fifty (50) out of 108 river gauges rose above the USGS-NWS flood stage. Most river gauges along Río Grande de Manatí, Río Cibuco, Río La Plata, Río Grande de Arecibo, Río Grande de Loíza, and Río Guanajibo rose above moderate or major flood stage. Across southern and southeastern portions of the island, significant catastrophic flooding was observed due to sharp rises along rivers combined with storm surge/coastal flooding. Families were rescued in Salinas, where a Flash Flood Warning with a catastrophic threat was issued (Fig.13).

Figure13: Local Storm Reports received during Hurricane Fiona by NOAA. The green icons identifies the flooded zones.

A Flash flooding emergency was reported in Salinas, with the highest impact in sectors El Coqui, Playa, and La Playita. Moreover, multiple communities were affected by the hurricane's significant landslides and rockfalls along the interior and southern portions of Puerto Rico, leaving over a dozen structures uninhabitable (Fig.14, 15).

Figure14: Destroyed home and infrastructure in Salinas near the Rio Nigua. Source: Gabriella N. Báez - NPR Network.

Figure 15: A house collapsed into a river in Guayama. Ricardo Arduengo - Reuters.

A total of 721 houses were affected by Hurricane Fiona in the Municipality of Ponce. Most of the damage were caused by winds, floods, and landslides in low to moderate areas of susceptibility to landslide, with some communities located near water resources. In addition, official information indicates that most of the houses were destroyed or partially damaged (Fig.16).

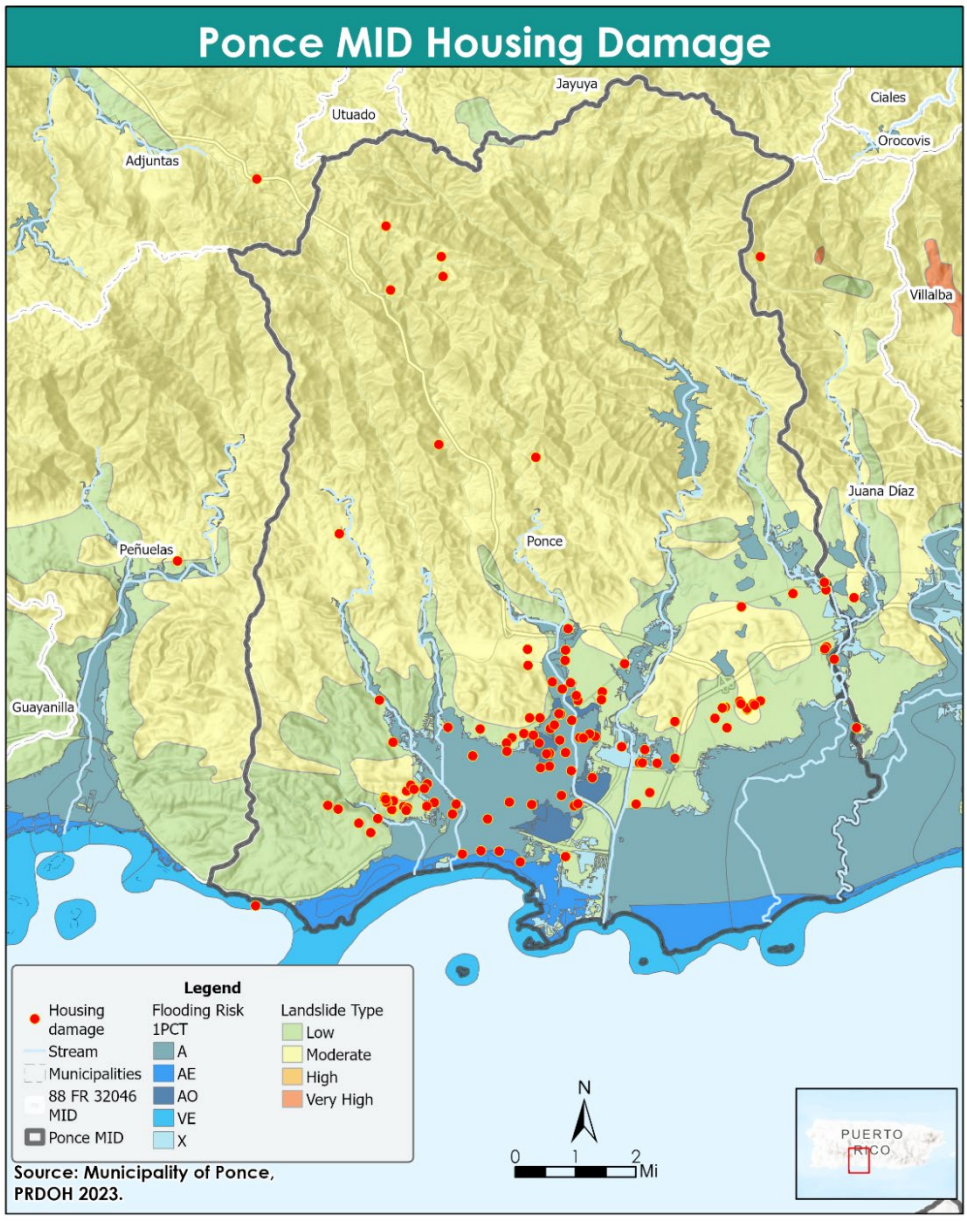

Figure 16: Map of the Municipality of Ponce, Puerto Rico. Red dots identifies the MID areas with Housing Damage.

Furthermore, the Municipality of Utuado reported eighty-one (81) houses affected by the disaster. Most of the damage was caused by landslides and flooding (Fig. 17). As shown in the map, many houses are located near flood zones and rivers, with low, moderate, and high susceptibility to landslides.

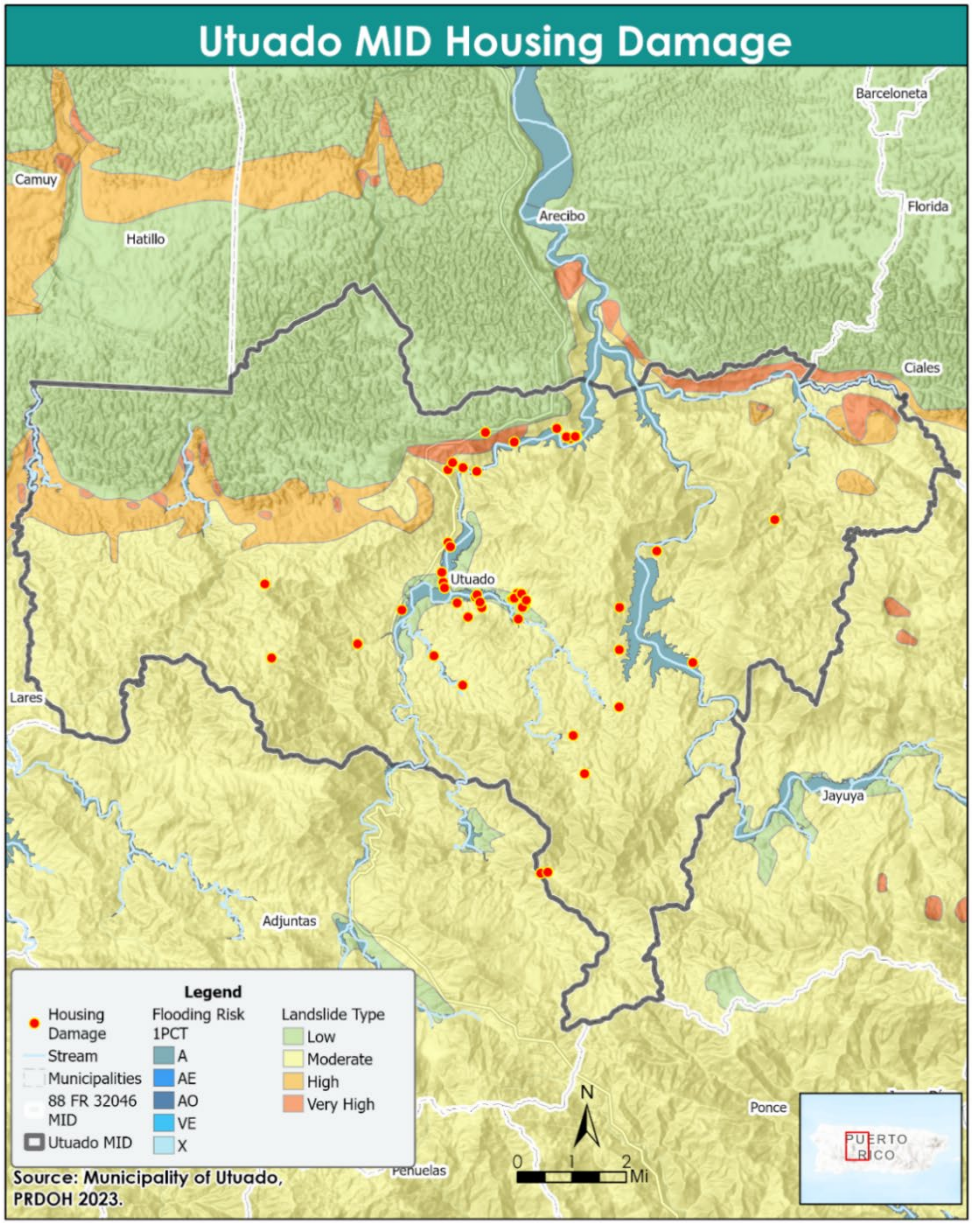

Figure17: Map of the Municipality of Utuado, Puerto Rico. Red dots identifies the Utuado MID Housing Damage.

Single Family v. Multi-Family Needs; Owner Occupied v. Tenant

FEMA's Individual Assistance Program Applications: Owner Applicants vs. Rental Applicants

FEMA's IA data and Real Property Damage information provide the basis for analysis of unmet housing needs in the HUD-identified MID areas by tenure. Across all MID areas for both 2022 disasters, there were a total of 1,243,189 applications for FEMA IA. Most FEMA's IA applications refer to Owner-occupied properties, constituting almost seventy percent (70%) of all applications; however, the total FEMA-verified loss for Owner-occupied properties constitute thirty-eight percent (38%) of all FEMA verified loss. Many of the Owner-occupied properties applications located in the MID area were from the municipalities of San Juan, Bayamón, Ponce, Caguas, Arecibo, Toa Baja, Vega Baja, Humacao and Cabo Rojo.

Municipality	Population 2022	Households 2022	Valid Owner Registrants	Owners with Damage	Valid Renters Registrants	Renters with Damage	Total Damage to Owners
Adjuntas	17,905	5,608	4,572	451	2,350	17	$1,356,754.56
Aguada	37,666	12,904	10,794	702	4,013	35	$996,406
Aguadilla	53,931	21,650	12,671	768	8,393	44	$1,221,307
Aibonito	24,555	8,995	6,217	633	3,158	19	$1,071,196
Arecibo	25,026	8,757	22,293	1,225	11,103	121	$2,297,157
Añasco	15,289	31,415	7,262	530	2,693	40	$1,474,565
Barceloneta	22,416	8,254	6,465	510	2,811	20	$753,573
Barranquitas	28,944	9,098	7,314	1,085	4,811	21	$2,421,909
Bayamón	181,577	69,043	37,396	1,768	28,788	117	$2,636,562
Cabo Rojo	46,718	17,568	13,256	1,136	5,202	72	$2,245,478
Caguas	125,136	49,645	28,278	2,004	20,629	100	$3,256,098
Canóvanas	41,637	14,712	11,631	865	4,745	42	$1,902,083
Carolina	151,571	61,883	29,842	1,253	22,986	41	$1,176,749
Cataño	22,364	8,794	4,087	292	4,271	23	$646,080
Cidra	33,887	14,207	10,655	748	5,510	16	$1,341,822

Municipality	Population 2022	Households 2022	Valid Owner Registrants	Owners with Damage	Valid Renters Registrants	Renters with Damage	Total Damage to Owners
Coamo	18,619	12,835	9,253	1,141	4,292	23	$1,286,600
Comerío	35,663	5,420	4,847	391	2,947	23	$750,920
Dorado	12,800	11,950	8,428	569	3,732	37	$1,654,493
Guayama	35,262	14,427	9,496	1,068	4,903	60	$2,818,931
Guayanilla	15,413	6,327	5,372	530	1,798	21	$968,960
Hormigueros	49,924	6,139	4,185	425	1,921	65	$1,756,484
Humacao	42,754	18,206	14,140	1,308	7,130	94	$2,215,653
Isabela	14,495	14,843	11,062	590	4,830	35	$904,531
Jayuya	45,923	4,945	3,816	487	2,284	12	$1,134,164
Juana Díaz	36,672	15,574	12,472	1,383	4,200	50	$2,827,204
Juncos	22,936	13,145	10,378	859	4,798	44	$1,488,980
Lajas	34,814	8,210	6,842	619	2,374	40	$1,500,204
Las Piedras	70,609	12,219	9,859	896	4,301	46	$1,961,187
Mayagüez	37,279	29,343	15,470	1,343	14,834	89	$2,698,222
Moca	29,208	13,254	10,300	595	4,090	20	$848,657
Naranjito	21,229	8,536	7,736	585	3,739	37	$1,355,475
Orocovis	15,524	6,792	6,576	923	2,941	33	$2,940,685
Patillas	19,763	6,196	4,982	609	1,858	36	$1,691,545
Peñuelas	132,138	6,939	5,956	576	2,018	23	$1,284,052
Ponce	15,316	52,977	34,770	3,719	21,904	185	$8,906,492
Rincón	25,000	5,679	3,943	374	1,593	8	$665,813
Salinas	31,174	9,721	8,492	1,629	3,129	187	$6,337,098
San Germán	37,260	11,560	8,325	511	3,827	20	$1,041,467
San Juan	334,776	147,044	48,131	2,008	73,401	139	$4,344,823
San Lorenzo	19,822	13,775	10,025	876	4,502	29	$2,159,307
Santa Isabel	66,041	7,230	6,025	958	2,241	81	$2,154,064
Toa Alta	72,783	22,568	15,246	750	6,260	24	$1,334,572
Toa Baja	27,535	28,155	18,351	1,576	10,338	265	$7,026,748

Municipality	Population 2022	Households 2022	Valid Owner Registrants	Owners with Damage	Valid Renters Registrants	Renters with Damage	Total Damage to Owners
Utuado	34,786	10,326	7,857	782	4,087	40	$1,633,751
Vega Alta	53,684	12,599	9,017	576	4,146	28	$1,303,428
Vega Baja	29,305	20,098	14,903	1,108	7,264	74	$1,853,119
Yabucoa	32,904	11,682	9,473	1,366	3,239	63	$3,590,681
Yauco	17,905	12,392	10,312	809	3,740	42	$1,663,754

Table 4: Comparative Assessment of Owner Impacts by Fiona and Severe Storms/Flooding. Source: FEMA 2022 and PRDOH.

Public Housing and Affordable Housing

Ongoing efforts through PRDOH's CDBG-DR and CDBG-MIT active programs will support housing opportunities with up-to-date construction standards to mitigate household losses across the island**.** Figure 18 below depicts the locations of current projects under development for the CDBG-DR Gap for Low-Income Housing Tax Credits (**LIHTC**) Program as of December 2023 and overlays some of the HUD-identified MID areas. These Programs will continue providing support for the populations in need of affordable rental housing and the vulnerable populations housing needs.

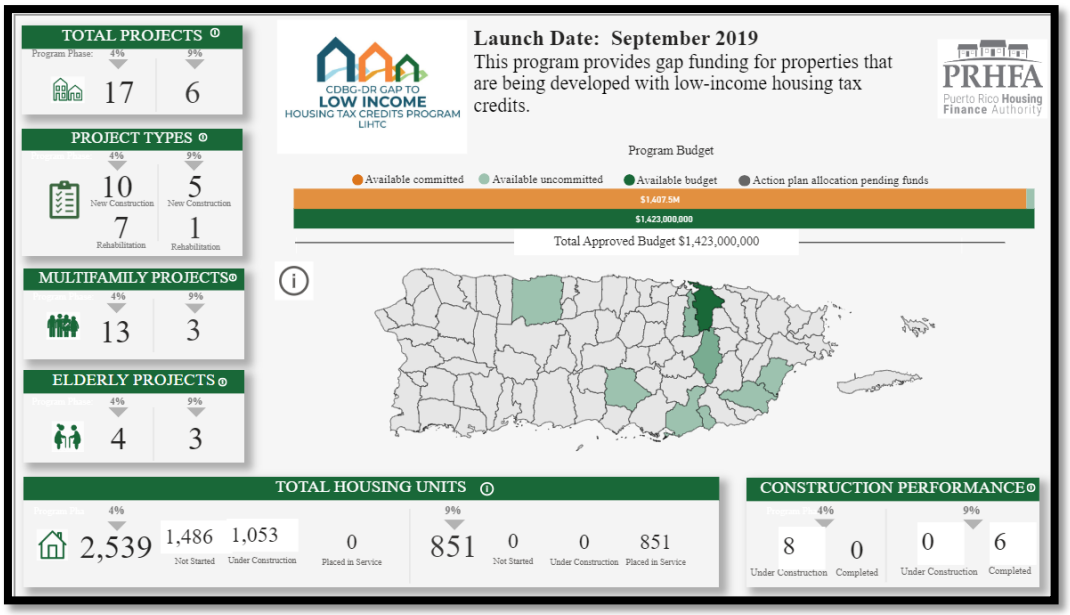

Figure 18: Depicts the locations with CDBG-DR Gap to Low-Income Housing Tax Credits (LIHTC) Program projects.

The projects are distributed as follows;

- The Municipality of Arecibo has one (1) elderly project for a total of 120 housing units.
- The Municipality of San Juan has a total of eight (8) projects, six (6) multifamily housing projects, and two (2) Elderly projects, for a total of 1,193 housing units.
- The Municipality of Caguas has three (3) projects, two (2) multifamily projects, and one (1) elderly project, for a total of 648 housing units.
- The Municipality of Coamo has one (1) elderly project of 69 housing units.
- The Municipality of Guayama has one (1) multifamily project with a total of 123 housing units.
- The Municipality of Yabucoa has one (1) multifamily project for a total of 149 housing units.
- The Municipality of Humacao has one (1) elderly project with a total of 90 housing units.

To date, LIHTC's opportunities related to the forty-eight (48) Municipalities included in the MID area ascend to 4,126 units as illustrated below.

Project Name	Municipality	Housing Type	Total Number of Units
Egida Sagrado Corazón de Jesus	Arecibo	Elderly	120
Casa Linda Apartments	Bayamon	MF	251
Apolonia Apartments	Bayamon	MF	138
Torres de Sabana	Carolina	MF	166
Jose Gautier Benitez	Caguas	Elderly	200
Jose Gautier Benitez	Caguas	MF	238
Sunrise at River Park	Caguas	MF	210
Bahia Apartments	Cataño	MF	107
San Blas Apartment	Coamo	Elderly	69
Brisas del Mar	Guayama	MF	123
Hogar Manuel Mediavilla Negrón II	Humacao	Elderly	90
La Merced	San Juan	Elderly	151
San Sebastian Apartment	San Juan	MF	25
Alameda Towers I & II	San Juan	MF	300
Mirador las Casas	San Juan	MF	294
Casa Metropolitana II	San Juan	Elderly	80
Ensueño	San Juan	MF	89
De Diego Village	San Juan	MF	94
Sabana Village	San Juan	MF	160
Viewpoint at Roosevelt	San Juan	MF	130
Valley Village	Santa Isabel	MF	292
Hacienda San Miguel	San Lorenzo	MF	740
Mirasol	Yabucoa	MF	149
Total			**4,126**

Table 5: LIHTC Program projects related to the MID area.

Additional ongoing competitive processes on behalf of PRDOH will provide more housing opportunities to citizens throughout the island.

Moreover, the Homebuyer Assistance (**HBA**) Program has benefited 9,678 households with CDBG-DR funds for a total disbursement of $366,811,900.88. As of September 2022, the HBA Program has benefited 6,122 households across the island, for a total disbursement of $257,631,673.20. More specifically, this opportunity has secured a total of 4,679 affordable, code compliant households, inside the forty-eight (48) MID area Municipalities for a total disbursement of $134,117,862.00.

In addition, the Social Interest Housing (**SIH**) Program focused on housing opportunities for citizens with special needs, those who are homeless or victims of domestic abuse. Figure 19 below depicts the locations of current projects under development.

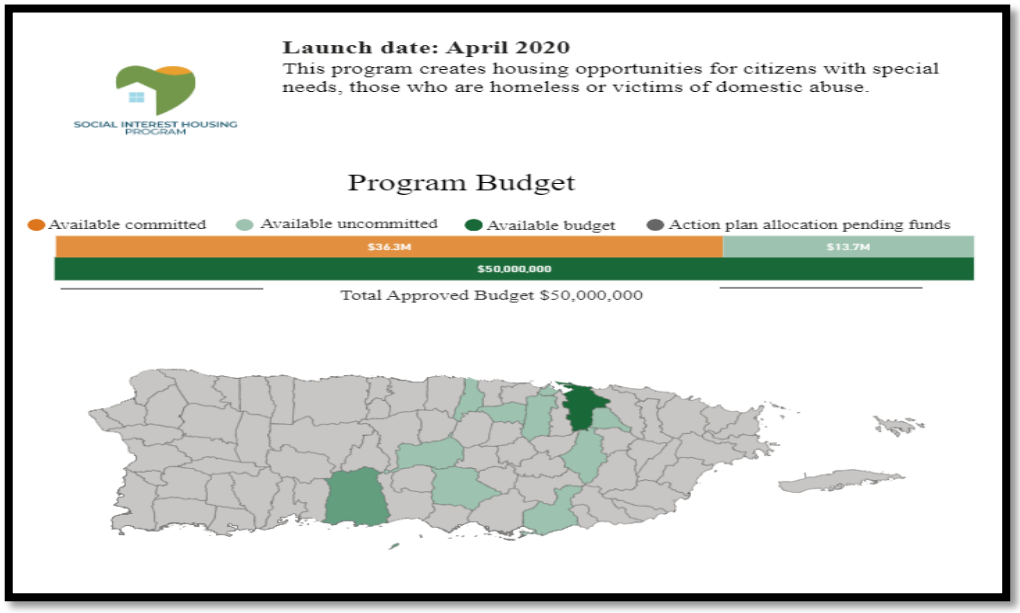

Figure 19: Depicts the locations with Social Interest Housing Program Projects.

Furthermore, the Single-Family Housing Mitigation (**SFM**) Program under the CDBG-MIT portfolio prioritizes mitigation assistance to families facing an immediate threat and whose homes have been rendered uninhabitable due to damage caused by recent disaster events or hazards. Table 6 below summarizes the fifteen (15) awarded projects with the total housing units for this initiative distributed across Functional Zones, as designated by the Puerto Rico Planning Board (**PRPB**).

REQUEST OF PROPOSALS No. CDBG-MIT-RFP-2022-04		
Single-Family Housing Development Initiatives		
Municipality	**Allocated Funds**	**Amount of Units**
Añasco	$21,210,000.00	70
Barceloneta	$11,586,200.00	38
Bayamón	$22,265,000.00	73
Carolina	$18,605,000.00	61
Fajardo	$23,782,200.00	78
Guayama	$32,318,343.18	106
Humacao	$30,485,000.00	100

Juana Díaz	$25,364,769.29	83
Luquillo	$30,500,000.00	100
Naguabo	$30,430,000.00	100
Naguabo	$30,390,000.00	100
Naguabo	$52,805,000.00	179
Ponce	$30,500,000.00	100
Vega Baja	$27,922,000.00	92
Vega Baja	$30,500,000.00	100
	Total of Units - 1380	
	Total Amount of allocated funds - $418,663,512.47	

Table 6: Awarded projects for SFM.

Puerto Rico Public Housing Administration Reported Damaged

According to data provided by the Puerto Rico Public Housing Administration (**PRPHA**), two (2) Public Housing Complex projects were reported to FEMA for disaster recovery assistance related to Hurricane Fiona. The projects submitted as Category E – Buildings and Equipment are detailed below:

Public Housing Complex Dr. Pedro Palou

The public housing complex, Dr. Pedro Palou, located in Humacao, Puerto Rico, was impacted by Hurricane Fiona, resulting in the displacement and cracking of a 45-degree retaining concrete wall on the streambank of an adjacent creek. Additionally, site estimates for work to be completed are $384,199.30, detailing $287,681.60 as a base repair cost and $95,257.78 as soft repair costs.

Public Housing Complex Manuel Román Adames

The public housing complex Manuel Román Adames, located in Camuy, Puerto Rico, was impacted by Hurricane Fiona, resulting in damages to LED Flood Lights of building exteriors, light fixtures, tilted walls due to strong winds and surface water flooding, and the detachment of rubber tiles due to surface water flooding. The site estimates for work to be completed are $40,138.53, detailing $31,639.92 as a base repair cost and $8,498.61 as soft repair costs.

Fair Housing, Civil Rights Data, and Advancing Equity

Historical data suggest an increase in the severity of hurricanes and tropical storms over the past two decades[32], and a 33% increase in rainfall during severe storms since 1958. This scenario has made Puerto Rican communities more vulnerable to the effects of winds and floods.[33] As documented most recently during the February 2022 floods and Hurricane Fiona, large volumes of storm runoff pose significant flood risks for urban and rural areas.

With approximately 61.8% of its residents living in 44 coastal municipalities[34] -where critical infrastructure is also located-, the population in Puerto Rico is highly vulnerable to hazards, particularly those who are economically disadvantaged, less prepared, and under conditions of social inequity.[35]

Stormwater management functions are predominantly the responsibility of municipalities, which apply for permits administered by the U.S. Environmental Protection Agency (**EPA**) to discharge stormwater effluent to waterways. Storms and hurricanes with significant rain have recurrently highlighted vulnerabilities in municipal storm water management systems stemming from deferred maintenance, clogging, and inadequate capacity, which was documented through the qualitative analysis approach of the stakeholder engagement.

Through this CDBG-DR allocation, PRDOH intends for funded projects help flood risk by improving drainage infrastructure, constructing flood barriers, and implementing sustainable stormwater management practices. By investing in these rehabilitation projects and implementing mitigation measures, low-income or otherwise vulnerable communities can better protect their property and assets from flood damage, reducing financial burdens and promoting economic stability.

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[32] A historical overview of these events is available in the CDBG-MIT Action Plan, available in English and Spanish at https://recuperacion.pr.gov/en/action-plans/action-plan-cdbg-mit/ and https://recuperacion.pr.gov/planes-de-accion/plan-de-accion-cdbg-mit/.

[33] U.S. Environmental Protection Agency, *EPA 430-F-16-063: What Climate Change Means for Puerto Rico* (2016), available at https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-pr.pdf.

[34] Wanda I. Crespo Acevedo & Roberto Moyano Flores, *Vulnerability assessment in Puerto Rico and its coastal zone using GIS analysis* (2017), available at https://www.drna.pr.gov/wp-content/uploads/2018/03/Vulnerability-assessment-in-Puerto-Rico-and-its-coastal-zone-using-GIS-analysis-floods-003.pdf.

[35] World Bank Group, *Puerto Rico: Historical Hazards*, available at https://climateknowledgeportal.worldbank.org/country/puerto-rico/vulnerability.

On the other hand, stormwater runoff can carry pollutants into waterways, degrading water quality and damaging ecosystems. By requiring the incorporation of green infrastructure elements, which help capture and filter stormwater, PRDOH envisions improving environmental quality and benefiting the health of communities.

As analyzed and presented in PRDOH's CDBG-MIT Action Plan, based on the Department of Homeland Security (**DHS**) Infrastructure Interdependency Assessment—Puerto Rico, flooding, among others, can cause physical damage to the critical public infrastructure of the island's water resource system. Moreover, based on the critical functions that water, and wastewater services play in the maintenance of public health, conserving natural ecosystems and wildlife, water and wastewater system resilience is critical to recovery and mitigation across multiple sectors, ensuring funds allocated can directly impact historically underserved communities. By addressing the unique challenges faced by historically underserved communities and integrating principles of equity and resilience into infrastructure planning and development, stormwater and flood mitigation projects can help build more sustainable and inclusive communities for all residents.

CDBG-DR and CDBG-MIT funds can increase recovery, mitigation, and resilience through Program implementation that does not bring discrimination based on race, color, religion, sex, disability, familial status, or national origin.

PRDOH will consider the impact of planning decisions on racial, ethnic, and low-income concentrations. This may include utilizing mapping tools and data to identify racially or ethnically concentrated poverty areas to evaluate possible impacts on those areas, promote fair housing choices, and foster inclusive communities. All this leveraging geospatial analysis on Puerto Rico's Racially and Ethnically Concentrated Areas of Poverty (R/ECAPs), developed as part of the CDBG-MIT Action Plan assessments.

HUD has developed a census tract-based definition of R/ECAPs showing a binary (yes or no) indication of poverty and race/ethnicity across Puerto Rico. R/ECAPs must have a non-white population of fifty percent (50%) or more. Additionally, areas with a poverty rate exceeding forty percent (40%) or three (3) or more times the average tract poverty rate for the metropolitan/micropolitan area, whichever

threshold is lower, are also considered R/ECAPs. Figure 20 below shows the Census tracts within the HUD-Identified MID Areas' that are considered R/ECAPs. It also illustrates how the distribution of R/ECAPs is aligned and significantly covers the HUD-identified MID areas.

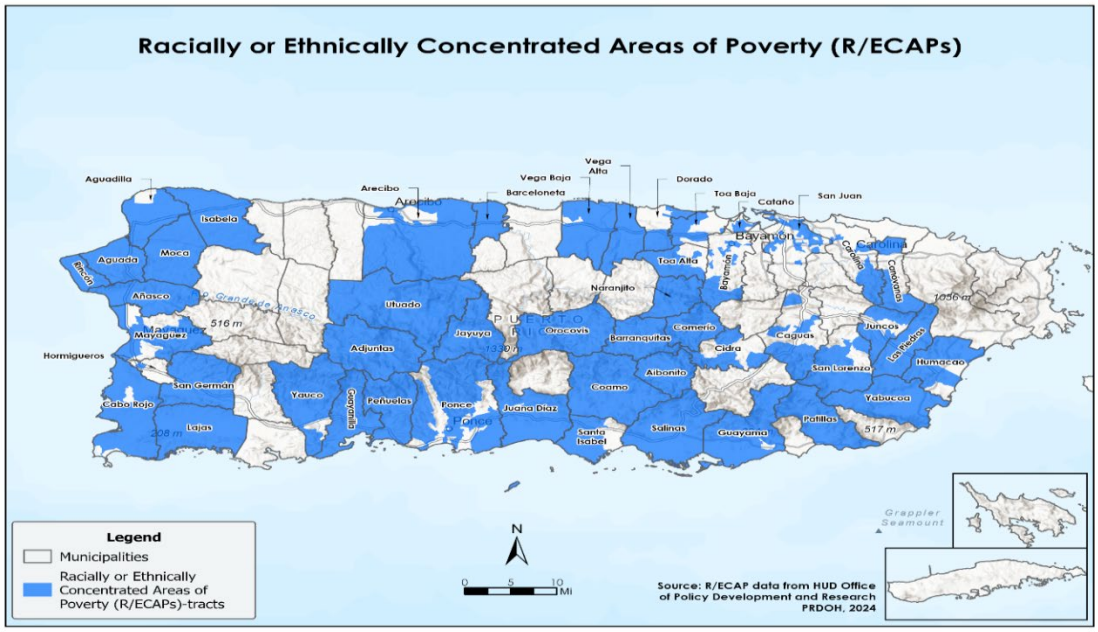


Figure 20: Map of Puerto Rico within the HUD-Identified MID Areas Census tracts that are considered Racially or Ethically Concentrated Areas of Poverty (R/ECAPs).

HUD's definition of R/ECAPs provide a simple systematic way to determine areas with an increased probability that two conditions (non-white and poverty) are met at the aggregate level. However, R/ECAP use of conditional logic to identify census tracts based on two different variables introduces an ecological fallacy where it is inferred that the populations in these places (tracts) are both non-white and impoverished because the tract (as a whole) exhibits these characteristics.

The U.S. Census provides a composite variable at the census tract level that summarizes the population by various racial groups and poverty status. This information allows for a more detailed understanding of the geographical distribution of racially and ethnically concentrated areas of poverty (R/ECAP) across the MID area. By employing 2022 Census data and considering different racial and ethnic characteristics along with poverty rates, a reimagined analysis of racially and ethnically concentrated poverty becomes feasible.

Figure 21 illustrates that higher percentages of populations experiencing both poverty and belonging to non-white racial groups are concentrated in the southwestern municipalities of Cabo Rojo, Lajas, and San Germán, as well as the southern municipalities of Ponce, Salinas, and Patillas. However, it's important to note that this depiction of percentages solely represents the overlap of poverty and race, potentially leading to a misleading interpretation. It doesn't necessarily reflect higher numbers of individuals experiencing poverty within each racial group.

Figure 22, focusing on percentages of impoverished white populations, reveals higher values across much of central Puerto Rico. Yet, many of these municipalities have smaller populations, resulting in lower overall numbers of impoverished white individuals compared to more densely populated areas across the island. Finally, mapping census tracts based on impoverished Hispanic populations (Figure 23) shows that the majority of the island exhibits higher percentages of impoverished Hispanic populations.

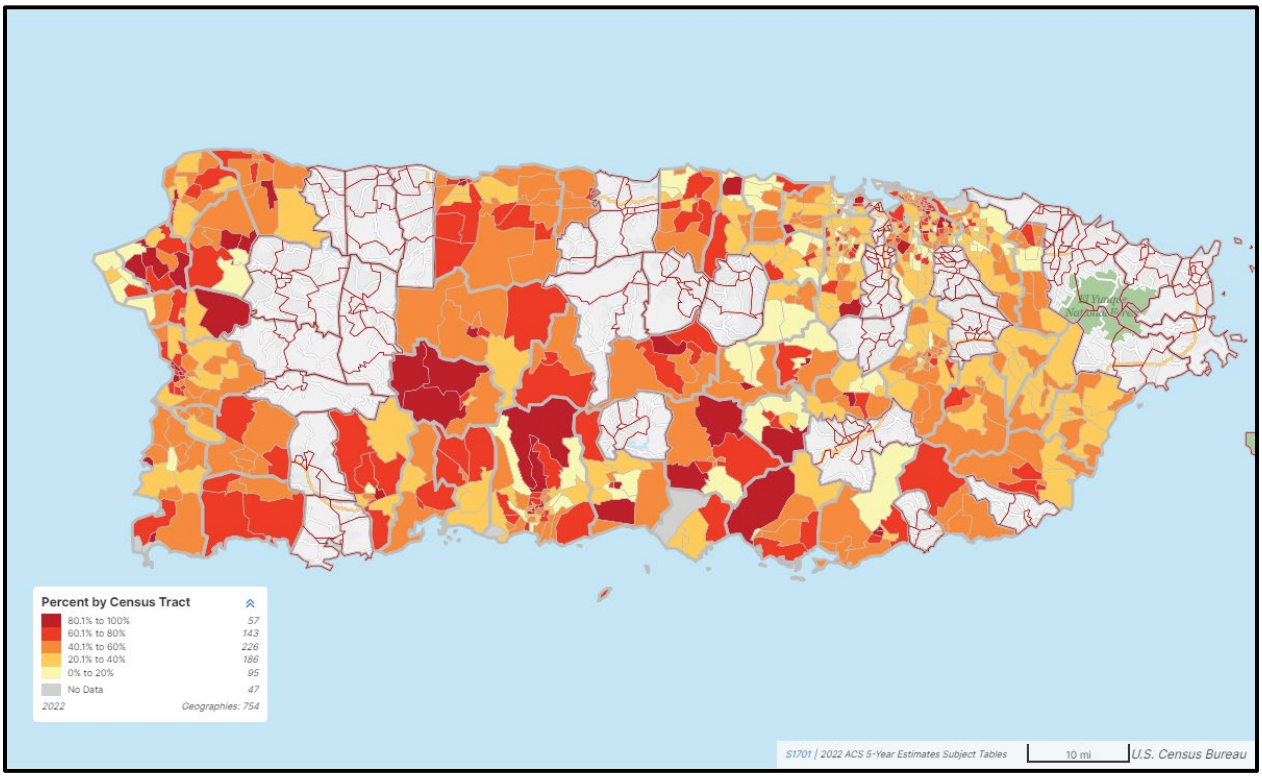


Figure 21: Map of Puerto Rico identifying the Impoverished Non-White populations by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table S1701.

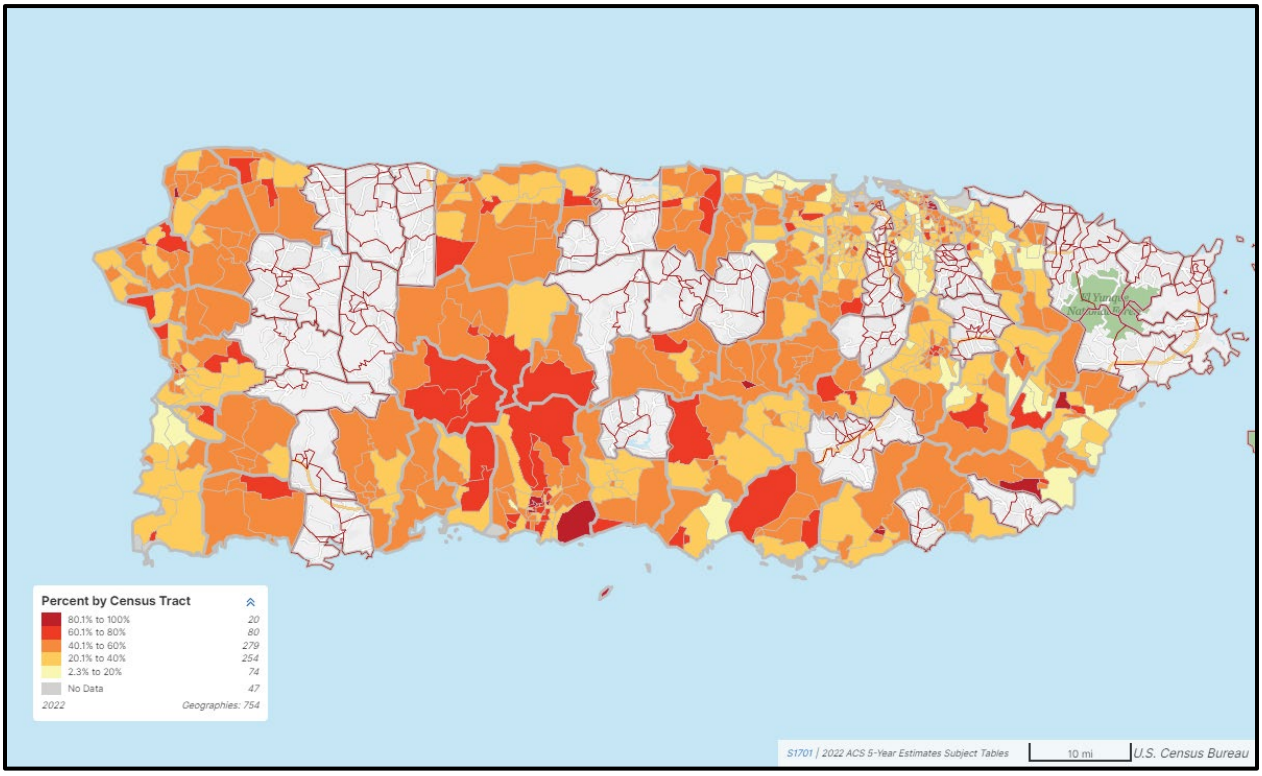


Figure 22: Map of Puerto Rico identifying the Impoverished White populations by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table S1701.

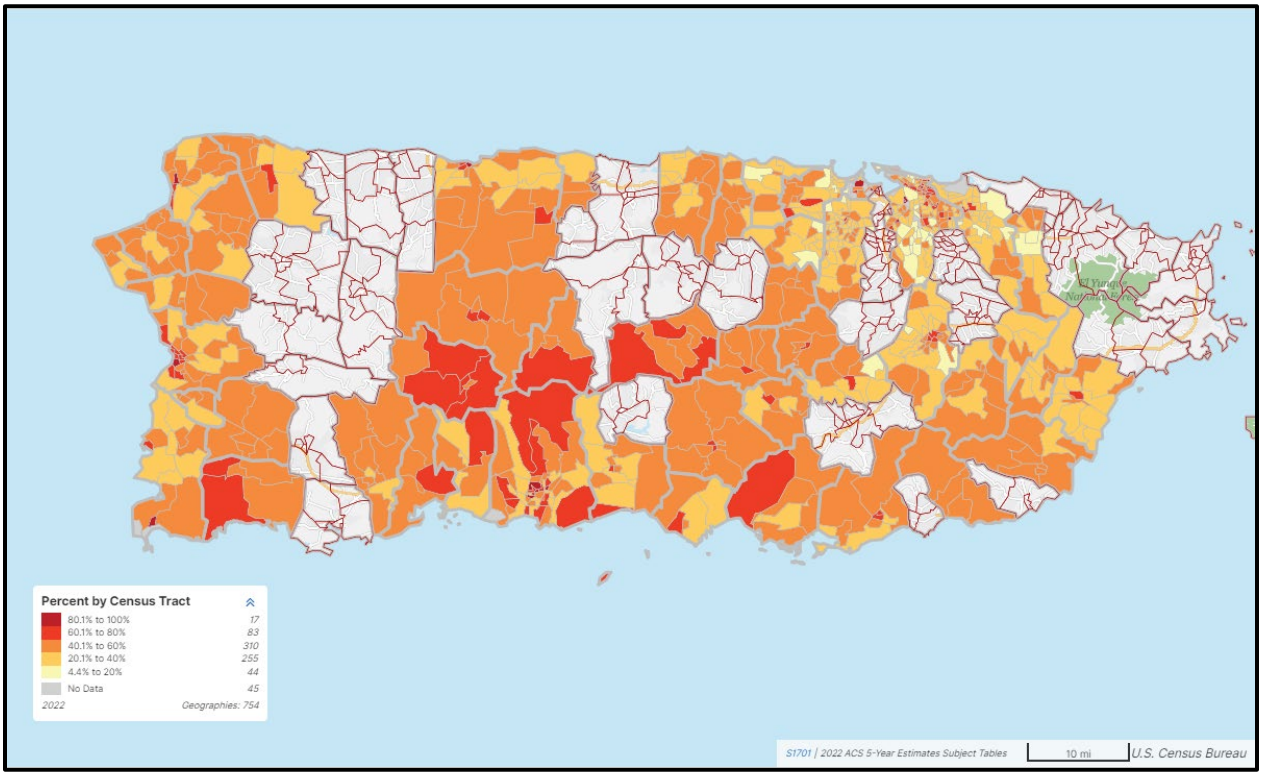


Figure 23: Map of Puerto Rico identifying the Impoverished Hispanic populations by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table S1701.

Moreover, the Justice 40 Initiative uses census tract data to illustrate disadvantaged communities to provide better assistance. This federal project developed categories of burdens with indicators that highlight disadvantaged populations and communities based on the following: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. Figure 24 shows the Justice 40 data results mapped by the HUD-identified MID Areas. All census tracts in the HUD-identified MID Areas meet at least one (1) category, with hundred sixty (160) census tracts having populations that fall under at least three (3) categories that meet the disadvantaged thresholds. Table 7 summarizes the Justice 40 Category frequency by Municipality.

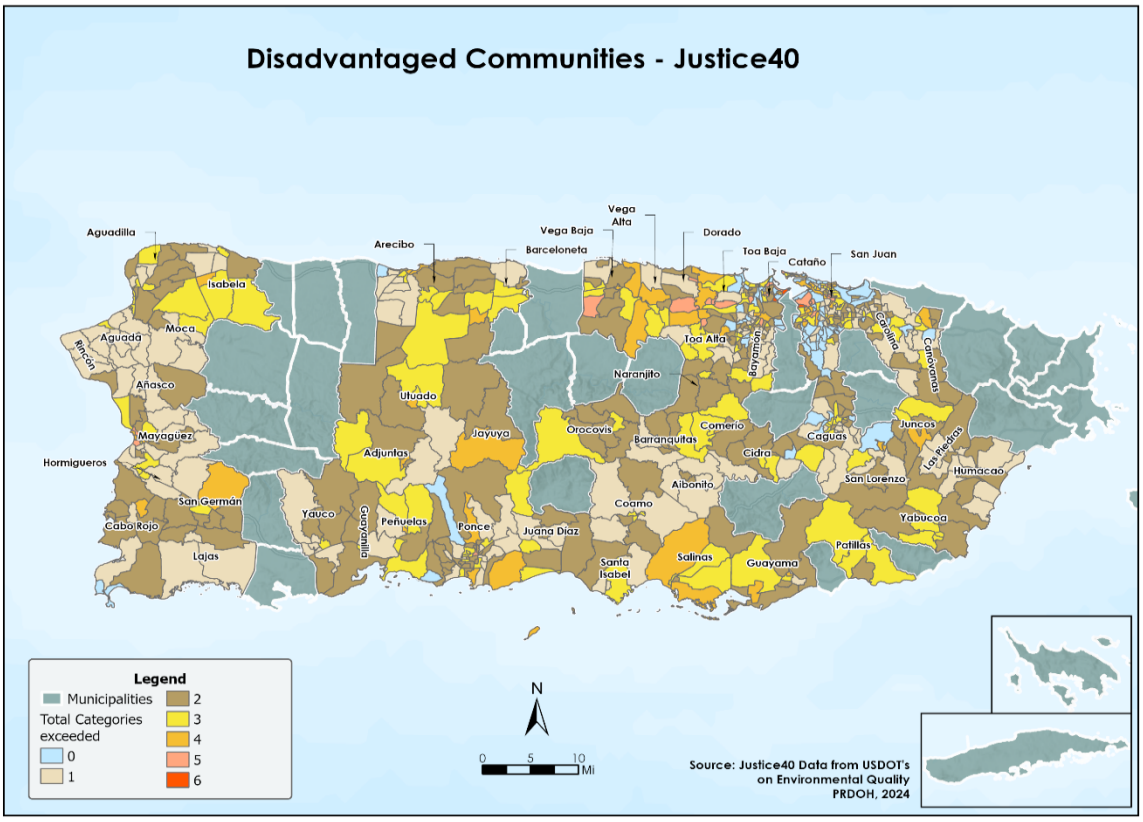


Figure 24: Map of Puerto Rico identifying the disadvantage communities in HUD-identified MID Area. Source: Justice40 Data from USDOTs on Environmental Quality.

Municipality	Critical Clean Water and Waste Infrastructure Disadvantaged	Training and Workforce Development Disadvantaged	Climate Change Disadvantaged	Clean Energy and Energy Efficiency Disadvantaged	Clean Transit Disadvantaged	Affordable and Sustainable Housing for Disadvantaged
Adjuntas	0	6	2	4	0	2
Aguada	0	8	1	0	0	2
Aguadilla	1	16	0	6	0	11
Aibonito	0	6	0	0	0	1
Arecibo	0	23	4	7	0	8
Añasco	0	7	0	0	0	2
Barceloneta	0	4	1	1	0	1
Barranquitas	0	6	0	4	0	1
Bayamón	4	47	2	10	4	27
Cabo Rojo	0	9	1	3	0	2
Caguas	0	29	3	4	8	9
Canóvanas	1	11	2	4	0	4
Carolina	3	28	4	2	3	15
Cataño	2	9	4	8	2	6
Cidra	0	9	0	0	0	2
Coamo	0	9	0	3	0	5
Comerío	0	5	2	4	0	4
Dorado	5	7	1	2	0	4
Guayama	0	2	0	2	0	2
Guayanilla	0	5	1	0	0	4
Hormigueros	0	4	1	1	0	2
Humacao	0	11	0	1	0	5
Isabela	1	9	0	4	0	6
Jayuya	0	3	2	3	0	1
Juana Díaz	0	12	4	2	0	6
Juncos	0	6	0	2	0	3
Lajas	0	5	0	1	0	1
Las Piedras	0	6	0	0	0	3
Mayagüez	2	26	8	9	4	7
Moca	0	7	0	2	0	3
Naranjito	0	5	1	2	0	1
Orocovis	0	7	0	7	0	1
Patillas	0	4	0	4	0	3
Peñuelas	0	6	2	1	0	4
Ponce	2	35	21	18	0	12
Rincón	0	3	0	0	0	0

Municipality	Critical Clean Water and Waste Infrastructure Disadvantaged	Training and Workforce Development Disadvantaged	Climate Change Disadvantaged	Clean Energy and Energy Efficiency Disadvantaged	Clean Transit Disadvantaged	Affordable and Sustainable Housing for Disadvantaged
Salinas	0	7	5	4	0	5
San Germán	0	7	0	1	0	4
San Juan	46	85	16	31	32	52
San Lorenzo	0	8	1	5	0	3
Santa Isabel	0	3	1	0	0	4
Toa Alta	10	5	0	5	0	7
Toa Baja	6	15	7	11	0	9
Utuado	0	8	1	3	0	4
Vega Alta	0	7	0	5	0	2
Vega Baja	0	13	1	5	0	5
Yabucoa	0	8	2	5	0	4
Yauco	0	11	0	5	0	1

Table 7: HUD-Identified MID Areas Frequency of Disadvantaged Categories

PRDOH, subrecipients, contractors, and other program partners must comply with applicable federal civil rights, fair housing, and equal opportunity laws, statutes, and executive orders. PRDOH will conduct regular training sessions for all CDBG-MIT and CDBG-DR staff, subrecipients, and contractors to ensure all parties understand and comply with relevant fair housing and civil rights requirements.

PRDOH is responsible for ensuring that programs are designed and implemented to comply with the requirements set forth in the Fair Housing and Equal Opportunity (**FHEO**) Policy for CDBG-DR Programs. The FHEO Policy for CDBG-DR Programs, as well as all General Policies, are available in English and Spanish at https://recuperacion.pr.gov/en/resources/policies/general-policies/ and https://recuperacion.pr.gov/recursos/politicas/politicas-generales/.

PRDOH is available to provide technical assistance to any program office, subrecipient, or contractor requesting support in ensuring that they are sufficiently complying with requirements to affirmatively further fair housing, provide equal opportunity, and comply with all civil rights requirements.

Demographic Profile of HUD identified MID Areas

An estimated population of 2,381,801 people reside within the forty-eight (48) Municipalities[36] that HUD identified as the MID areas for the disaster declaration DR-4649-PR and DR-4671-PR. Table 8 shows the total populations by Municipality. The table also shows the total population estimates from all the municipalities for 2022, which includes the annual change from July 1, 2021 to July 1, 2022.[37]

Impacted Municipalities	U.S. Census Bureau, Population Estimates Program (PEP), Population estimates, July 1, 2022, (V2022)	Annual Change, July 1, 2021 to July 1, 2022
Adjuntas	17,905	-0.7
Aguada	37,666	-0.9
Aguadilla	53,931	-1.3
Aibonito	24,555	-0.5
Añasco	25,026	-1.5
Arroyo	15,289	-2
Barceloneta	22,416	-1
Barranquitas	28,944	-0.4
Bayamón	181,577	-1.3
Cabo Rojo	46,718	-0.8
Caguas	125,136	-1.2
Canóvanas	41,637	-1.2

[36] As extended by HUD. See Appendix B include with this Action Plan.
[37] Annual Estimates of the Resident Population for Puerto Rico Municipios: April 1, 2020 to July 1, 2022 (PRM-EST2022-POP) Source: U.S. Census Bureau, Population Division Release Date: March 2023.

Impacted Municipalities	U.S. Census Bureau, Population Estimates Program (PEP), Population estimates, July 1, 2022, (V2022)	Annual Change, July 1, 2021 to July 1, 2022
Carolina	151,571	-1.3
Cataño	22,364	-2
Coamo	33,887	-1.4
Comerío	18,619	-1.3
Dorado	35,663	-0.8
Guánica	12,800	-3.6
Guayama	35,262	-1
Hormigueros	15,413	-1
Humacao	49,924	-1.2
Isabela	42,754	-0.5
Jayuya	14,495	-1.4
Juana Díaz	45,923	-1
Juncos	36,672	-0.9
Lajas	22,936	-1.2
Las Piedras	34,814	-0.9
Mayagüez	70,609	-1.8
Moca	37,279	-0.6
Naranjito	29,208	-0.5

Impacted Municipalities	U.S. Census Bureau, Population Estimates Program (PEP), Population estimates, July 1, 2022, (V2022)	Annual Change, July 1, 2021 to July 1, 2022
Orocovis	21,229	-0.9
Patillas	15,524	-1.8
Peñuelas	19,763	-1.9
Ponce	132,138	-1.9
Rincón	15,316	-0.1
Salinas	25,000	-1.8
San Germán	31,174	-1.3
San Juan	334,776	-1.3
San Lorenzo	37,260	-0.9
Santa Isabel	19,822	-1.5
Toa Alta	66,041	-1
Toa Baja	72,783	-1.9
Utuado	27,535	-1.6
Vega Alta	34,786	-1.2
Vega Baja	53,684	-1
Yabucoa	29,305	-2.1
Yauco	32,904	-2.1

Table 8: Annual Estimates of the Resident Population for Puerto Rico HUD identified MID. Source: U.S. Census. Annual Estimates of the Resident Population for Puerto Rico Municipios: April 1, 2020, to July 1, 2022 (PRM-EST2022-POP).

Moreover, the increasing number of populations over sixty-five (65) years in Puerto Rico is higher than the U.S. average of twenty-three-point five percent (23.5%) and seventy-point three percent) (17.3%) respectively, as shown in Table 9. The older adult population is an important indicator to determine the social vulnerability of an area, as older adults are more vulnerable than other age groups because of their need for susceptibility to harm and potential mobility constraints, all of which influence the ability to get out of harm's way.[38] Social imbalances historically tend to reduce women's status in society, their access to resources, opportunities, and power, leading to higher female vulnerability to adverse hazards and disaster outcomes[39]. In both indicators, Puerto Rico and the Municipalities within the HUD-identified MID areas have higher percentages than the U.S. average.

Areas	Females, %	Persons 65 yrs. & over, %
United States	50.4%	17.3%
Puerto Rico	52.6%	23.5%
Adjuntas	51.2%	21.4%
Aguada	51.2%	21.5%
Aguadilla	51.5%	23.0%
Aibonito	52.3%	23.1%
Añasco	51.8%	22.1%
Arecibo	52.4%	22.9%
Barceloneta	52.8%	20.6%
Barranquitas	51.0%	17.9%

[38] See Puerto Rico's CDBG-MIT Action Plan Section "Additional Analysis of Demographics and Protected Classes" for detailed assessment on socially vulnerable populations and protected classes. Accessed at: https://recuperacion.pr.gov/en/action-plans/action-plan-cdbg-mit/ (English) and https://recuperacion.pr.gov/planes-de-accion/plan-de-accion-cdbg-mit/ (Spanish).
[39] Trieb, Carolin-Anna. Vulnerability to Natural Hazards: A Gender Perspective in Disasters, Management Center Innsbruck. Accessed at: http://www.ibgeographypods.org/uploads/7/6/2/2/7622863/university_dissertation_ib_dp_geography.pdf.

Areas	Females, %	Persons 65 yrs. & over, %
Bayamón	53.2%	23.2%
Cabo Rojo	52.7%	24.0%
Caguas	53.7%	21.5%
Canóvanas	52.1%	18.4%
Carolina	54.5%	23.6%
Cataño	53.0%	22.4%
Cidra	51.8%	19.5%
Coamo	51.6%	19.7%
Comerío	50.1%	20.0%
Dorado	51.6%	18.7%
Guayama	50.4%	19.7%
Guayanilla	52.8%	22.3%
Hormigueros	53.8%	29.2%
Humacao	52.8%	24.2%
Isabela	51.4%	21.3%
Jayuya	51.1%	18.7%
Juana Díaz	52.6%	19.4%
Juncos	52.6%	17.3%
Lajas	51.6%	25.9%
Las Piedras	52.2%	20.2%
Mayagüez	52.2%	25.3%

Areas	Females, %	Persons 65 yrs. & over, %
Moca	51.2%	19.4%
Naranjito	49.5%	21.4%
Orocovis	50.1%	18.6%
Patillas	52.1%	24.2%
Peñuelas	51.7%	18.4%
Ponce	52.3%	23.8%
Rincón	53.5%	26.4%
Salinas	51.8%	21.1%
San Germán	51.4%	26.3%
San Juan	54.3%	24.1%
San Lorenzo	51.4%	20.7%
Santa Isabel	52.0%	17.2%
Toa Alta	52.2%	16.0%
Toa Baja	53.6%	21.0%
Utuado	51.7%	23.7%
Vega Alta	52.0%	19.7%
Vega Baja	52.3%	21.8%
Yabucoa	51.8%	23.1%
Yauco	52.4%	23.9%

Table 9: Vulnerability Indicators for HUD-Identified MID Areas. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

Data on disability and difficulties from the 2022 U.S. Census of the USA ACS 5-Years Estimate was assessed to identify the location in which differently abled populations are residing. Table 10 shows the total population, and percentage of the population, by difficulty/disability and municipality. While persons of differential ability reside in every part of Puerto Rico, certain municipalities identified as MID have larger proportions of their populations characterized by disabilities or having difficulty in at least one (1) of the six (6) categories accounted by the U.S. Census.

PRDOH promotes the incorporation of universal design and accessibility principles from the outset of infrastructure planning to ensure that the needs of people with disabilities are considered at all stages of the project. This could include, for example, conducting accessibility assessments, collaborating with disability advocacy organizations, and soliciting input from people with disabilities and their representatives.

Designing stormwater and flood mitigation infrastructure to be accessible and inclusive ensures that people with disabilities can safely utilize these facilities and/or impact areas. This may involve providing accessible pathways, ramps, handrails, and signage.

Always in consideration of this population, PRDOH maintains robust policies in place to prohibit discrimination against people with disabilities in all CDBG-DR/MIT programs. These are contained in the Cross-Cutting Guidelines, available in English and Spanish at https://recuperacion.pr.gov/en/download/cross-cutting-guidelines/ and https://recuperacion.pr.gov/download/guias-intersectoriales/.

Municipality	Total Population	Hearing Difficulty	Vision difficulty	Cognitive difficulty	Ambulatory difficulty	Self-care difficulty	Independent living difficulty
ADJUNTAS	17,905	470 (2.6)	768 (4.3%)	1,220(7.0%)	1,544 (8.9%)	663 (3.8)	1,312 (8.9%)
AGUADA	37,666	3,135 (8.3%)	5,533 (14.6)	3,880 (10.6%)	7,230 (19.7%)	1,169 (3.2%)	5,569 (17.5%)
AGUADILLA	53,931	4,129 (7.6%)	4,881 (9.0%)	3,880 (7.4%)	7,256 (13.9 %)	1,840 (3.5%)	5,000 (11.2%)

AIBONITO	24,555	1,600 (6.5%)	5,093 (20.8%)	2,213 (9.3)	1,800 (7.6%)	883 (3.7%)	1,919 (9.4%)
ANASCO	25,026	1,911 (7.5%)	3287 (12.9%)	2,309 (9.4%)	4,353 (17.7%)	724 (2.9%)	3,283 (15.5%)
ARECIBO	86,090	3,517 (4.1%)	3,114 (3.6%)	7,768 (9.3%)	10,147 (12.2%)	4,796 (5.8)	8,175 (11.4)
BARCELONETA	22,416	1,118 (4.9%)	794 (3.5%)	1,375 (6.3%)	2,013 (9.2%)	898 (4.1%)	1,561 (8.4%)
BARRANQUITAS	28,944	972 (3.4%)	1,131 (3.9%)	2,363 (8.6%)	2,630(9.5%)	958 (3.5%)	1,760 (7.7%)
BAYAMON	181,577	10,935 (6.1%)	10,787 (6.0%)	21,750 (12.6%)	23,890 (13.8%)	11,609 (6.7%)	18,209 (12.2%)
CABO ROJO	46,718	2,137 (4.6%)	1,786 (3.8%)	4,002 (8.8%)	4,715 (10.4%)	1,497 (3.3%)	4,037 (10.3%)
CAGUAS	125,136	6,328 (5.0%)	10,294 (8.2%)	14,881 (12.2%)	16,989 (13.9%)	6,038 (5.0%)	10,462 (10.0%)
CANOVANAS	41,637	1,897 (4.5%)	2,444 (5.8%)	3,342 (8.2%)	4,755 (11.70)	2,059 (5.1%)	3,827 (11.2%)
CAROLINA	151,571	6,093 (4.0%)	6,129 (4.0%)	12,189 (8.2%)	17,522 (11.8%)	7,108% (4.8%)	1,3002 (10.2%)
CATANO	22,364	774 (3.4%)	742 (3.2%)	2,065 (9.3%)	2,269 (10.2%)	1,176 (5.3%)	1,861(9.9%)
CIDRA	39,515	3,373 (8.5%)	6,681 (16.9%)	6,830 (17.9%)	7,561 (19.8%)	2,450 (6.4%)	4,556 (14.0%)
COAMO	33,887	1,639 (4.8%)	7,044 (20.4%)	2,784 (8.4%)	2,437 (7.3%)	1,001 (3.01%)	2,265 (8.0%)
COMERIO	18,619	802 (4.3%)	1,167 (6.2%)	2,635 (14.5%)	2,624 (14.4%)	1,036 (5.7%)	1,947 (12.7%)
DORADO	35,663	990 (2.8%)	1,025 (2.9%)	2,075 (6.1%)	2,909 (8.5%)	1,128 (3.3%)	2,255 (7.8%)
GUAYAMA	35,262	778 (2.3%)	870 (2.6%)	2,134 (6.5%)	5,758 (17.6%)	1,022 (3.1%)	1,737 (6.3%)
GUAYANILLA	17,064	554 (3.1%)	530 (3.0%)	1,074 (6.3%)	1,490 (8.8%)	656 (3.9%)	1,218 (8.5%)
HORMIGUEROS	15,413	1,190 (7.7%)	1,287 (8.3%)	1,636 (10.9%)	2,556 (17.0%)	927 (6.2%)	2,070 (15.7%)
HUMACAO	49,924	1,055 (2.1%)	1,016 (2.0%)	1,712 (3.5%)	2,522 (5.2%)	1,180 (2.4%)	2,870 (6.8%)
ISABELA	42,754	2,521 9 (5.9%)	3,921 (9.2%)	5,463 (13.3%)	6,485 (15.8%)	2,179 (5.3%)	5,543 (15.7%)
JAYUYA	14,495	672 (4.6%)	873 (5.9%)	1,936 (13.8%)	1,889 (13.4%)	1,064 (7.6%)	1,701 (14.5%)
JUANA DIAZ	45,923	2,297 (5.0%)	5,432 (11.8%)	5,018 (11.4%)	6,227 (14.1%)	3,776 (8.5%)	5,286 (14.3%)
JUNCOS	36,672	1,478 (4.0%)	4,026 (10.9%)	4,061 (11.5%)	5,401 (15.2%)	2,039 (5.8%)	3,544 (11.9%)
LAJAS	22,936	1,083 (4.7%)	2,067 (8.9%)	2,657 (11.9%)	3,591 (16.0%)	1,436 (6.4%)	2,989 (15.4%)

LAS PIEDRAS	34,814	492 (1.4%)	651 (1.9%)	1,750 (5.2%)	1,656 (4.9%)	1,261 (3.7%)	3,426 (11.9%)
MAYAGUEZ	70,609	3,948 (5.5%)	5,181 (7.2%)	6,942 (10.0%)	9,360 (13.4%)	2,756 (4.0%)	6,610 (10.9%)
MOCA	37,279	2,162 (5.8%)	2,592 (7.0%)	2,309 (6.4%)	4,588 (12.8%)	1,249 (3.5%)	2,903 (9.5%)
NARANJITO	29,208	1,589 (5.5%)	2,308 (7.9%)	3,446 (12.1%)	4,756 (16.6%)	2,127 (7.4%)	3,621 (15.2%)
OROCOVIS	21,229	645 (3.0%)	778 (3.7%)	2,215 (10.9%)	2,381 (11.7%)	997 (4.9%)	1,885 (11.0%)
PATILLAS	15,524	396 (2.5%)	291 (1.8%)	582 (3.8%)	1,023 (6.6%)	656 (4.3%)	1,381 (10.4%)
PENUELAS	19,763	749 (3.7%)	645 (3.2%)	1,582 (8.1%)	2,166 (11.2%)	1,113 (5.7%)	1,803 (11.2%)
PONCE	132,138	5,231 (3.9%)	2,281 (15.1%)	10,507 (8.2%)	19,979 (15.6%)	8,688 (6.8%)	11,831 (10.9%)
RINCON	15,316	1,603 (10.6%)	2,579 (17.0%)	1,794 (12.2%)	2,521 (17.1%)	612 (4.2%)	2.348 (18.2%)
SALINAS	25,000	1,231 (4.8%)	4,728 (18.5%)	1,619 (6.6%)	1,798 (7.3%)	841 (3.4%)	1,576 (7.6%)
SAN GERMAN	31,174	683 (2.2%)	519 (1.6%)	1,745 (5.7%)	1,675 (5.5%)	1,141 (3.7%)	1,900 (7.3%)
SAN JUAN	334,776	14,773 (4.4%)	19,302 (5.7%)	29,527 (9.1%)	41,561 (12.8%)	21,407 (6.6%)	33,031 (11.7%)
SAN LORENZO	37,260	758 (2.0%)	649 (1.7%)	2,526 (7.0%)	1,756 (4.9%)	1,369 (3.8%)	3,332 (10.7%)
SANTA ISABEL	19,822	885 (4.4%)	4,345 (21.6%)	1,187 (6.1%)	1,300 (6.7%)	464 (2.4%)	1,104 (6.8%)
TOA ALTA	66,041	1,968 (3.0%)	2,048 (3.1%)	4,945 (7.7%)	5,263 (8.2%)	2,068 (3.2%)	4,189 (7.7%)
TOA BAJA	72,783	3,113 (4.2%)	1,990 (2.7%)	11,907 (16.6%)	10,660 (14.8%)	5,491 (7.6%)	6,503 (10.6%)
UTUADO	53,684	1,260 (4.5%)	1,345 (4.8%)	3,252 (12.0%)	3,374 (12.4%)	1,351 (5.0%)	2,878 (12.4%)
VEGA ALTA	8,043	2,376 (6.8%)	2,481(7.1%)	4,711 (14.0%)	5,240 (15.5%)	2,376 (7.0%)	5,308 (18.8%)
VEGA BAJA	21,466	2,456 (4.5%)	3,355 (6.2%)	4,828 (9.3%)	7,045 (13.6%)	3,853 (7.4%)	6,471 (14.5%)
YABUCOA	29,305	466 (1.5%)	470 (1.6%)	1,526 (5.2%)	1,404 (4.8%)	964 (3.3%)	2,654 (10.5%)
YAUCO	32,904	1,049 (3.1%)	6,988 (20.7%)	2,034 (6.2%)	5,181 (15.8%)	1,615 (4.9%)	2,788 (9.9%)

Table 10: U.S. Census Bureau. (2022). Disability Characteristics. American Community Survey, ACS 5-Year Estimates

Puerto Rico has high rates of poverty, with an average of forty-one-point-seven percent (41.7%) of people living in poverty, according to the United States Census

estimates from 2022. It is significantly higher than the United States average of twelve-point-six percent (12.6%). As follows, Table 11 displays the HUD-identified MID areas, with their poverty percentage.

Areas	Persons in Poverty %
United States	12.6%
Puerto Rico	41.7%
Adjuntas	59.4%
Aguada	45.4%
Aguadilla	46.5%
Aibonito	38.7%
Añasco	44.5%
Arecibo	41.5%
Barceloneta	46.0%
Barranquitas	47.7%
Bayamón	31.4%
Cabo Rojo	37.8%
Caguas	34.1%
Canóvanas	33.5%
Carolina	28.3%
Cataño	41.5%
Cidra	33.9%
Coamo	43.5%
Comerío	52.1%

Areas	Persons in Poverty %
Dorado	26.2%
Guayama	46.7%
Guayanilla	47.8%
Hormigueros	38.4%
Humacao	31.4%
Isabela	44.5%
Jayuya	52.7%
Juana Díaz	41.0%
Juncos	36.3%
Lajas	53.9%
Las Piedras	35.5%
Mayagüez	47.5%
Moca	45.7%
Naranjito	47.1%
Orocovis	52.5%
Patillas	45.5%
Peñuelas	46.9%
Ponce	47.2%
Rincón	37.9%
Salinas	46.5%
San Germán	42.8%

Areas	Persons in Poverty %
San Juan	36.4%
San Lorenzo	43.5%
Santa Isabel	42.4%
Toa Alta	30.2%
Toa Baja	31.7%
Utuado	48.6%
Vega Alta	41.5%
Vega Baja	38.2%
Yabucoa	44.8%
Yauco	39.2%

Table 11: Percent of Persons in Poverty in HUD-identified MID Areas for Puerto Rico. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP03. U.S. Census Bureau, Current Population Survey, 1959 to 2022 Annual Social and Economic Supplements (CPS ASEC).

Additional Analysis of Demographics and Protected Classes

Added Focus on Protected Class Group

Assessing socially vulnerable and protected class populations aims to identify areas where these groups reside and understand where concentrations of the most marginalized populations occur across the MID areas. Included here are assessments of sex, familial status, race, ethnicity, and national origin, specifically focusing on racially and ethnically concentrated areas of poverty.

Identifying Puerto Rico Population by Sex, Age, and Familial Status

The Fair Housing Act prohibits discrimination based on sex, age, or familial status. PRDOH will consider those characteristics individually based on various theoretical and conceptual links to inequity. Each of these indicators of social vulnerability has proven ties to adverse outcomes in relation to hazards. Gender, or specifically

being female, is an important driver of social vulnerability to disasters. Patriarchic structures and power imbalances tend to reduce women's status in society, their access to resources, opportunities, and power, and subsequently lead to higher female vulnerability to adverse hazards and disaster outcomes[40]. Age, another key characteristic influencing social vulnerability, is normally recognized at the two (2) extremes of the age continuum—children and older adults are more vulnerable than others[41]. Both age cohorts (young and old) need special care, are often more susceptible to harm, and may have mobility constraints, all of which influence the ability to get out of harm's way[42,43]. For this assessment, a focus on aging populations is required by Fair Housing regulations.

Similarly, families with large numbers of dependents or single-parent households may be more vulnerable because of the need to rely on paid caregivers. Like sex and age, identifying areas based on familial status, or those with children in the home, is of particular interest here to address Fair Housing regulations. These three (3) indicators of socially vulnerable areas are mapped and discussed.

Puerto Rico Population by Gender

Like Hispanic populations across Puerto Rico, gender is a ubiquitous vulnerability characteristic, with female populations evenly dispersed across Puerto Rico. As shown in the map below, twenty-eight (28) census tracts have greater than sixty percent (60%) female populations in the MID area. These municipalities tend to have more difficulty preparing for, responding to, and recovering from disaster situations.

[40] Trieb, Carolin-Anna. *Vulnerability to Natural Hazards: A Gender Perspective in Disasters*, Management Center Innsbruck. Accessed at: http://www.ibgeographypods.org/uploads/7/6/2/2/7622863/university_dissertation_ib_dp_geography.pdf
[41] Rodriguez, Donner & Trainor. *Handbook of Disaster Research. 2018.*
[42] Smith, Susan M. *Disaster planning and response: considering the needs of the frail elderly*, International Journal of Emergency Management. Accessed at: https://www.researchgate.net/publication/244924906_Disaster_planning_and_response_Considering_the_needs_of_the_frail_elderly
[43] Anderson, William A. *Bringing children into focus on the social science disaster research agenda*, International Journal of Mass Emergencies and Disasters. Accessed at: http://ijmed.org/articles/376/download/

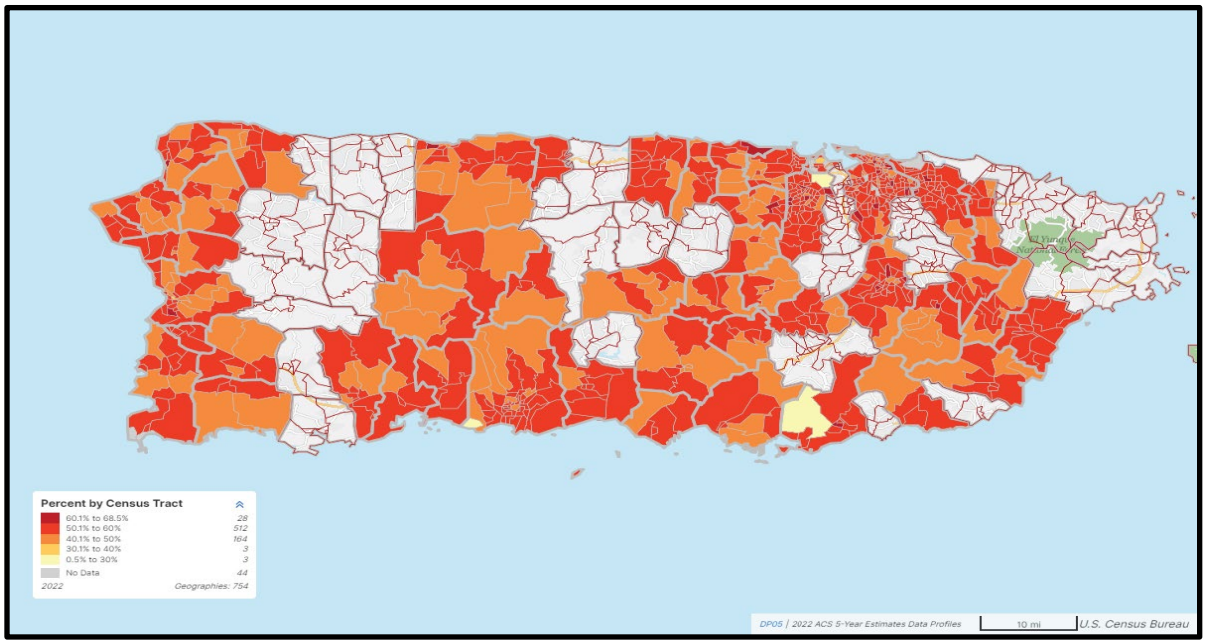


Figure 25: Map of Puerto Rico identifying the Female Population percent in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

Puerto Rico Population by Age

Puerto Rico's twenty-two-point-one percent (22.1%) population over age sixty-five (65) is higher than the U.S. average and the average of other CDBG-DR receiving states. However, the spatial pattern of aging populations does not indicate specific concentrations. Ninety-three (93) census tracts have greater than thirty percent (30%) of their population over age sixty-five (65), and only five (5) census tracts have greater than forty percent (40%) populations over age sixty-five (65).

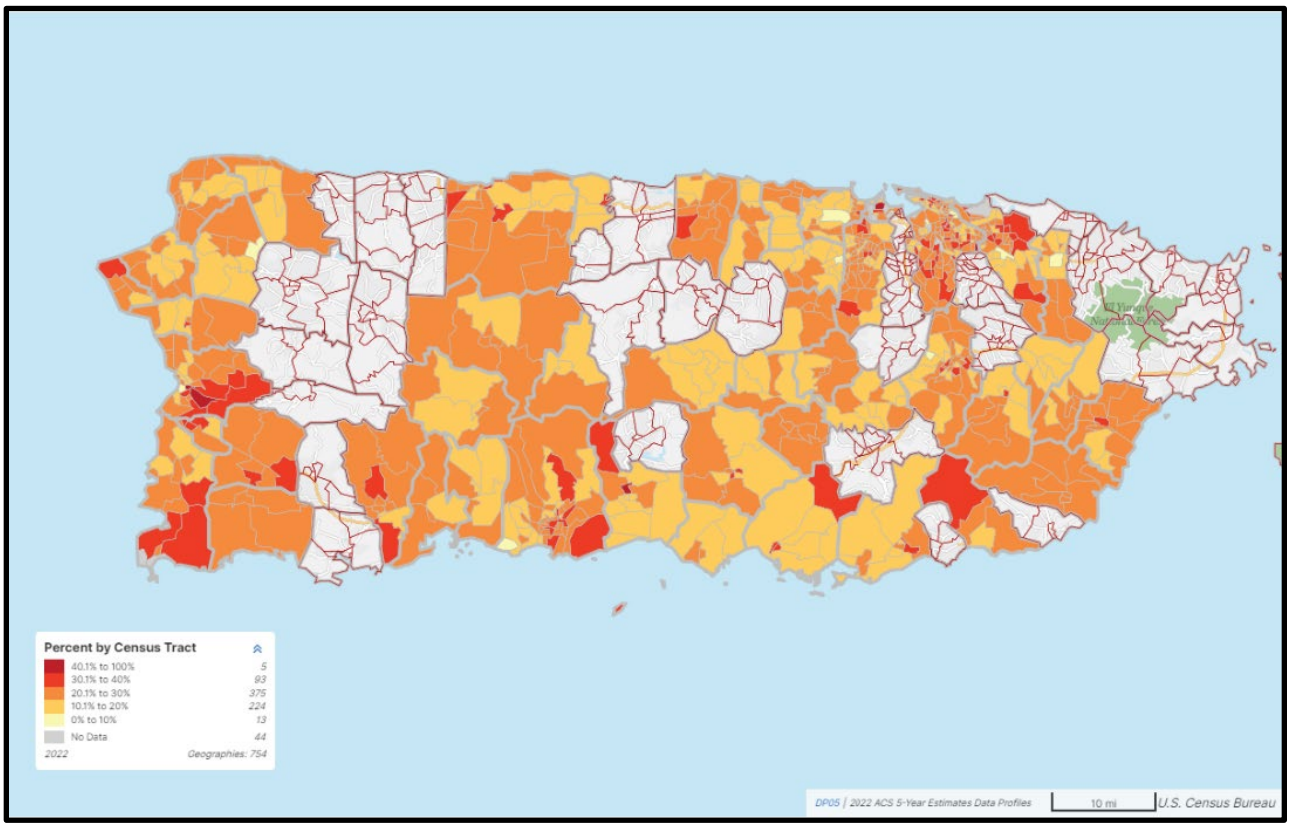


Figure 26: Map of Puerto Rico Identifying the percent of Populations over 65 in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

Puerto Rico Population by Familial Status

Like the other social characteristics assessed here, familial status does not show a distinct concentration pattern across Puerto Rico. Only twenty-eight (28) census tracts had forty percent (40%) or more households with children. However, an additional one hundred twenty-nine (129) census tracts had thirty percent (30%) or more households with children.

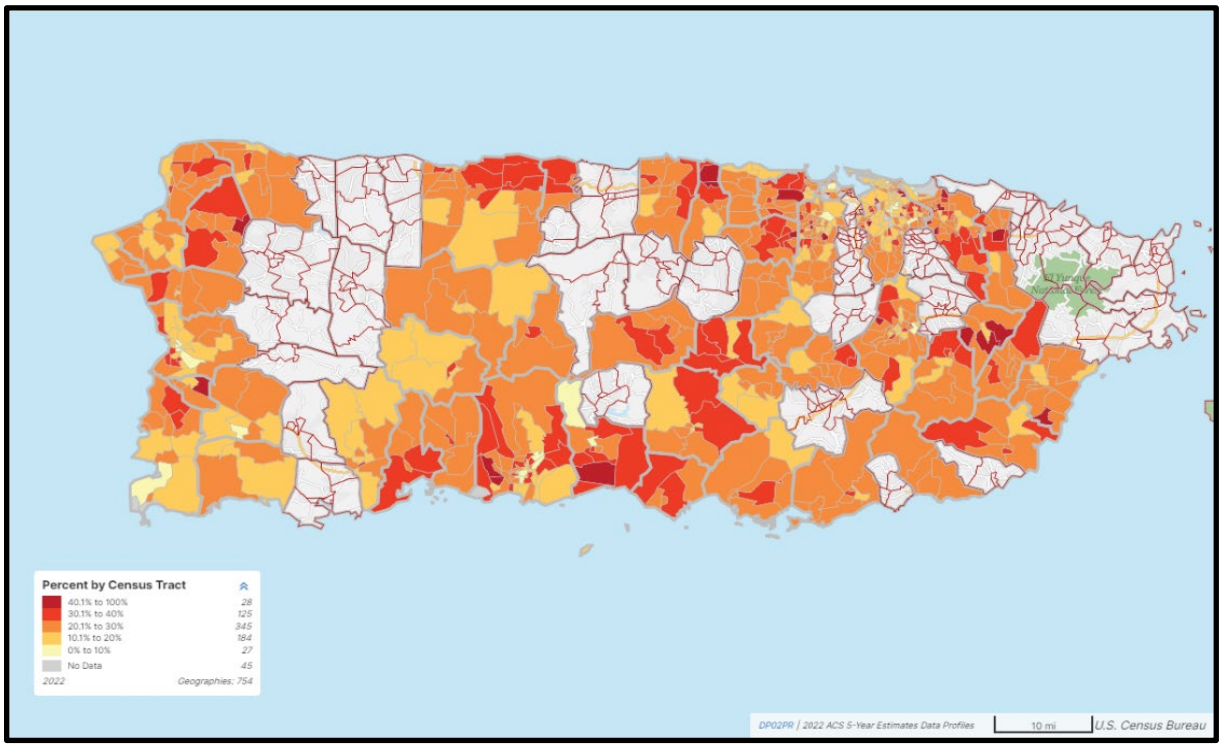


Figure 27: Map of Puerto Rico Identifying the percent of Households with children under 18 in the MID area by census track. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP02PR.

Identifying Puerto Rico Population by Race

The U.S. Census provides quality data on racial composition at several levels of geographic specificity from State to census block group. Most useful for the Puerto Rican case are county (municipality) and census tract levels of geography. These enumeration units are either politically defined (in the case of municipalities) or statistically defined (in the case of census tracts) based on population thresholds determined by the census.[44] Identifying the racial composition of census tracts enables a more holistic understanding of where these different population groups reside across Puerto Rico. However, it must be noted that data on race (White, Black, Other) may be misleading in the Puerto Rican context due to historical trends in identifying as "white" even though much

[44] U.S. Census Bureau. Glossary. Accessed at: https://www.census.gov/programs-surveys/geography/about/glossary.html#:~:text=Census%20Tracts%20are%20small%2C%20relatively,Bureau's%20Participant%20Statistical%20Areas%20Program.

of the population across the Island has roots in Africa.[45] Maps of Other Race (Non-White/Black) populations, Black populations, and White populations show specific regionalization patterns.

Those identifying as "Other" race (Non-White/Black) constitute a larger proportion of the population in several regions of Puerto Rico, including southwestern municipalities like Hormigueros, Lajas, and Mayagüez, northern municipalities such as Arecibo, Vega Baja, and Vega Alta, southern municipalities like Juana Díaz, Santa Isabel, and Salinas, as well as northeastern municipalities like Canóvanas and Carolina. In contrast, those identifying as Black comprise a higher percentage of the population in southeastern municipalities such as Las Piedras, Yabucoa, and Patillas. White populations, on the other hand, predominate in the majority of other municipalities throughout Puerto Rico.

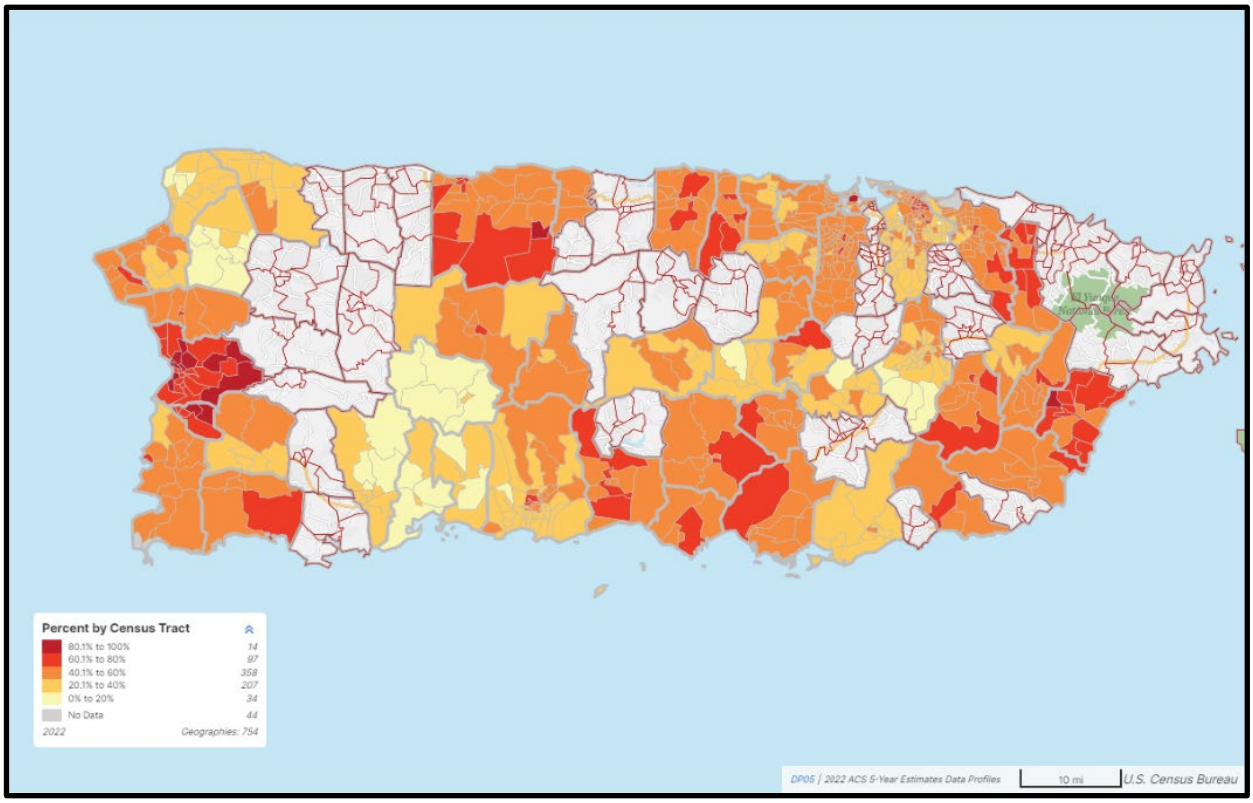


Figure 28: Map of Puerto Rico Identifying the percent of Non-White/Black population in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

[45] Alford, Natasha S. Why Some Black Puerto Ricans Choose 'White' on the Census, The New York Times. February 2020. Accessed at: https://www.nytimes.com/2020/02/09/us/puerto-rico-census-black-race.html

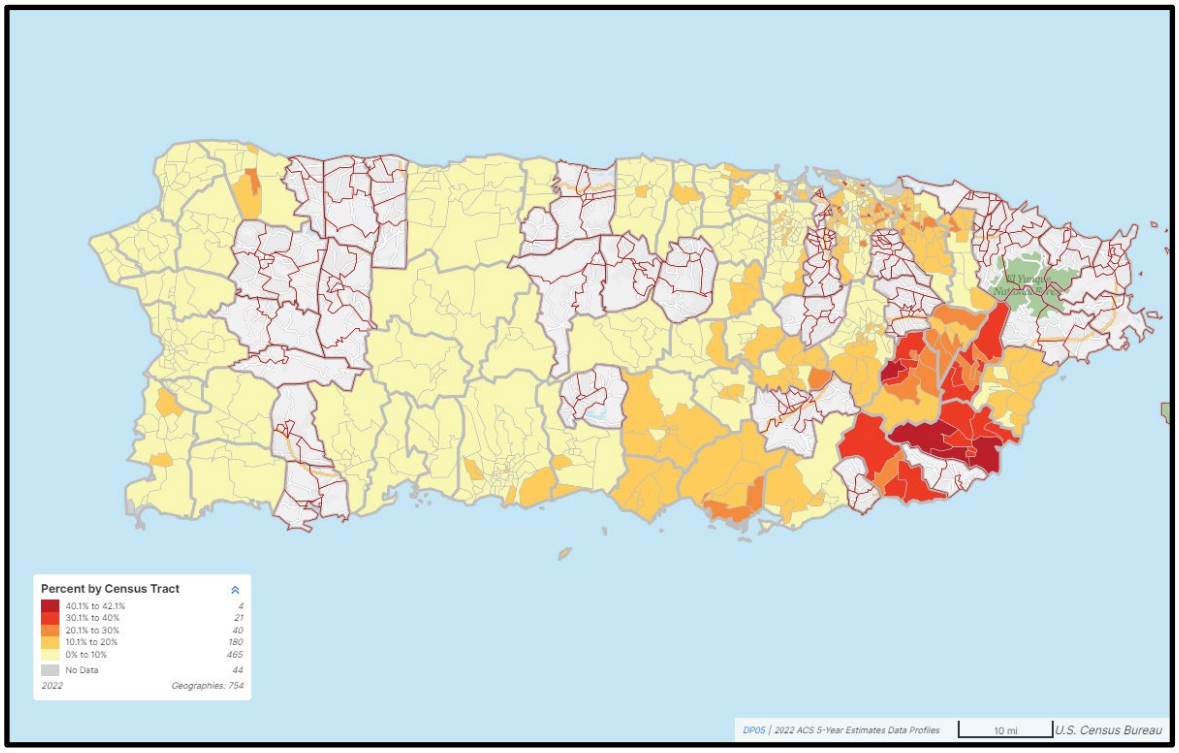


Figure 29: Map of Puerto Rico identifying the percent of Black population in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

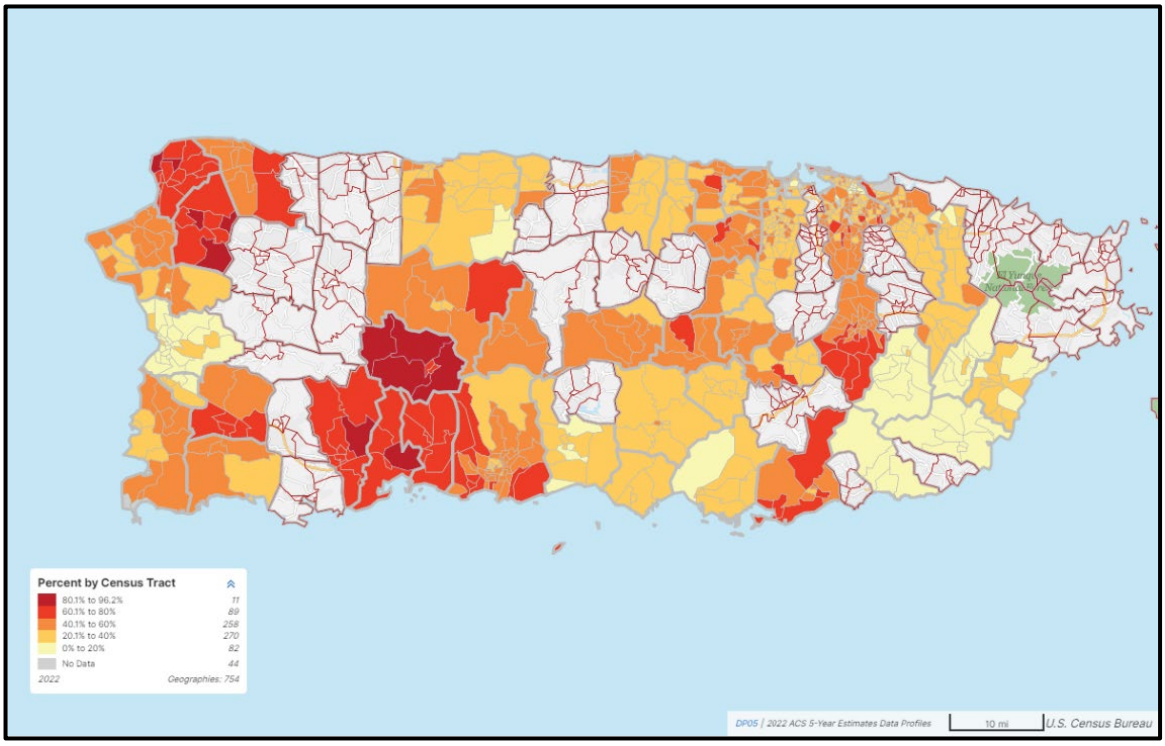


Figure 30: Map of Puerto Rico identifying the percent of White population in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

Identifying Puerto Rico's Population by Ethnicity

The U.S. Office of Management and Budget (OMB) defines "Ethnicity" as either "Hispanic or Latino" or "Not Hispanic or Latino". OMB defines "Hispanic or Latino" as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.[46] It should be noted that people who identify themselves as Hispanic, Latino, or Spanish may be any race. MID area population predominantly identifies itself as Hispanic/Latino with no census tract containing less than sixty-nine point seven percent (69.7%) population (Figure 28). Puerto Rico's ninety-eight point seven percent (98.7%) Hispanic/Latino population automatically qualifies most of Puerto Rico as a protected class according to the Fair Housing Act. However, additional social vulnerabilities such as Afro Caribbean ancestry, poverty, or the intersection of race/ethnicity and poverty may provide useful information beyond that provided by social vulnerability measures shown in the Table 12.

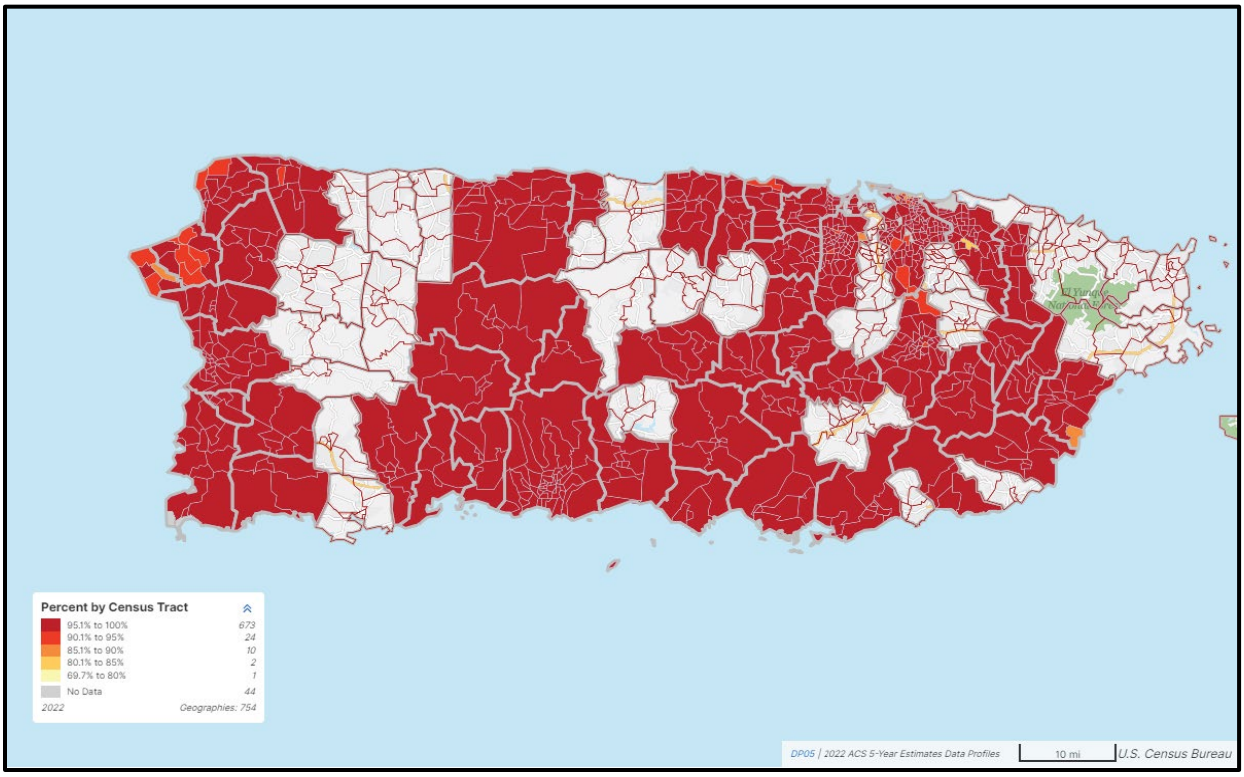


Figure 31: Map of Puerto Rico identifying the percent of Hispanic/Latino Populations in the MID area by census tract. Source: U.S. Census ACS: 5-year (2018-2022) Estimate- Table DP05.

[46] R. Marks and N. Jones, Collecting and Tabulating Ethnicity and Race Response in the 2020 Census. Accessed at: https://www2.census.gov/about/training-workshops/2020/2020-02-19-pop-presentation.pdf

Afro Caribbean Ancestry

The Migration Policy Institute identified thirteen (13) different Caribbean countries in a Caribbean Migration Study aimed at understanding Black Caribbean immigration to the United States.[47] These countries include Cuba, Dominican Republic (Table 12), Haiti, Jamaica, Bahamas, Barbados, Trinidad & Tobago, and Countries in the British West Indies, the U.S. Virgin Islands, and other West Indian Countries such as Grenada, St. Lucia, Antigua-Barbuda, St. Vincent, Dominica, and St. Kitts-Nevis (Table 13). In Puerto Rico, the largest populations of Black Caribbean have ancestral links to the Dominican Republic.

Populations of Dominican ancestry account for approximately one point seventy-six percent (1.76%) of Puerto Rico's total population. From the HUD-Identified MID Areas, the municipality of San Juan has the largest population of Dominicans with a 58.14%. Two other municipalities, Carolina with a 13.99% and Bayamón with 8.71% have the greater number of all Dominicans. The only two municipalities that do not have a registered population of Dominicans are Adjuntas and Comerío.

Municipality	Population 2022	Households 2022	Total Cubans	Total Dominicans	Total Hispanic Afro Caribbean
Adjuntas	17,905	5,608	8	0	8
Aguada	37,666	12,904	48	38	86
Aguadilla	53,931	21,650	136	172	308
Aibonito	24,555	8,995	30	84	114
Arecibo	25,026	8,757	149	329	478
Añasco	15,289	31,415	0	70	70
Barceloneta	22,416	8,254	0	23	23
Barranquitas	28,944	9,098	0	84	84
Bayamón	181,577	69,043	973	4,396	5,369
Cabo Rojo	46,718	17,568	78	92	170
Caguas	125,136	49,645	652	1,348	2,000
Canóvanas	41,637	14,712	63	1,252	1,315
Carolina	151,571	61,883	1,256	7,060	8,316
Cataño	22,364	8,794	184	266	450

[47] K. Thomas, A Demographic Profile of Black Caribbean Immigrants in the United States, Migration Policy Institute, https://www.migrationpolicy.org/pubs/CBI-CaribbeanMigration.pdf

Cidra	33,887	14,207	26	79	105
Coamo	18,619	12,835	34	133	167
Comerío	35,663	5,420	0	0	0
Dorado	12,800	11,950	27	227	254
Guayama	35,262	14,427	43	186	229
Guayanilla	15,413	6,327	1	16	17
Hormigueros	49,924	6,139	15	221	236
Humacao	42,754	18,206	105	309	414
Isabela	14,495	14,843	69	177	246
Jayuya	45,923	4,945	0	61	61
Juana Díaz	36,672	15,574	108	68	176
Juncos	22,936	13,145	18	122	140
Lajas	34,814	8,210	78	42	120
Las Piedras	70,609	12,219	63	243	306
Mayagüez	37,279	29,343	178	314	492
Moca	29,208	13,254	14	196	210
Naranjito	21,229	8,536	60	19	79
Orocovis	15,524	6,792	0	37	37
Patillas	19,763	6,196	35	32	67
Peñuelas	132,138	6,939	11	30	41
Ponce	15,316	52,977	234	670	904
Rincón	25,000	5,679	13	72	85
Salinas	31,174	9,721	0	64	64
San Germán	37,260	11,560	53	165	218
San Juan	334,776	147,044	4,259	29,337	33,596
San Lorenzo	19,822	13,775	18	54	72
Santa Isabel	66,041	7,230	9	13	22
Toa Alta	72,783	22,568	111	114	225
Toa Baja	27,535	28,155	159	1,567	1,726
Utuado	34,786	10,326	14	21	35
Vega Alta	53,684	12,599	142	387	529
Vega Baja	29,305	20,098	189	159	348
Yabucoa	32,904	11,682	22	68	90
Yauco	17,905	12,392	32	42	74

Table 12: Hispanic Afro Caribbean Ancestry by MID area. Source: B03001: Hispanic or Latino Origin by Specific Origin. 2022 ACS 5-Year Estimates.

Likewise, Table 13 demonstrates additional ethnicity demographics with the Population of Non-Hispanic/Latino Hispanic Afro Caribbean ancestry making up the largest number of residents between the municipalities of Bayamón, Cabo Rojo, Carolina, and San Juan.

Municipality	Population 2022	Haitian	Jamaican	Bahamian	Barbadian	British West Indian	Trinidadian and Tobagonian	U.S. Virgin Islander	West Indian	Other West Indian	Total Non-Hispanic Afro Caribbean
Adjuntas	17,905	0	0	0	0	0	0	0	0	0	0
Aguada	37,666	0	0	0	0	0	0	0	0	0	0
Aguadilla	53,931	0	0	0	0	16	0	0	14	0	30
Aibonito	24,555	0	0	0	0	0	0	0	0	0	0
Arecibo	25,026	0	0	0	18	0	0	0	0	0	18
Añasco	15,289	0	0	0	0	0	0	0	0	0	0
Barceloneta	22,416	0	0	0	0	0	0	0	0	0	0
Barranquitas	28,944	0	0	0	0	0	0	0	0	0	0
Bayamón	181,577	55	0	0	0	0	0	13	69	0	137
Cabo Rojo	46,718	0	0	0	0	0	0	0	85	0	85
Caguas	125,136	0	0	0	0	18	0	0	0	0	18
Canóvanas	41,637	12	0	0	0	0	0	0	0	0	12
Carolina	151,571	30	0	0	0	0	0	0	72	0	102
Cataño	22,364	0	0	0	0	0	0	0	0	0	0
Cidra	33,887	0	0	0	0	0	15	0	0	0	15
Coamo	18,619	0	0	0	0	0	0	0	0	0	0
Comerío	35,663	0	0	0	0	0	0	0	0	0	0
Dorado	12,800	0	0	0	0	0	0	0	0	0	0
Guayama	35,262	0	0	0	0	0	0	0	2	0	2
Guayanilla	15,413	0	0	0	0	0	0	0	0	0	0
Hormigueros	49,924	0	0	0	0	0	0	0	0	0	0
Humacao	42,754	0	0	0	0	0	0	0	0	0	0
Isabela	14,495	0	0	0	0	0	0	0	11	0	11
Jayuya	45,923	0	0	0	0	0	0	0	0	0	0
Juana Díaz	36,672	0	0	0	0	0	0	0	0	0	0
Juncos	22,936	0	0	0	0	0	0	0	0	0	0
Lajas	34,814	0	0	0	0	0	0	0	12	0	12
Las Piedras	70,609	42	0	0	0	0	0	0	0	0	42
Mayagüez	37,279	32	0	0	0	0	0	0	8	0	40
Moca	29,208	0	0	0	0	0	0	0	0	0	0

Naranjito	21,229	0	0	0	0	0	0	0	0	0	0
Orocovis	15,524	0	0	0	0	0	0	0	55	0	55
Patillas	19,763	0	17	0	0	0	0	0	0	0	17
Peñuelas	132,138	0	0	0	0	0	0	0	0	0	0
Ponce	15,316	46	0	0	0	17	0	0	7	0	70
Rincón	25,000	0	0	0	0	0	0	0	0	0	0
Salinas	31,174	0	0	0	0	0	0	0	0	54	54
San Germán	37,260	0	0	0	0	0	0	0	12	0	12
San Juan	334,776	37	27	0	0	55	12	17	102	0	250
San Lorenzo	19,822	0	0	0	0	0	0	0	0	0	0
Santa Isabel	66,041	0	0	0	0	12	0	0	0	0	12
Toa Alta	72,783	0	0	0	0	0	0	33	27	0	60
Toa Baja	27,535	10	0	0	0	0	0	0	0	0	10
Utuado	34,786	0	0	0	0	0	0	0	0	0	0
Vega Alta	53,684	0	0	0	0	0	0	0	0	0	0
Vega Baja	29,305	0	0	0	0	0	0	0	0	0	0
Yabucoa	32,904	0	0	0	0	0	0	0	0	0	0
Yauco	17,905	0	0	0	0	0	0	0	0	0	0

Table 13: Non-Hispanic Afro Caribbean Ancestry by MID area. Source: B04004:People Reporting Single Ancestry. 2022 ACS 5-Year Estimates.

Language

Unlike most other places in the United States, Puerto Rico has a prominent level of Spanish language proficiency. According to U.S. Census data, 94.80% of the population of Puerto Rico uses Spanish as its spoken language (Table 14). CDBG-DR Program implementation included the completion of a Language Access Plan (**LAP**) for Puerto Rico. Based on this analysis in the LAP, PRDOH is already taking measures to address these needs, such as producing all programmatic documents in both English and Spanish. In accordance with HUD guidance, PRDOH should continue proactively providing "vital documents" in both English and Spanish.

Speak a Language other than english	Language Spoken at home	Percent population
Spanish	2,994,899	94.80%
Speak only English	159,503	5.00%
Other Indo- European languages	3,198	0.10%
Asian and Pacific Island languages	1,334	0%
Other languages	571	0%
Total:	3,159,505	99.90%

Table 14: U.S. Census Bureau. (2022). Language Spoken at Home. American Community Survey, ACS 5-Year Estimates Table S1601.

Religion

According to data retrieved from the Association of Religion Data Archives and World Religion Database from 2020, the majority of Puerto Ricans identify as Christians. Specifically, 73% are Catholics, 14% are Protestants, and 13% are Independents or unaffiliated Christians, as indicated in Table 15.

Religion	Percent
Baha'is	0%
Buddhists	0%
--Mahayanists	0%
--Theravadins	---
--Lamaists	---
Chinese folk-religionists	0%
Christians	96%
--unaffiliated Christians	4%
--Orthodox	0%
--Catholics	73%
--Protestants	14%
--Independents	13%
Daoists	---
Confucianists	---
Ethnic religionists	---
Hindus	0%
--Vaishnavites	0%
--Shaivites	0%
--Saktists	0%
Jains	---

Jews	0%
Muslims	0%
--Sunnis	0%
--Shias	0%
--Islamic schismatics	---
New religionists	0%
Shintoists	---
Sikhs	---
Spiritists	1%
Zoroastrians	---
Non-Religious	3%
--Agnostics	3%
--Atheists	0%

Table 15: Religion Data in Puerto Rico. Source: World Religion Database. 2020 https://www.thearda.com/world-religion/national-profiles?u=182c

Identifying the proximity of natural and environmental hazards

As identify by the EPA, Figure 32 shows the proximity of natural and environmental hazards that affected the population in the MID area, including members of protected classes, vulnerable populations, and underserved communities, as describe below:

- Toxic Releases to Water (**TRI Water**): is a publicly available EPA database that contains information on toxic chemical releases and waste management activities reported annually by certain industries as well as federal facilities. The database also contains links to compliance and enforcement information.
- National Priorities List (**NPL**): is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.
- National Pollutant Discharge Elimination System (**NPDES**): The NPDES permit program, created in 1972 by the Clean Water Act (**CWA**), helps address water pollution by regulating point sources that discharge pollutants to waters of the United States.
- Biennial Reporting (**BR**): The Hazardous Waste Report (Biennial Report) collects data on the generation, management, and minimization of hazardous waste. This provides detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage, and disposal facilities.

- Brownfields Assessment, Cleanup and Redevelopment Exchange System (**ACRES**): The ACRES captures grantee reported data on environmental activities and accomplishments (assessment, cleanup and redevelopment), funding, job training, and details on cooperative partners and leveraging efforts - a central objective of the Brownfields Program. The information in ACRES is provided at the property and grant level.

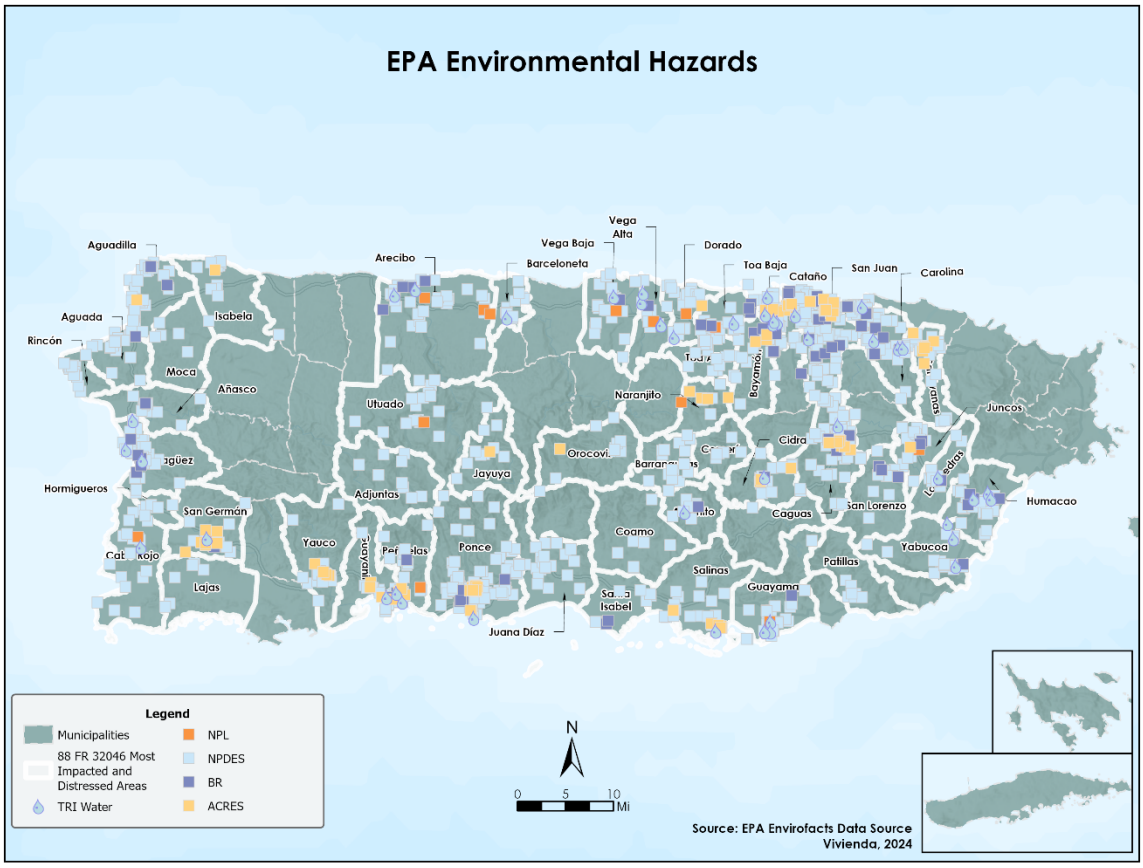


Figura 32. Map of Puerto Rico indentfiying EPA Environmental Hazards. EPA Envirofacts Data Source Vivienda, 2024.

Grantee Demographics and Disaster-Impacted Populations

Grantee Demographics and Disaster-Impacted Populations						
Demographic	Area-Wide estimate	Area-wide percent	Disaster Declaration Estimate	Disaster Declaration percent	MID estimates	MID percent
Total Population	3,272,382	100%	3,272,382	100%	2,453,456	75%
Under 5 years	112,877	3.40%	112,877	3.40%	84,845	75%
65 years and over	722,934	22.10%	722,934	22.10%	543,735	75%
Population with a Disability	722,330	22.30%	722,330	22.30%	537,079	74%
White or Caucasian	2,119,740	64.80%	2,119,740	64.80%	1,553,669	73%
Black or African American	507,998	15.50%	507,998	15.50%	392,513	77%
American Indian and Alaska Native	51,071	1.60%	51,071	1.60%	44,346	87%
Asian	9,359	0.30%	9,359	0.30%	7,156	76%
Native Hawaiian and other Pacific Islander	998	0%	998	0%	908	91%

Other	1,447,932	44.20%	1,447,932	44.20%	1,118,118	77%

Table 16: Grantee Demographics and Disaster Impacted Population. U.S. (sf). DP05: Demographic and Housing Estimates. 2022 ACS 5-Year Estimates.

Income Demographics			
Income/ Economic Demographics	**Statewide**	**Area Impacted by Disaster**	**HUD MIDs**
Median Household Income	$24,002	$24,002	$21,287
Per Capita Income	$15,637	$15,637	$23,975

Table 17: Income Demographics. Income Demographics- Low Income. Source: U.S. . (sf). S1901: Income in the past 12 months 2022 ACS 5-Year Estimates

Income Demographics - Low Income			
Income/ Economic Demographics	**Statewide**	**Area Impacted by Disaster**	**HUD MIDs**
Income Status in the past 12 months below the poverty level	3,195,054	3,195,054	1,029,197

Table 18: Income Demographics- Low Income. Source: U.S. (sf). S1701: Poverty Status in the past 12 months 2022 ACS 5-Year Estimates.

LMI Analysis - Overall			
Category	**Total LMI Persons**	**Total Population**	**Percent LMI**
Area-wide	2,565,695	3,326,084	77.14%

Table 19: LMI Analysis – Overall. Source: United States Census Bureau. (Sf). Total Population estimate using ACS 2012-2016.

LMI Analysis - Federally Declared Disaster Areas						
County/ Municipality	**Non-MID-Total LMI Persons**	**Non- MID-Total Population**	**Non- MID Percentage LMI**	**MID- Total LMI Persons**	**MID- Total Population**	**MID-Percentage LMI**
Adjuntas	--	--	--	15,774	17,821	88.51%

LMI Analysis - Federally Declared Disaster Areas						
County/ Municipality	Non-MID-Total LMI Persons	Non- MID-Total Population	Non- MID Percentage LMI	MID- Total LMI Persons	MID- Total Population	MID-Percentage LMI
Aguada	--	--	--	31,638	38,443	82.30%
Aguadilla	--	--	--	41,898	51,325	81.63%
Aibonito	--	--	--	19,322	23,349	82.75%
Añasco	--	--	--	22,064	26,875	82.10%
Arecibo	--	--	--	70,023	84,590	82.78%
Arroyo	--	--	--	15,588	17,643	88.35%
Barceloneta	--	--	--	19,747	23,515	83.98%
Barranquitas	--	--	--	23,591	27,463	85.90%
Bayamón	--	--	--	126,265	176,906	71.37%
Cabo Rojo	--	--	--	39,036	48,483	80.51%
Caguas	--	--	--	91,670	129,214	70.94%
Canóvanas	--	--	--	34,720	45,311	76.63%
Carolina	--	--	--	105,849	155,927	67.88%
Cataño	--	--	--	19,283	24,865	77.55%
Coamo	--	--	--	30,677	38,057	80.61%
Comerío	--	--	--	17,057	19,227	88.71%
Dorado	--	--	--	23,200	36,509	63.55%
Guánica	--	--	--	14,786	16,404	90.14%
Guayama	--	--	--	32,380	38,303	84.54%
Hormigueros	--	--	--	12,981	16,104	80.61%

LMI Analysis - Federally Declared Disaster Areas						
County/ Municipality	Non-MID-Total LMI Persons	Non- MID-Total Population	Non- MID Percentage LMI	MID- Total LMI Persons	MID- Total Population	MID-Percentage LMI
Humacao	--	--	--	41,250	51,935	79.43%
Isabela	--	--	--	34,902	40,788	85.57%
Jayuya	--	--	--	12,847	14,174	90.64%
Juana Díaz	--	--	--	36,393	46,001	79.11%
Juncos	--	--	--	31,693	38,607	82.09%
Lajas	--	--	--	20,919	23,410	89.36%
Las Piedras	--	--	--	30,460	37,340	81.57%
Mayagüez	--	--	--	62,822	76,147	82.50%
Moca	--	--	--	31,322	36,437	85.96%
Naranjito	--	--	--	22,629	28,312	79.93%
Orocovis	--	--	--	18,517	20,874	88.71%
Patillas	--	--	--	15,160	17,433	86.96%
Peñuelas	--	--	--	18,296	21,032	86.99%
Ponce	--	--	--	115,885	141,569	81.86%
Rincón	--	--	--	11,926	14,141	84.34%
Salinas	--	--	--	24,272	28,147	86.23%
San Germán	--	--	--	26,176	31,422	83.30%
San Juan	--	--	--	233,390	338,623	68.92%
San Lorenzo	--	--	--	30,385	37,700	80.60%
Santa Isabel	--	--	--	16,825	21,776	77.26%

LMI Analysis - Federally Declared Disaster Areas						
County/ Municipality	Non-MID-Total LMI Persons	Non- MID-Total Population	Non- MID Percentage LMI	MID- Total LMI Persons	MID- Total Population	MID-Percentage LMI
Toa Alta	--	--	--	46,488	72,514	64.11%
Toa Baja	--	--	--	56,322	78,041	72.17%
Utuado	--	--	--	25,485	29,548	86.25%
Vega Alta	--	--	--	29,400	36,241	81.12%
Vega Baja	--	--	--	41,002	53,468	76.69%
Yabucoa	--	--	--	28,924	33,979	85.12%
Yauco	--	--	--	29,294	36,475	80.31%
Aguas Buenas	21,570	26,179	82.39%	--	--	--
Camuy	25,909	31,382	82.56%	--	--	--
Cayey	34,653	44,075	78.62%	--	--	--
Ceiba	10,098	11,871	85.06%	--	--	--
Ciales	14,818	16,589	89.32%	--	--	--
Cidra	29,407	38,923	75.55%	--	--	--
Corozal	29,107	33,825	86.05%	--	--	--
Culebra	1,109	1,424	77.88%	--	--	--
Fajardo	25,422	31,385	81.00%	--	--	--
Florida	9,550	11,090	86.11%	--	--	--
Guayanilla	16,043	18,782	85.42%	--	--	--
Guaynabo	48,086	87,617	54.88%	--	--	--
Gurabo	27,406	45,390	60.38%	--	--	--

LMI Analysis - Federally Declared Disaster Areas						
County/ Municipality	Non- MID- Total LMI Persons	Non- MID- Total Population	Non- MID Percentage LMI	MID- Total LMI Persons	MID- Total Population	MID- Percentage LMI
Hatillo	31,196	40,065	77.86%	--	--	--
Lares	23,328	26,398	88.37%	--	--	--
Las Marías	7,627	8,543	89.28%	--	--	--
Loíza	21,917	26,125	83.89%	--	--	--
Luquillo	14,480	18,226	79.45%	--	--	--
Manatí	32,008	39,514	81.00%	--	--	--
Maricao	5,560	6,048	91.93%	--	--	--
Maunabo	9,487	11,109	85.40%	--	--	--
Morovis	26,960	31,023	86.90%	--	--	--
Naguabo	21,044	25,829	81.47%	--	--	--
Quebradillas	20,566	24,137	85.21%	--	--	--
Río Grande	37,643	49,540	75.99%	--	--	--
Sabana Grande	18,716	22,932	81.62%	--	--	--
San Sebastián	33,033	37,647	87.74%	--	--	--
Trujillo Alto	43,234	66,722	64.80%	--	--	--
Vieques	6,834	8,688	78.66%	--	--	--
Villalba	18,351	22,538	81.42%	--	--	--
Total	665,162	863,616	77.08%	1,900,533	2,462,462	77.18%

Table 20: LMI Analysis- Federally Declared Disaster Area. U.S. (Sf). Total Low Income Persons- HUD estimate using ACS 2012-2016 Standard Tabulation data.

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
Adjuntas	Total population	17,379	
	Speak only English	888	5%
	Spanish	16,491	95%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Aguada	Total population	36,804	
	Speak only English	1,568	4%
	Spanish	35,236	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Aguadilla	Total population	52,907	
	Speak only English	2,198	4%
	Spanish	50,649	96%
	French, Haitian, or Cajun:	33	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	8	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	19	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Aibonito	Total population	23,711	
	Speak only English	780	3%
	Spanish	22,931	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Añasco	Total population	24,735	
	Speak only English	746	3%
	Spanish	23,989	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Arecibo	Total population	84,204	
	Speak only English	3,657	4%
	Spanish	80,514	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	7	0%
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	2	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	24	0%
	Other and unspecified languages:	0	
Barceloneta	Total population	21,781	
	Speak only English	651	3%
	Spanish	21,130	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Barranquitas	Total population	27,678	
	Speak only English	1,197	4%
	Spanish	26,481	96%

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Bayamón	Total population	177,813	
	Speak only English	11,924	7%
	Spanish	165,515	93%
	French, Haitian, or Cajun:	115	0%
	German or other West Germanic languages:	38	0%
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	39	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	122	0%
	Vietnamese:	13	0%
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	20	0%
	Arabic:	0	
	Other and unspecified languages:	27	0%
Cabo Rojo	Total population	45,646	
	Speak only English	1,329	3%
	Spanish	44,279	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	38	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Caguas	Total population	122,536	
	Speak only English	7,176	6%
	Spanish	115,247	94%
	French, Haitian, or Cajun:	63	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	29	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	21	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	

Limited English Proficiency Population of Disaster-Related Areas

County/Municipality	Language	# of LEP Speakers	% of population
	Other and unspecified languages:	0	
Canóvanas	Total population	40,710	
	Speak only English	1,362	3%
	Spanish	39,348	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Carolina	Total population	148,957	
	Speak only English	12,715	9%
	Spanish	135,685	91%
	French, Haitian, or Cajun:	113	0%
	German or other West Germanic languages:	49	0%
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	182	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	70	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	143	0%
	Other and unspecified languages:	0	
Cataño	Total population	22,239	
	Speak only English	1,326	6%
	Spanish	20,885	94%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	12	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	16	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Cidra	Total population	38,383	
	Speak only English	773	2%
	Spanish	37,583	98%
	French, Haitian, or Cajun:	19	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	8	
Coamo	Total population	33,357	
	Speak only English	935	3%
	Spanish	32,422	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Comerío	Total population	18,182	
	Speak only English	1,389	8%
	Spanish	16,793	92%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Dorado	Total population	34,490	
	Speak only English	2,020	6%
	Spanish	32,457	94%
	French, Haitian, or Cajun:	13	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Guayama	Total population	35,130	
	Speak only English	1,517	4%
	Spanish	33,605	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Russian, Polish, or other Slavic languages:	8	0%
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Guayanilla	Total population	17,041	
	Speak only English	609	4%
	Spanish	16,432	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Hormigueros	Total population	15,172	
	Speak only English	697	5%
	Spanish	14,475	95%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Humacao	Total population	49,009	
	Speak only English	2,263	5%
	Spanish	46,557	95%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	189	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Isabela	Total population	41,448	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Speak only English	2,451	6%
	Spanish	38,975	94%
	French, Haitian, or Cajun:	6	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	16	0%
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Jayuya	Total population	14,114	
	Speak only English	451	3%
	Spanish	13,663	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Juana Díaz	Total population	44,571	
	Speak only English	1,301	3%
	Spanish	43,270	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Juncos	Total population	35,518	
	Speak only English	3,035	9%
	Spanish	32,483	91%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	

Limited English Proficiency Population of Disaster-Related Areas

County/Municipality	Language	# of LEP Speakers	% of population
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Lajas	Total population	22,453	
	Speak only English	2,020	9%
	Spanish	20,433	91%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Las Piedras	Total population	33,910	
	Speak only English	818	2%
	Spanish	33,092	98%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Mayagüez	Total population	70,406	
	Speak only English	3,936	6%
	Spanish	66,422	94%
	French, Haitian, or Cajun:	40	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	8	0%
Moca	Total population	36,014	
	Speak only English	1,082	3%
	Spanish	34,932	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Naranjito	Total population	28,652	
	Speak only English	946	3%
	Spanish	27,706	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Orocovis	Total population	20,478	
	Speak only English	843	4%
	Spanish	19,635	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Patillas	Total population	15,443	
	Speak only English	463	3%
	Spanish	14,980	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Peñuelas	Total population	19,434	
	Speak only English	573	3%
	Spanish	18,861	97%

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Ponce	Total population	131,384	
	Speak only English	8,442	6%
	Spanish	122,753	93%
	French, Haitian, or Cajun:	62	0%
	German or other West Germanic languages:	24	0%
	Russian, Polish, or other Slavic languages:	13	0%
	Other Indo-European languages:	64	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	20	0%
	Other and unspecified languages:	6	0%
Rincón	Total population	14,732	
	Speak only English	417	3%
	Spanish	14,297	97%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	18	0%
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Salinas	Total population	24,772	
	Speak only English	751	3%
	Spanish	24,008	97%
	French, Haitian, or Cajun:	13	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Other and unspecified languages:	0	
San Germán	Total population	30,614	
	Speak only English	1,482	5%
	Spanish	29,124	95%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	4	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	4	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
San Juan	Total population	328,638	
	Speak only English	23,807	7%
	Spanish	302,674	92%
	French, Haitian, or Cajun:	720	0%
	German or other West Germanic languages:	83	0%
	Russian, Polish, or other Slavic languages:	18	0%
	Other Indo-European languages:	509	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	563	0%
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	39	0%
	Arabic:	140	0%
	Other and unspecified languages:	85	0%
San Lorenzo	Total population	36,298	
	Speak only English	1,343	4%
	Spanish	34,955	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Santa Isabel	Total population	19,434	
	Speak only English	589	3%
	Spanish	18,810	97%
	French, Haitian, or Cajun:	7	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Vietnamese:	28	0%
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Toa Alta	Total population	64,544	
	Speak only English	2,574	4%
	Spanish	61,871	96%
	French, Haitian, or Cajun:	10	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	89	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Toa Baja	Total population	72,317	
	Speak only English	3,810	5%
	Spanish	68,469	95%
	French, Haitian, or Cajun:	15	0%
	German or other West Germanic languages:	23	0%
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Utuado	Total population	27,209	
	Speak only English	1,230	5%
	Spanish	25,979	95%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Vega Alta	Total population	34,021	
	Speak only English	1,245	4%
	Spanish	32,680	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	28	0%

Limited English Proficiency Population of Disaster-Related Areas			
County/Municipality	**Language**	**# of LEP Speakers**	**% of population**
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	17	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	51	0%
	Other and unspecified languages:	0	
Vega Baja	Total population	52,140	
	Speak only English	1,903	4%
	Spanish	50,217	96%
	French, Haitian, or Cajun:	0	
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	20	0%
	Other and unspecified languages:	0	
Yabucoa	Total population	29,333	
	Speak only English	729	2%
	Spanish	28,597	97%
	French, Haitian, or Cajun:	7	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	0	
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	
Yauco	Total population	32,870	
	Speak only English	2,125	6%
	Spanish	30,712	93%
	French, Haitian, or Cajun:	14	0%
	German or other West Germanic languages:	0	
	Russian, Polish, or other Slavic languages:	0	
	Other Indo-European languages:	19	0%
	Korean:	0	
	Chinese (incl. Mandarin, Cantonese):	0	
	Vietnamese:	0	
	Tagalog (incl. Filipino):	0	
	Other Asian and Pacific Island languages:	0	
	Arabic:	0	
	Other and unspecified languages:	0	

Table 21: Language Spoken at Home for the Population 5 Years and Over. Source: U.S. C16001: 2022 ACS 5-Year Estimates.

Point-in-Time Count - Type of Shelter				
Geography	**Emergency Shelter**	**Transitional Housing**	**Unsheltered Homeless**	**Total Known Homeless**
Area-wide	37,391	371	1,861	2,215
FEMA Declared	37,391	371	1,861	N/A
MID	37,015	N/A	N/A	N/A

Table 22: Point in Time - Type of Shelter. Sources: HUD 2022 Continuum of Care Homeless Assistance Programs Housing Inventory Count Report. Refugee Centers Report provided by PRDOH during hurricane Fiona. Homeless data collected and analyzed by Estudios Técnicos included in the 2024-2030 State Housing Plan.

Point-in-Time Count - Impacted by Disaster				
Geography	**Emergency Shelter**	**Transitional Housing**	**Unsheltered Homeless**	**Total Known Homeless**
Area wide	37,391	N/A	N/A	N/A
FEMA Declared	37,391	N/A	N/A	N/A
MID	37,015	N/A	N/A	N/A

Table 23: *Point in Time - Impacted by Disaster. Sources: HUD 2022 Continuum of Care Homeless Assistance Programs Housing Inventory Count Report. Homeless data collected and analyzed by Estudios Técnicos included in the 2024-2030 State Housing Plan.*

Assisted Housing Impacted by the Disaster							
Municipality	Total Housing Choice Vouchers	Total Impacted Housing Choice Voucher Units	Total LIHTC Units	Total Impacted LIHTC Units	Total Public Housing Dwelling Units	Total Impacted Public Housing Dwelling Units	Remaining Unmet Need
Adjuntas	51	N/A	N/A	N/A	205	N/A	N/A
Aguada	54	N/A	N/A	N/A	232	N/A	N/A
Aguadilla	140	N/A	N/A	N/A	1955	N/A	N/A
Aibonito	1	N/A	N/A	N/A	159	N/A	N/A
Añasco	35	N/A	N/A	N/A	160	N/A	N/A
Arecibo	133	N/A	120	N/A	1611	N/A	N/A
Barceloneta	104	N/A	N/A	N/A	220	N/A	N/A
Barranquitas	21	N/A	N/A	N/A	160	N/A	N/A
Bayamón	954	N/A	N/A	N/A	1897	N/A	N/A
Cabo Rojo	21	N/A	N/A	N/A	180	N/A	N/A
Caguas	567	N/A	648	N/A	1343	N/A	N/A
Canóvanas	103	N/A	N/A	N/A	124	N/A	N/A
Carolina	756	N/A	N/A	N/A	1972	N/A	N/A
Cataño	32	N/A	N/A	N/A	1672	N/A	N/A
Cidra	57	N/A	N/A	N/A	197	N/A	N/A
Coamo	25	N/A	69	N/A	358	N/A	N/A
Comerío	30	N/A	N/A	N/A	78	N/A	N/A
Dorado	43	N/A	N/A	N/A	792	N/A	N/A
Guayama	4	N/A	123	N/A	170	N/A	N/A

Assisted Housing Impacted by the Disaster							
Municipality	Total Housing Choice Vouchers	Total Impacted Housing Choice Voucher Units	Total LIHTC Units	Total Impacted LIHTC Units	Total Public Housing Dwelling Units	Total Impacted Public Housing Dwelling Units	Remaining Unmet Need
Guayanilla	6	N/A	N/A	N/A	64	N/A	N/A
Hormigueros	26	N/A	N/A	N/A	610	N/A	N/A
Humacao	246	N/A	90	N/A	328	N/A	N/A
Isabela	48	N/A	N/A	N/A	226	N/A	N/A
Jayuya	15	N/A	N/A	N/A	292	N/A	N/A
Juana Díaz	67	N/A	N/A	N/A	516	N/A	N/A
Juncos	156	N/A	N/A	N/A	80	N/A	N/A
Lajas	6	N/A	N/A	N/A	202	N/A	N/A
Las Piedras	118	N/A	N/A	N/A	3411	N/A	N/A
Mayagüez	353	N/A	N/A	N/A	142	N/A	N/A
Moca	115	N/A	N/A	N/A	79	N/A	N/A
Naranjito	56	N/A	N/A	N/A	70	N/A	N/A
Orocovis	11	N/A	N/A	N/A	139	N/A	N/A
Patillas	9	N/A	N/A	N/A	70	N/A	N/A
Peñuelas	9	N/A	N/A	N/A	5466	N/A	N/A
Ponce	284	N/A	N/A	N/A	74	N/A	N/A
Rincón	8	N/A	N/A	N/A	191	N/A	N/A
Salinas	2	N/A	N/A	N/A	401	N/A	N/A
San Germán	14	N/A	N/A	N/A	17829	N/A	N/A

Assisted Housing Impacted by the Disaster							
Municipality	Total Housing Choice Vouchers	Total Impacted Housing Choice Voucher Units	Total LIHTC Units	Total Impacted LIHTC Units	Total Public Housing Dwelling Units	Total Impacted Public Housing Dwelling Units	Remaining Unmet Need
San Juan	1595	N/A	1193	N/A	112	N/A	N/A
San Lorenzo	77	N/A	N/A	N/A	311	N/A	N/A
Santa Isabel	2	N/A	N/A	N/A	150	N/A	N/A
Toa Alta	156	N/A	N/A	N/A	322	N/A	N/A
Toa Baja	275	N/A	N/A	N/A	100	N/A	N/A
Utuado	95	N/A	N/A	N/A	279	N/A	N/A
Vega Alta	67	N/A	N/A	N/A	160	N/A	N/A
Vega Baja	105	N/A	N/A	N/A	207	N/A	N/A
Yabucoa	83	N/A	149	N/A	303	N/A	N/A
Yauco	15	N/A	N/A	N/A	205	N/A	N/A

Table 24: *Assisted Housing Impacted by the Disaster. Source: HUD Census 2022 data from the Office of Policy Development and Research, Housing Choice Vouchers assistance from PRPHA.*

The table above summarizes the report of the assisted housing units in Puerto Rico from HUD submitted in the quarter of December 31, 2022. This data is related to the disaster impacts in the HUD-identified MID Areas.

b. Infrastructure Unmet Need

Disaster Damage and Impacts – Infrastructure

The devastation brought by the floods and Hurricane Fiona severely affected the municipality's vital infrastructure. Several Municipal Recovery Plans, developed through the CDBG-DR MRP Program, reported the extensive consequences on main roads; with landslides, fallen trees, and light poles obstructing critical

transportation arteries. Thousands of individuals were powerless, revealing a crisis with widespread water access issues and floods.

Roads and bridges

The Municipality of Ponce reported landslides that affected the infrastructure of the PR-505 km. 9.4, which suffered damage due to flooding. The neighborhoods identified by the municipality as the most affected were: Barrio Anón, Real, and Guaraguao. Figure 33 illustrates a cluster of landslides concentrated in the northern, rural part of the Municipality.

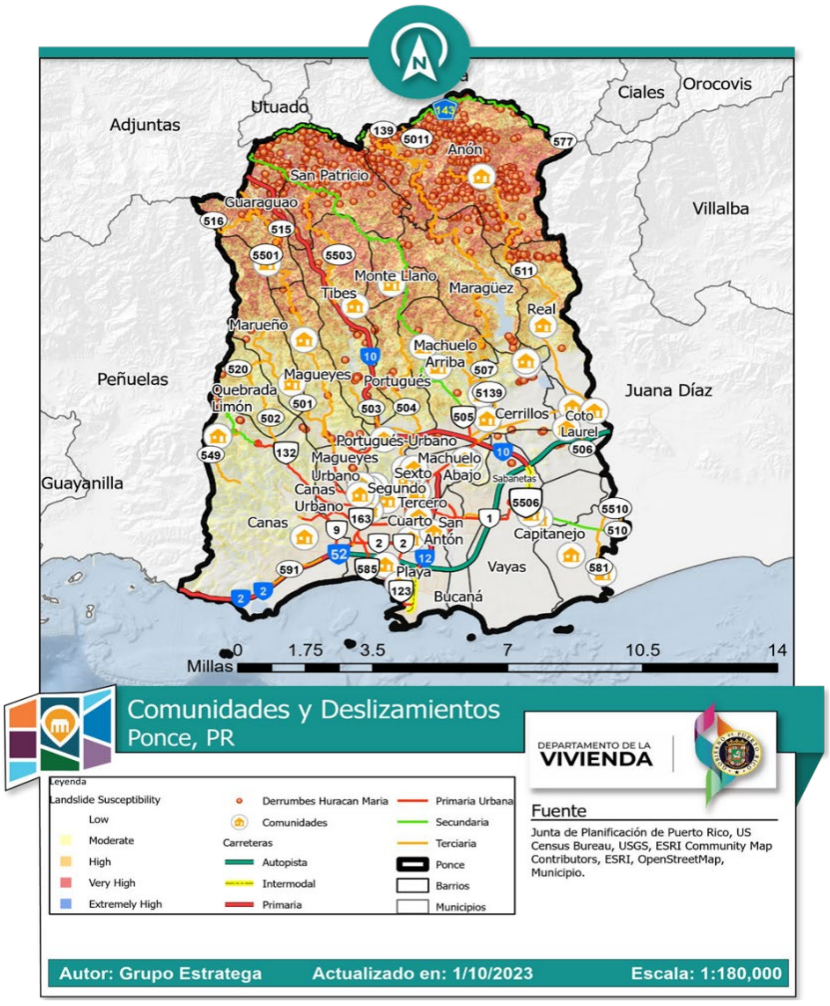


Figure 33: Landslides in the Municipality of Ponce after Hurricane María. Orange dots illustrate a cluster of landslides concentrated in the northern, rural part of the Municipality. MRP Plan, Municipality of Ponce.

Bridges and roads were also reported as damaged or destroyed in the municipalities of Utuado and Arecibo. Figure 34 illustrates an impacted road that

connects the Jurutungo sector along the Río Grande of Arecibo, which caused citizens to take alternate routes to get to their homes. The most affected neighborhoods in this municipality were: Pueblo, Río Arriba, Islote, and Domingo Ruíz, which suffered from flooding and landslides, highlighting the urgent need for comprehensive recovery efforts and resilient infrastructure.

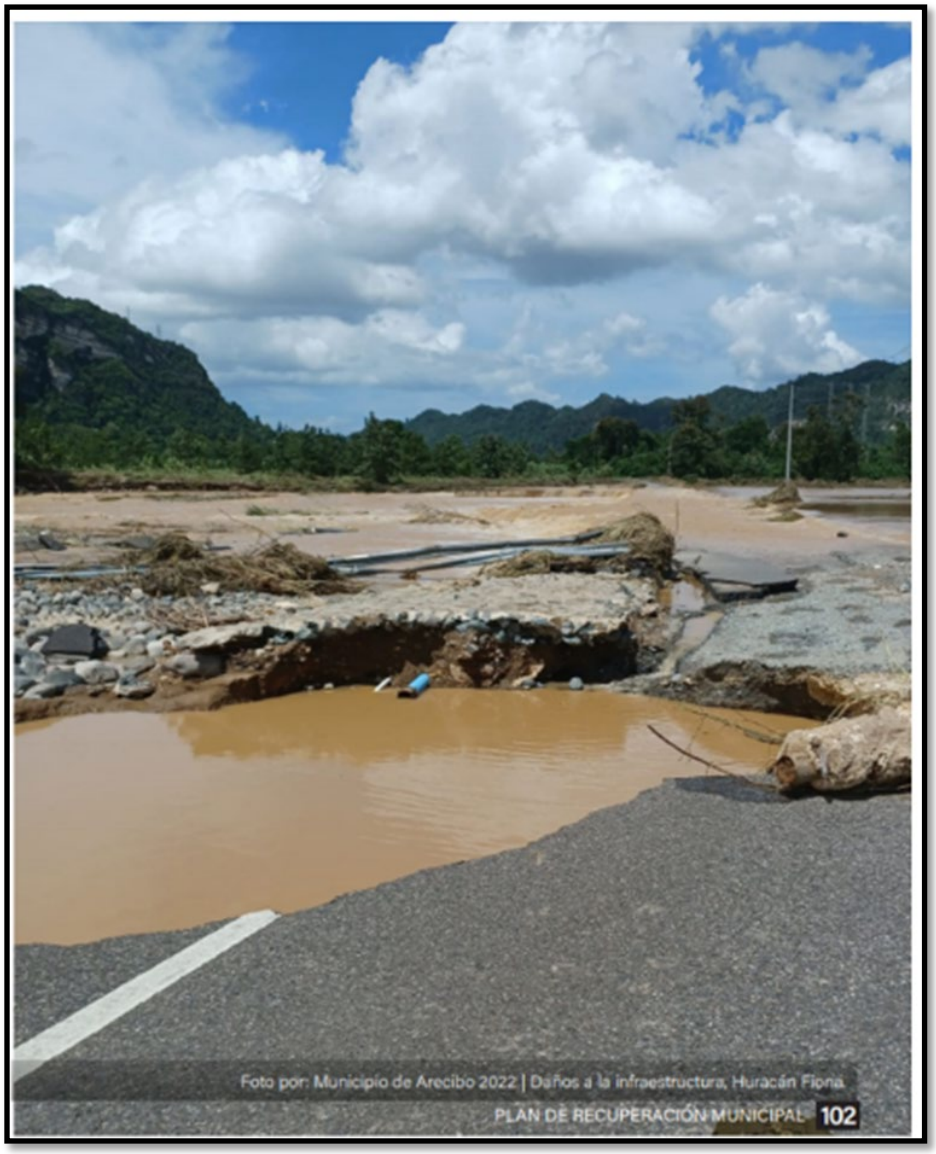


Figure 34: Road Damage near Jurutungo sector and the Río Grande River in the Municipality of Arecibo. MRP Plan Municipality of Arecibo.

Figure 35: Image locating the Municipal/state Infrastructure damaged by Hurricane Fiona reported to FEMA Public Assistance in the Municipality of Cataño. MRP Plan Municipality of Cataño.

Figure 36 below illustrates the susceptibility of landslides and the location of documented damages in the Municipalities of Utuado, Cabo Rojo, and Ponce. Most reported damages caused by Hurricane Fiona are located near water bodies and areas with moderate landslide susceptibility.

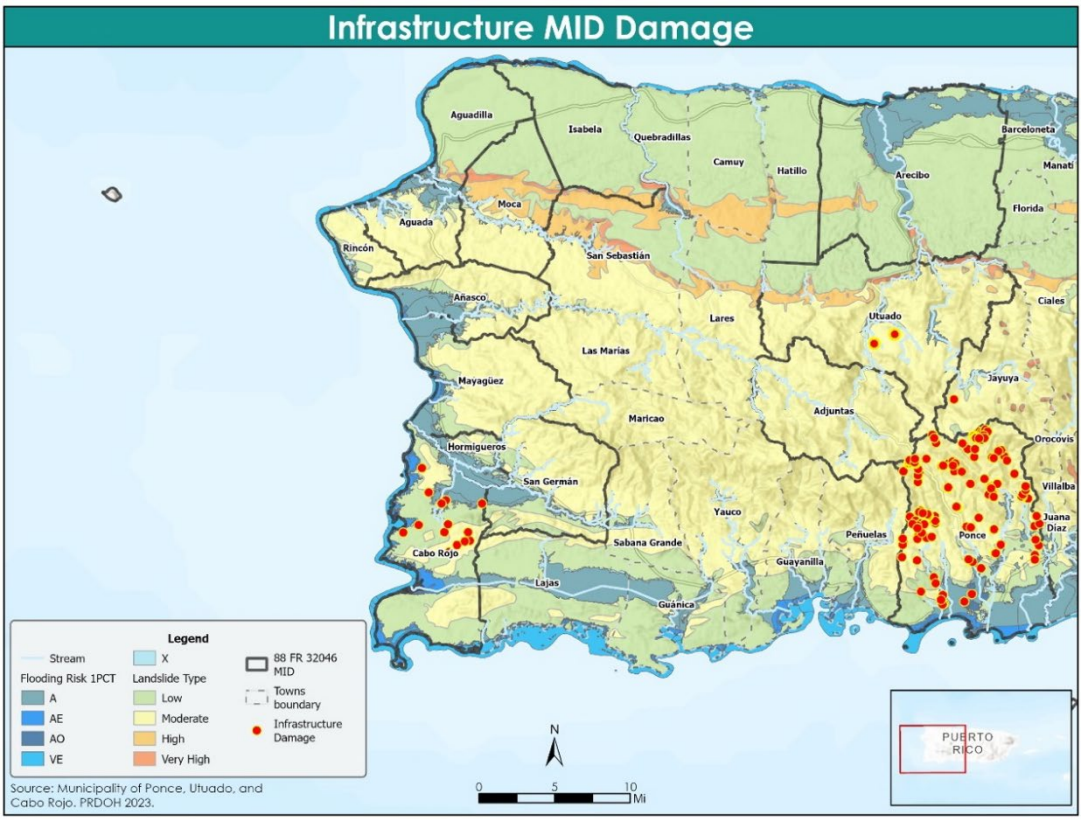


Figure 36: Infrastructure MID Damage. Red dots identifying locations of documented damages in the Municipalities of Utuado, Cabo Rojo, and Ponce.

Figure 37: Infrastructure damage in the Municipality of Utuado. El Nuevo Día, September 22,2022.

Municipalities like Toa Alta still suffer from the consequences of Hurricane Fiona floods, with main roads like PR-861 remaining closed due to landslides since the disaster occurred in 2022. The residents of Toa Baja are struggling with compromised accessibility and precarious roads, demanding immediate attention and strategic interventions.

The Municipality of Caguas reported multiple landslides in its southern regions during the emergency. Barrio Borinquen, Barrio San Salvador, and Barrio Turabo Arriba experienced landslides while bridges succumbed to flooding. During the MRP community engagement process, several interviews revealed the need for improvements in municipal infrastructure, including bridges. Details of the data collection process highlight construction aging as a possible risk factor that may have contributed to landslides and floodings in areas such as: Barrio Cañabón, La Unión sector, Barrio Caña, La Liga sector, San Antonio Sector, Río Abajo Sector, among others. Figure 38 provides a visual representation of these vulnerable areas within the municipality.

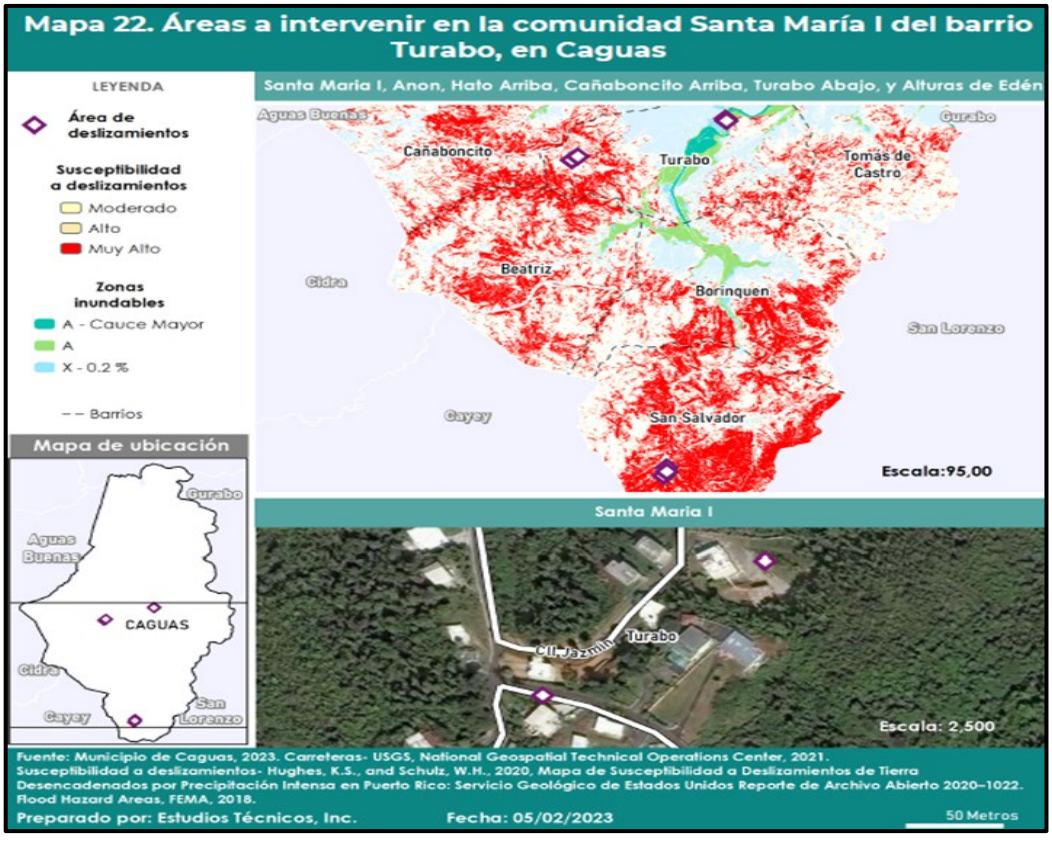


Figure 38: Landslide areas and susceptibility in the Municipality of Caguas. MRP Plan Municipality of Caguas.

Water pumping system infrastructure

The water pumping system, essential for the well-being of residents, faces persistent issues exacerbated by hurricanes and disasters. Not only does the system fail during emergencies, leaving residents without water, but the infrastructure's inherent weaknesses lead to prolonged disruptions even in non-disaster periods. The frailty of the water system demands immediate attention and substantial improvements to ensure consistent and reliable services for all Municipalities. Moreover, efforts at the state level are developing improvements to several facilities around the island. In Toa Baja, commendable efforts have been undertaken to manage stormwater and control floods, significantly reducing the impact on the Municipality. However, the battle against flooding is ongoing, requiring the continuation of initiatives like the stormwater runoff management update outlined in the Municipal Recovery Plan. This proactive approach can serve as a blueprint for other municipalities facing similar challenges, fostering a more resilient response to potential floods. Ponce, unfortunately, faced flooding due to malfunctioning water pumps, sewage breakdowns, and collapsed sewage services. After Hurricane Fiona, detailed data collection highlighted the specific damages incurred and flood mitigation needs.

Power infrastructure

The stability of the electric power system, already compromised after Hurricane Maria, continues to be a significant concern in the aftermath of subsequent disasters, including DR-4671 and DR-4649. As noted by citizens through multiple Municipal Recovery Plans, there is a general dissatisfaction with the unstable power system. Street light pole failures leave main roads in darkness and contribute to a sense of insecurity within communities. Widespread incidents of falling light poles during disasters, such as the nineteen (19) reported in Ponce after Hurricane Fiona, underscore the pressing need for comprehensive improvements to restore and maintain a reliable power supply.

In addition, ongoing efforts by PRDOH continue to support energy grid improvements, providing five hundred (500) million dollars in cost share opportunity to fund projects that enhance the electric system's reliability, affordability, and resiliency through the Energy Grid Rehabilitation and

Reconstruction Cost Share Program (**ER1**)[48]. This Program focuses on developing an improved electrical grid for all residents of Puerto Rico, as approved by FEMA's Accelerated Award Strategy (**FAASt**).

Also, a comprehensive approach is being developed through the Energy Electrical Power Reliability and Resilience (ER2) Program[49], which aims to enhance electric system reliability, affordability, and resiliency by developing and interconnecting projects that qualify as electric system enhancements or improvements. Efforts are focused on creating decentralized sources of power generation, distribution, and storage to minimize blackouts, furthering the goals defined by the Puerto Rico Energy Public Act, No. 17-2019, which sets the Island on a path to forty percent (40%) and one hundred percent (100%) renewable energy by 2025 and 2050, respectively.

Total Cost and Need by PA Category			
Public Assistance (PA) Category	**Estimated PA Cost**	**Local Match**	**Total Need**
Category C - Roads and Bridges	$311,223,019.00	$31,122,292.00	$342,345,311.00
Category D - Water Control Facilities	$295,525.00	$29,553.00	$325,078.00
Category E – Buildings and Equipment	$10,398,716.00	$1,039,867.00	$11,438,583.00
Category F - Utilities	$3,030,682.00	$303,068.00	$3,333,750.00
Category G – Parks, Recreational, Other	$3,827,386.00	$382,739.00	$4,210,125.00
Total	$328,775,328.00	$32,877,519	$361,652,847.00

COR3 Road to Recovery Hurricane Fiona Public Assistance project summary.

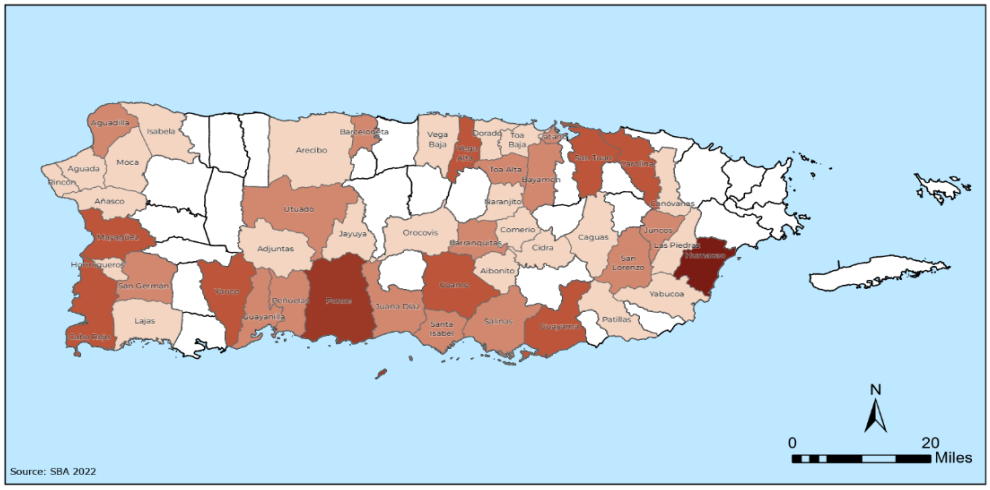
[48] See, https://recuperacion.pr.gov/en/energy-grid-rehabilitation-and-reconstruction-cost-share-program/
[49] See, https://recuperacion.pr.gov/en/electrical-power-reliability-and-resilience-program/

c. Economic Revitalization Unmet Need.

Disaster Damage and Impacts - Economic Revitalization.

The impact of disasters transcends physical infrastructure and housing, extending to the economic landscape. Prolonged electricity outages have crippled many small businesses, rendering them unable to operate. The recovery process not only implies the restoration of electric power or flooding recovery, but also the replacement of goods and merchandise that could be affected or lost because of the event. According to data obtained from SBA loans for fiscal year 2022, related to Disaster Declaration 4649 and 4671, $54,795,689 was approved as an unmet need for the MID Area. That amount includes thirty percent (30%) or $16,305,228 of unmet needs from businesses. This number should be greater, considering that no data is available for six (6) municipalities.

Estimated Total Unmet Needs in Business Sector based on SBA Loans



Business sector unmet needs ($)
$0.00 - $145,461.22
$145,461.23 - $373,307.20
$373,307.21 - $1,060,194.64
$1,060,194.65 - $1,880,682.60
$1,880,682.61 - $3,841,010.46

Figure 39: Map of Puerto Rico identifying the Estimated Total Unmet Needs in Business Sector per Municipality, based on SBA Loans. Source: SBA loans for Fiscal Year 2022.

Estimated Total Unmet Needs in Housing Sector based on SBA Loans

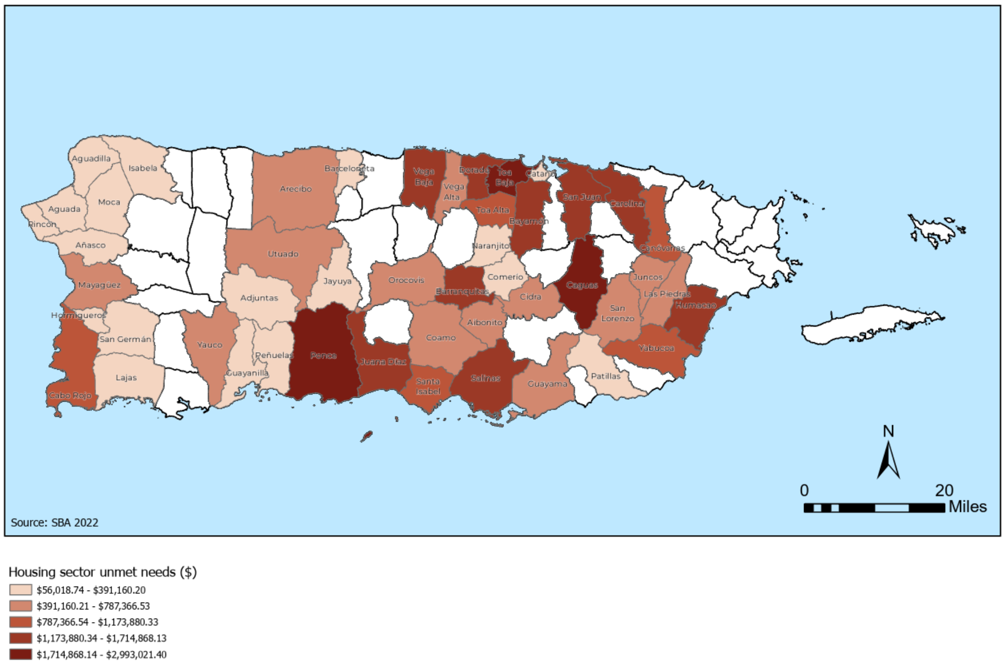


Figure 40: Map of Puerto Rico identifying the Estimated Total Unmet Needs in the Housing Sector per municipality, based on SBA Loans. Source: SBA loans for Fiscal Year 2022.

It is important to note that for both events, reports of damage and unmet needs were scarce for commercial, mixed-use, multifamily, and institutional properties. The same could be observed when evaluating the data from the seismic events in 2019 and 2020 (DR-4473-PR). As previously mentioned, and based on outreach processes and stakeholder meetings during the development of the Earthquake Action Plan, it was identified that many affected commercial, mixed-use, multifamily, and institutional property owners did not report all damages to FEMA because of their experience with Hurricanes Irma and María. The absence of property title (ownership) and hazard insurance also impacted the qualification for federal assistance. Therefore, the number of properties reported by municipalities is usually greater than those reported by FEMA. The recent experiences of emergency management, disaster management, disaster recovery, and mitigation processes suggest citizens, businesses, mixed-use,

multifamily, and institutional property owners may be discouraged or confused about the extent and details required to report all damages to federal agencies such as FEMA. This creates a gap between real damages and damage estimates, thus being excluded from calculating unmet needs and MID Areas.

d. Mitigation Only Activities.

Public Laws PL-117-180 and PL-117-328 established a mitigation set-aside of 13% of the total allocation. Which means a minimum of $21,693,000 must be used for mitigation activities. As the allocation notice states, "mitigation activities are defined as those activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, suffering, and hardship, by lessening the impact of future disasters."

Recognizing the importance of mitigation activities for hazard reductions, PRDOH established, as a requirement, that all activities to be executed under this Action Plan must include a mitigation component. Therefore, all activities, besides any other disaster recovery requirement, must meet the definition of mitigation activities; addresses the current and future risks identified in the evaluation of mitigation needs for MID and Non-MID areas; and be an activity eligible under title I of the HCDA or eligible under a waiver or as an alternative requirement, complies with a National Objective of the Program.

Consequently, PRDOH may also meet the CDBG–DR mitigation set-aside requirement by including eligible recovery activities that address the impacts of the qualified disaster and incorporate qualitative and quantitative mitigation measures into the recovery outcomes. PRDOH will report mitigation activities expenditures in DRGR so that HUD and the public have visibility over compliance with this requirement.

3. General Requirements

a. Citizen Participation

The citizen participation protocols described in this Action Plan are further detailed in the PRDOH Citizen Participation Plan, which provides all Puerto Rican residents with an opportunity to participate in the planning and assessment of the PRDOH's CDBG-DR programs.

Methods for Citizen Participation

The following paragraphs describe methods that will be used for citizen participation concerning the CDBG-DR/MIT programs. The methods described are not intended to be exclusive of other methods of citizen participation allowed by HUD.

Methods and Opportunities for Citizen Involvement:

- Public Hearings;
- Communication via the Internet;
- Information via the PRDOH Website;
- Participatory Engagement; and
- Other Methods for Citizen Participation

Through these methods, citizens may receive information about the following:

- The amount of assistance available to impacted communities;
- The range of eligible activities to be undertaken;
- Performance reports;
- Action Plan and Action Plan Amendments and comment periods;
- Program information, including how to request additional information;
- Upcoming Public Hearings, Webinars, or other stakeholder sessions;
- Information to request and receive technical assistance;
- How to comment on the Citizen Participation Plan; and
- How to file a complaint.

Communication for Individuals with Disabilities

PRDOH is committed to ensuring that citizens with disabilities have effective means to participate and communicate with the Program. Consequently, PRDOH will also effectively communicate with citizens with disabilities regarding Action

Plans, policies, and procedures. Interpretation services for sign language will be made available at Public Hearings. Notices for public meetings will include contact information for requesting accessible communication aids or services. Requests for communication aids or services should be requested at least forty-eight (48) hours before the public meeting so PRDOH can reasonably coordinate the provision of the requested aids or services. PRDOH will make every reasonable effort to honor requests received with less than forty-eight (48) hours of advance notice of a public meeting.

The Action Plan and other materials on the PRDOH website are provided in accessible formats, including those readable by screen readers to provide accessibility to the visually impaired. PRDOH will meet communications requirements at 24 C.F.R. §8.6 and other Fair Housing and civil rights requirements, such as the effective communication requirements under the Americans with Disabilities Act of 1990.

The CDBG-DR/MIT Fair Housing and Equal Opportunity Policy and its appendices will be posted along with all CDBG-DR/MIT Program policies in English and Spanish at https://recuperacion.pr.gov/en/resources/policies/general-policies/ and https://recuperacion.pr.gov/recursos/politicas/politicas-generales/**.** Fair Housing and Equal Opportunity Policy shall be adopted for this CDBG-DR/MIT Program for Hurricane Fiona disaster recovery.

Program accessibility for individuals with disabilities may be requested at:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324 (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00 am-5:00 pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG- DR inquiries or
  CDBG-MIT@vivienda.pr.gov – for all CDBG-MIT inquiries
- **Online:**
  https://www.recuperacion.pr.gov/en/contact/ (English version)
  https://www.recuperacion.pr.gov/contact/ (Spanish version)
- **In writing:**
  Puerto Rico CDBG-DR/MIT Program

P.O. Box 21365
San Juan, PR 00928-1365

Outreach and Engagement

In the development of this disaster recovery action plan, PRDOH consulted with disaster-affected citizens, stakeholders, local governments, public housing authorities, and other affected parties in the surrounding geographic area to ensure consistency of disaster impacts identified in the plan, so it and the planning process was comprehensive and inclusive. Among the entities that have already responded by providing information are:

- Federal Emergency Management Administration (**FEMA**)
- Puerto Rico Central Office for Recovery, Reconstruction and Resiliency (**COR3**)
- Puerto Rico Public Housing Authority (**PRPHA**)
- Puerto Rico Planning Board (**PRPB**)
- Municipalities located in the expanded MID Area

Moreover, a presentation was offered to the PRDOH Citizen Advisory Committee (CAC) on the policies established in this Plan, receiving insight. Notwithstanding, the outreach and engagement will continue through the thirty (30) days public comment period.

In addition to the activities above, PRDOH has published this action plan on Action Plans - CDBG (pr.gov) for a 30-day public comment period. Citizens were notified through a public notice, CDBG-DR/MIT website, eblast, social media, and public hearings. PRDOH will ensure that all citizens have equal access to information, including persons with disabilities (vision and hearing impaired) and limited English proficiency (LEP).

Appendix C of this document summarizes citizen comments on this action plan and PRDOH responses.

For more information, citizens can refer to the PRDOH citizen participation plan, which can be found at https://recuperacion.pr.gov/en/download/citizen-participation-plan/

Public hearings

HUD guidance at 88 FR 32046 prescribes for CDBG-DR grantees the number of public hearings that must be convened based on the amount of the grantee's allocation. PRDOH adheres to the guidelines for allocations under $500 millions, requiring at least one (1) public hearing in the HUD-identified MID Area and a public comment period of thirty (30) calendar days. It's important to note that public safety is a priority concern for PRDOH, its employees, and the citizens it serves. Residents will be offered the option of submitting comments during the public hearings through one or more of the following means: the CDBG-DR website, comments on social media, and the call center (1- 833-234-CDBG or 1-833 234-2324, (TTY: 787-522-5950).

Complaints

Citizen Complaints

To address Puerto Rico's long-term recovery needs, citizen complaints on any issues related to the general administration of CDBG-DR funds are welcome throughout the grant period. PRDOH aims to provide an opportunity to address all complaints received. Addressing these complaints is an essential responsibility for PRDOH, as it establishes the importance of open communication regarding citizens' concerns about the programs.

As a grantee, PRDOH is responsible for ensuring all complaints are dealt with promptly and consistently. Also, PRDOH must provide a timely and substantive written response to every written complaint within **fifteen (15) business days**, where practicable. See 24 C.F.R. § 570.486(a) (7).

PRDOH aims to provide an opportunity to address all complaints received, either formally or informally. An informal complaint refers to those complaints that are verbally communicated through PRDOH program personnel. These are not subject to 24 C.F.R. § 570.486(a) (7) unless the complainant requests it to be filed as a formal complaint. A formal complaint is a written statement of grievance. All formal complaints will be documented, processed, filed, and answered. Complaints with insufficient data or submitted by a third party with no standing in the matter being submitted need not be accepted or reviewed.

Citizens who wish to submit formal complaints related to the CDBG-DR funded activities may do so through any of the following means:

- **Via email:**
  LegalCDBG@vivienda.pr.gov
- **Online:**
  https://recuperacion.pr.gov/en/complaints/ (English)
  https://recuperacion.pr.gov/quejas/ (Spanish)
- **In writing:**
  Puerto Rico CDBG-DR/MIT Program
  Attn: CDBG-DR/MIT Legal Division- Complaints
  P.O. Box 21365
  San Juan, PR 00928-1365

Although formal complaints are required to be submitted in writing, complaints may also be received verbally and by other means necessary, as applicable, when PRDOH determines that the citizen's particular circumstances do not allow the complainant to submit a written complaint. However, PRDOH shall convert these complaints into written form in these instances. These alternate methods include, but are not limited to:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324 (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00 am-5:00 pm
- **In-person:**
  PRDOH Headquarters Office

The Citizen Complaints Policy and all CDBG-DR/MIT Program policies are posted in both English and Spanish languages at https://recuperacion.pr.gov/en/resources/policies/general-policies/ and https://recuperacion.pr.gov/recursos/politicas/politicas-generales/.

Citizen Complaints for Anti-Fraud, Waste, Abuse or Mismanagement

PRDOH, as grantee, is committed to the responsible management of CDBG-DR and CDBG-MIT funds by being a good advocate of the resources while

maintaining a comprehensive policy for preventing, detecting, reporting, and rectifying fraud, waste, abuse, or mismanagement.

Pursuant to 88 FR 32046, PRDOH implements adequate measures to detect and prevent fraud, waste, abuse, or mismanagement in all Programs administered with CDBG-DR funds. It also encourages any individual who is aware or suspects any kind of conduct or activity that may be considered an act of fraud, waste, abuse, or mismanagement regarding the CDBG-DR Program, to report such acts to the CDBG-DR Internal Audit Office, directly to the Office of Inspector General (**OIG**) at HUD, or any local or federal law enforcement agency.

The Anti-Fraud, Waste, Abuse, or Mismanagement Policy (**AFWAM Policy**) is established to prevent, detect, and report any acts, known or suspected, of fraud, waste, abuse, or mismanagement of CDBG-DR. This Policy applies to any allegations or irregularities, either known or suspected, that could be considered acts of fraud, waste, abuse, or mismanagement involving any citizen, previous, current, or potential applicant, beneficiary, consultant, contractor, employee, partner, provider, subrecipient, supplier, and/or vendor under the CDBG-DR Programs.

Report Fraud, Waste, Abuse, or Mismanagement to PRDOH

- **CDBG-DR/MIT-hotline:**
  787-274-2192 (English/Spanish/TTY)
- **Postal mail:**
  Puerto Rico Department of Housing
  CDBG-DR/MIT Internal Audit Office
  P.O. Box 21355
  San Juan, PR 00928-1355
- **Email:**
  hotlineCDBG@vivienda.pr.gov
- **Online:**
  https://recuperacion.pr.gov/app/cdbgdrpublic/Fraud?culture=en-US
- **In person:**
  Request a meeting with the Deputy Audit Director of the CDBG-DR Internal Audit Office located at PRDOH's Headquarters at 606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918.

Report Fraud, Waste, Abuse, or Mismanagement Directly to HUD OIG

- **HUD OIG hotline:**
  1-800-347-3735 (Toll-Free)
  787-766-5868 (Spanish)
- **Postal mail:**
  HUD Office of Inspector General (OIG) Hotline
  451 7th Street SW
  Washington, D.C. 20410
- **Email:**
  HOTLINE@hudoig.gov
- **Internet:**

  https://www.hudoig.gov/hotline

The AFWAM Policy and all CDBG-DR Program policies are posted in English and Spanish at https://recuperacion.pr.gov/en/resources/policies/general-policies/ and https://recuperacion.pr.gov/recursos/politicas/politicas-generales/.

Discrimination Complaints

PRDOH will ensure potential and actual program applicants and beneficiaries can adequately submit discrimination complaints. That is, report any possible discrimination under the Fair Housing Act (including housing that is privately owned and operated) and/or any possible discrimination of civil rights violations in the CDBG-DR/MIT Programs.

Discrimination Complaints submitted directly to PRDOH

A Discrimination Complaint may be presented directly to PRDOH by submitting the complaint to the PRDOH CDBG-DR/MIT Federal Compliance and Labor Standards (**FCLS**) Division. Any discrimination complaint received by a PRDOH regional office or program area shall be forwarded to the PRDOH FCLS Division via: fairhousing@vivienda.pr.gov.

Discrimination complaints can be submitted to the CDBG-DR/MIT FCLS Division via:

- **Email:**
  fairhousing@vivienda.pr.gov
- **Postal mail:**
  Puerto Rico CDBG-DR/MIT Program
  Attn: Federal Compliance and Labor Standards Division
  P.O. Box 21365
  San Juan, PR 00928-1365

- **Telephone:**
  1-833-234-CDBG
  1-833-234-2324
  TTY: 787-522-5950
  Attention hours: Monday to Friday from 8:00 am - 5:00 pm

To ensure accessible communication for persons with disabilities, a complainant may request reasonable accommodation, as needed. PRDOH may allow a discrimination complaint to be received verbally. CDBG-DR/MIT personnel or other related CDBG-DR/MIT parties receiving said complaint will put it in writing and assure compliance with all other requirements, as described in the Fair Housing and Equal Opportunity (**FHEO**) Policy for CDBG-DR/MIT Programs, available in English and Spanish languages at: https://recuperacion.pr.gov/en/resources/policies/general-policies/ (in English) and https://recuperacion.pr.gov/recursos/politicas/politicas-generales/ (in Spanish).

Discrimination Complaints submitted directly to HUD

A Discrimination Complaint may be presented directly to HUD by submitting HUD Form 903.1 (available in English, Spanish, and other languages) via:

- **Email**:
  ComplaintsOffice02@hud.gov
- **Telephone:**
  (212) 542-7519
  (800) 496-4294
  TTY (212) 264-0927

- **Fax:**
  (202) 485-5737
- **Online:**
  - https://www.hud.gov/program_offices/fair_housing_equal_opp/online- complaint
  - English: https://portalapps.hud.gov/FHEO903/Form903/Form903Start.action
  - Spanish: https://portalapps.hud.gov/AdaptivePages/HUD_Spanish/Espanol/complain t/complaint-details.htm
  - Other languages: https://www.hud.gov/program_offices/fair_housing_equal_opp/online- complaint

b. Public Website

Accessibility of Information

Information related to PRDOH's CDBG-DR, including Action Plans, Action Plan amendments, program policies and procedures, performance reports, citizen participation requirements, program information, and details of contracts and ongoing procurement policies will be publicly available in English and Spanish at https://recuperacion.pr.gov/welcome/en/index.html and https://recuperacion.pr.gov/welcome/index.html, respectively. Program information posted to the website will be accessible and available in both Spanish and English and will be made available in accessible formats, including those readable by screen readers. PRDOH will make information available in alternate formats as needed and upon request to ensure effective communication to persons with disabilities.

PRDOH may use various communication methods to notify the public of information regarding the CDBG-DR Programs. The methods listed have been used by PRDOH prior to the disaster to communicate information across the Island. The use of these methods varies based on region and municipality. In addition to these outreach methods and an active online presence, PRDOH regularly provides CDBG-DR written outreach materials for all municipalities to use

and communicate with their constituents. These methods may include, but are not limited to:

- Print media, such as the newspaper;
- Social media;
- Radio or television advertisements;
- Letters or emails to municipalities, government agencies, non-profit organizations, and Non-Government Organizations (**NGOs**);
- Notices posted to internet sites, including PRDOH's CDBG-DR and CDBG-MIT websites;
- Ads on billboards and bus stops;
- Sound wagons (a popular local method for communication which includes a vehicle with speakers used for promotion);
- Brochures and printed materials;
- Direct mail;
- Outbound call campaigns (live or automated);
- Email announcements;
- Community events or fairs;
- Webinars or web conferences;
- Web-based surveys;
- Focus groups or interviews;
- Community meetings;
- Press releases;
- Media events or interviews; and
- Other forms of communication accepted by HUD.

PRDOH will continue to coordinate outreach meetings with Municipalities, Government Agencies, Non-Profit and Community organizations, and other interested stakeholders to disseminate information related to the PRDOH Action Plan or substantial Action Plan amendments.

To promote access to information among LMI citizens, PRDOH will organize special orientation events throughout the Island or use broad-band media campaigns once the first CDBG-DR fund program is launched and dissemination initiatives begin. Direct communication with Municipalities, Government Agencies, Non-Profit Organizations, and NGOs as partners is intended to increase residents' access to information and is supplemental to communication between PRDOH

and residents. In addition to citizen involvement, PRDOH encourages the participation of regional and Island-wide institutions.

Simultaneously with the abovementioned efforts, PRDOH will distribute informational material through its regional offices and public residential administrators. It will also strengthen the distribution of news information on the programs through regional media that operate in areas where CDBG-DR funds will be used. This is in accordance with the Plan's initiatives, which aim to strengthen access to information among LMI citizens and members of minority or disabled groups.

Also, PRDOH publishes all environmental reviews that require an authorization to use grant funds on the official website, under the environmental review information. Information related to environmental review can be access through the following link https://recuperacion.pr.gov/en/resources/environmental-review/.

Communication Via the Internet

Public information for CDBG-DR (Hurricane Fiona) allocations during Action Plan development can be found on a dedicated page within the PRDOH CDBG-DR Program website in English and Spanish at https://recuperacion.pr.gov/welcome/en/index.html and https://recuperacion.pr.gov/welcome/index.html, respectively. From this page, entity and private citizen stakeholders can find more information, register for program-related notifications, and find a formal announcement for the opening of the CDBG-DR Action Plan public comment period.

The CDBG-DR Action Plan will be posted in its entirety on the PRDOH disaster recovery website, where all versions of the CDBG-DR/MIT Action Plans and its amendments will reside in English and Spanish at: https://recuperacion.pr.gov/en/action-plans/ and https://recuperacion.pr.gov/planes-de-accion/ respectively.

Once HUD approves the CDBG-DR Action Plan and an additional program becomes available, all information will be integrated into the current CDBG-DR site for Hurricane Fiona allocations.

Interested individuals are encouraged to comment at any time by sending an email to infoCDBG@vivienda.pr.gov for CDBG-DR (Hurricane Fiona) inquiries. Additionally, citizens may comment using the "Contact Us" tool included in PRDOH's disaster recovery website. The "Contact Us" tool can be accessed directly at https://recuperacion.pr.gov/en/contact-us/ in English and https://recuperacion.pr.gov/contactanos/ in Spanish.

As part of implementing CDBG-DR Programs, PRDOH will regularly interact with municipalities, NGOs, and the citizens of Puerto Rico. These methods may include but are not limited to:

- Web-based surveys
- Coordination with municipalities, non-profit or community organizations, faith-based or other organizations
- Focus groups or interviews
- Other in-person meetings as requested by individuals or organizations.

This Citizen Participation Plan will continue to be updated as programs progress. Citizen comment is welcome on this Plan throughout the duration of this grant. Please contact PRDOH using the following methods:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324
  (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00am-5:00pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG-DR inquiries
- **Online:**
  https://recuperacion.pr.gov/en/contact-us/ (English version)
  https://recuperacion.pr.gov/contactanos/ (Spanish version)
- **In writing:**
  Puerto Rico CDBG-DR/MIT
  P.O. Box 21365
  San Juan, PR 00928-1365

Performance Report

Program performance reports, such as Quarterly Performance Reports (**QPR**), will be posted at https://recuperacion.pr.gov/en/reports/ prior to submission to HUD. Citizens will be provided fifteen (15) calendar days to comment on performance reports, as required by 24 C.F.R. § 91.115.

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324
  (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00am-5:00pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG-DR inquiries
- **Online:**
  https://recuperacion.pr.gov/en/contact-us/ (English version)
  https://recuperacion.pr.gov/contactanos/ (Spanish version)
- **In writing:**
  Puerto Rico CDBG-DR/MIT Program
  P.O. Box 21365
  San Juan, PR 00928-1365

Individuals with Limited English Proficiency

Program materials, including plans and program guidelines, will be available in Spanish and English at https://recuperacion.pr.gov/en/resources/ and in Spanish at https://recuperacion.pr.gov/recursos/. For access to language access services in languages other than English or Spanish, citizens may contact PRDOH at:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324
  (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00 am - 5:00 pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG-DR inquiries
- **Online:**
  https://recuperacion.pr.gov/en/contact-us/ (English version)
  https://recuperacion.pr.gov/contactanos/ (Spanish version)
- **In writing:**

Puerto Rico CDBG-DR Program /CDBG-MIT Program
P.O. Box 21365
San Juan, PR 00928-1365

Materials will also be disseminated among program partners, including municipalities, government agencies, non-profit organizations, and NGOs, to ensure that these materials are accessible locally.

The CDBG-DR Language Access Plan will be posted, along with all CDBG-DR Program policies, in both English and Spanish languages at https://recuperacion.pr.gov/en/resources/policies/ and at https://recuperacion.pr.gov/recursos/politicas/.

Technical Assistance

PRDOH will provide technical assistance to facilitate public participation regarding CDBG-DR Programs upon request. The technical assistance provided will be determined based on the needs of the community or individual requesting assistance. This technical assistance may be requested at:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324
  (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00 am - 5:00 pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG-DR inquiries
- **Online:**
  https://recuperacion.pr.gov/en/contact-us/ (English version)
  https://recuperacion.pr.gov/contactanos/ (Spanish version)
- **In writing:**
  Puerto Rico CDBG-DR/MIT Program
  P.O. Box 21365
  San Juan, PR 00928-1365

c. Amendments

Citizen Involvement in the Original Action Plan

The original Action Plan will be posted in English and Spanish on the PRDOH program website https://recuperacion.pr.gov/welcome/en/index.html and

https://recuperacion.pr.gov/welcome/index.html to allow an opportunity for public comment for **thirty (30) calendar days** for CDBG-DR, as required by 88 FR 32046, 32073. PRDOH will consider comments on the Action Plan or substantial amendments received in writing, via email, verbally via the Call Center or expressed in-person or at official public hearing events.

Additionally, to permit public examination and accountability, PRDOH will make formal comments regarding Action Plans or substantial amendments publicly available at https://recuperacion.pr.gov/en/action-plans/ in English and https://recuperacion.pr.gov/planes-de-accion/ in Spanish. PRDOH responses to comments regarding Action Plans or substantial amendments will also be posted to the website. PRDOH will submit the summary of these comments or views and its response to each comment to HUD with the Action Plan or substantial amendment.

Citizens accessing information via the CDBG-DR website in English and Spanish at https://recuperacion.pr.gov/welcome/index.html and who are seeking to comment on the CDBG-DR Action Plan will be directed to the Action Plan links for public comment as outlined above.

The most current version of the approved Action Plan, including any substantial amendments, will be posted as a single document and located at: https://recuperacion.pr.gov/en/action-plans/ in English and https://recuperacion.pr.gov/planes-de-accion/ in Spanish. Publishing the Action Plan and any amendments as a single document allows the public to view the Action Plan as a whole, rather than the public having to view and cross-reference changes among multiple amendments. Citizens who cannot access the Action Plan or proposed substantial amendments through the website may request assistance from PRDOH:

- **Via telephone:**
  1-833-234-CDBG or 1-833-234-2324
  (TTY: 787-522-5950)
  Attention hours: Monday to Friday from 8:00 am - 5:00 pm
- **Via email:**
  infoCDBG@vivienda.pr.gov – for all CDBG-DR inquiries
- **Online:**

https://recuperacion.pr.gov/en/contact-us/ (English version)
https://recuperacion.pr.gov/contactanos/ (Spanish version)

- **In writing:**
  Puerto Rico CDBG-DR/MIT Program
  P.O. Box 21365
  San Juan, PR 00928-1365

Substantial Amendment

Citizen Involvement in the Substantial Amendment Process

Substantial amendments are subject to a **thirty (30) calendar day** public comment period and shall be posted on the PRDOH website, where citizens can also submit electronic comments or follow instructions for submitted written comments by alternative means listed on the website.

Citizen participation for substantial amendments to the Action Plan will follow the PRDOH Citizen Participation Plan. Changes made via substantial amendments to the Action Plan will be highlighted or otherwise identified within the context of the entire Action Plan. As required by 88 FR 32046, 32072, every substantial amendment will include the following:

- A section that identifies what content is being added, deleted, or changed;
- Chart or table that clearly illustrates where funds are coming from and where they are moving to; and
- Revised budget allocation table that reflects all funds.

A substantial amendment is defined as an amendment that contemplates one (1) or more of the following:

- Change in a program benefit or eligibility criteria;
- Addition or deletion of an activity; and
- Allocation or reallocation of more than ten percent (10%) of grant funds.

Non-Substantial Amendment

Non-substantial Amendments to this Action Plan are not subject to a public comment period and will, therefore, follow HUD procedure requiring PRDOH to notify HUD at least **five (5) business days** before the amendment becomes effective. All non-substantial amendments will be posted to the PRDOH public website with changes to the text highlighted in grey.

d. Displacement of persons and other entities

Minimizing or Addressing Displacement

PRDOH plans to minimize the 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. PRDOH will ensure that every project funded in part or in full by CDBG-DR funds and all activities related to that project, are subject to the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (**URA**), as amended,[50] and section 104(d) of the Housing and Community Development Act of 1974 (**HCDA**),[51] except where HUD has provided waivers or alternative requirements. The implementing regulations for URA are at 49 C.F.R. § Part 24, and the regulations for section 104(d) are at 24 C.F.R. § Part 42, subpart C. These laws and regulations aim to provide uniform, fair, and equitable treatment of persons whose real property is acquired or who are displaced in connection with federally funded projects. PRDOH will follow an existing Residential Anti-displacement and Relocation Assistance Plan (**RARAP**) and amend it to reflect the requirements stated on 88 FR 32046 and to conform to the standards or requirements of 24 C.F.R. § 42.325.

Based on the program outline in the Action Plan (strictly about Infrastructure projects), no direct relocation is contemplated, thus no Planning and Budget is specifically designated. However, in case a specific project submitted and evaluated is deemed to require relocation activities, PRDOH will adhere to the Uniform Relocation Assistance Anti-Displacement and Relocation Assistance Plan (**URA & ADP Guide**) guide, specifically its Relocation Planning requirements at

[50] 49 C.F.R § Part 24
[51] 42 U.S.C § 5301 et seq.

Section 7.2. In order to comply with the URA requirements, PRDOH will have a plan and budget for relocation activities at the initial stage of the project's timeline. The URA & ADP Guide as well as all General Policies are available in English and Spanish at https://recuperacion.pr.gov/en/resources/ and https://recuperacion.pr.gov/recursos/.

e. Protection of People and Property.

PRDOH will implement construction methods that emphasize quality, durability, energy efficiency, sustainability, and mold resistance, as described further in this Action Plan.

Elevation standards

The elevation is not a standalone activity in this CDBG-DR Program. Still, it shall be included as a resiliency measure for structures receiving assistance through the Community Flood Recovery and Mitigation Program. Also, it shall only be applied when it is required and feasible to mitigate future flood risk and protect the federal investment. PRDOH will apply elevation standards for reconstruction, repair of substantially damaged structures, or substantial improvements to critical infrastructure structures in flood-hazard areas, such that the lowest floor is at least two (2) feet above the one percent (1%) annual floodplain elevation (or ABFE +2), as outlined in the 88 FR 32064. As per 24 C.F.R. § 55.2(b)(3), all Critical Actions within the 500-year (or 0.2 percent annual chance) floodplain must be elevated or floodproofed (in accordance with the FEMA standards) to the higher of the 500-year floodplain elevation or three (3') feet above the 100-year floodplain elevation. If the 500-year floodplain is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or floodproofed at least three (3') feet above the 100-year floodplain elevation. Elevation and flood insurance requirements will be implemented for all applicable program assistance to structures in the floodplain.

Flood Insurance Requirements

As per Federal regulations, a HUD-assisted property located in a Special Flood Hazard Area must obtain and maintain flood insurance in the amount and duration prescribed by FEMA's National Flood Insurance Program. Section 102(a)

of the Flood Disaster Protection Act of 1973 (42 U.S.C. 4012a) mandates the purchase of flood insurance protection for any HUD-assisted property within a Special Flood Hazard Area. Section 582 of the National Flood Insurance Reform Act of 1994, as amended (42 U.S.C. 5154a), prohibits flood disaster assistance in certain circumstances. In general, it provides that no Federal disaster relief assistance made available in a flood disaster area may be used to make a payment to a person for ''repair, replacement, or restoration'' for damage to any personal, residential, or commercial property if that person at any time has received Federal flood disaster assistance that was conditioned on the person first having obtained flood insurance under applicable Federal law and the person has subsequently failed to obtain and maintain flood insurance as required under applicable Federal law on such property. This means that a PRDOH may not provide disaster assistance for repairing, replacing, or restoring a property to a person who has failed to meet this requirement and must implement a process to check and monitor for compliance.

Property owners receiving disaster assistance that triggers the flood insurance purchase requirement, also have a statutory responsibility to notify any transferee of the requirement to obtain and maintain flood insurance and to maintain such written notification in the documents evidencing the transfer of the property, and that the transferring owner may be liable if he or she fails to do so.[52]

Construction Standards

PRDOH will support and supervise construction methods emphasizing quality, durability, energy efficiency, sustainability, and mold resistance. All reconstructed and newly constructed infrastructure will be required to incorporate sustainability principles, including mitigation against the impact of storms, floods, and landslides.

Infrastructure construction which addresses critical floods and landslides will, at a minimum, adhere to the Puerto Rico Codes 2018, Regulation No. 9049, as adopted on November 15, 2018,[53] and must comply with the federal accessibility requirements. Exceptions may be reviewed on a case-by-case basis. All

[52] 42 U.S.C. 5154a(b).
[53] Permits Management Office (OGPe, by its Spanish Acronym), Puerto Rico Codes 2018, Regulation No. 9049 (November 15, 2018) http://app.estado.gobierno.pr/ReglamentosOnLine/Reglamentos/9049.pdf.

construction developed should ensure the protection of people and property from harm; emphasizing high quality, durability, energy efficiency, sustainability, and mold resistance; supporting the adoption and enforcement of modern and/or resilient building codes and mitigation of hazard risks, including possible sea level rise, high winds, hurricane storm surge, and flooding, where appropriate.

Contractors Standards

PRDOH will ensure that contractors comply with codes, regulations, and permit requirements at the federal, state, and local levels. Work must also be conducted in a workmanship manner always ensuring adherence to construction standards.

Further information about a warranty periods, appeals, and/or applicant responsibilities related to acceptance of the Program assistance will be further developed in Program Guidelines that will be published in English and Spanish at: https://recuperacion.pr.gov/welcome/en/index.html and https://recuperacion.pr.gov/welcome/index.html.

Preparedness, Mitigation and Resilience

The assessment of risk and unmet needs shows that floods and landslides are ongoing and can worsen over time. Vulnerability for communities is being tackled by different strategies at the state and municipal level. However, due to the funds available to develop projects, not all impacted communities may benefit from disaster recovery efforts. Thousands of homeowners remain at continued risk because their housing structure may not withstand future disaster events, leading to the risk of loss of life and property damage. Communities within reasonable proximity to critical flood zones and landslide clusters will be a part of the outreach and planning process to approve project funding comprehensively.

Vulnerability in the Disaster-Impacted Areas

Resilience is defined as a community's ability to minimize damage and recover quickly from extreme events and changing conditions, including natural hazard risks. In alignment with this methodology, flood hazard vulnerability is determined with the following indicators: social vulnerability, landslide risk, and flood risk. The area with the highest social vulnerability identifies those areas where the persons have a lower capacity to absorb shocks and stressors. In the map below (Fig. 41),

social vulnerability indicators were used to create a SoVI for Puerto Rico. SoVI scores were categorized from (0 – no data to 5 – high social vulnerability) using a standard deviation classification scheme. Social vulnerability describes an area's capacity to prepare for, respond to, and rebound from disaster events[54]and has a long conceptual and theoretical history in social and disaster science fields.[55] Socially vulnerable populations have fewer resources to aid in disaster preparation, often withstand the worst of disaster impacts, and take longer to recover from disaster events. Empirical measures of social vulnerability enable decision-makers and emergency managers to understand where vulnerable populations reside and how that vulnerability manifests across a landscape.

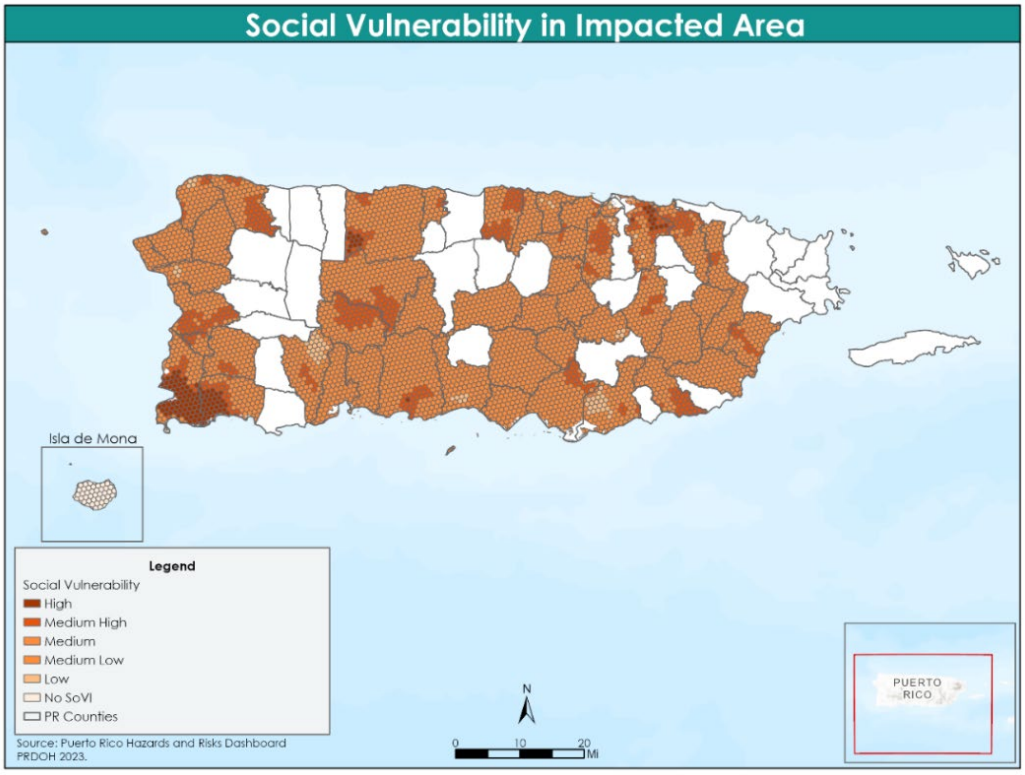


Figure 41: Map of Puerto Rico identifying Social Vulnerability of the impacted Area.

The term landslide includes various land movements, such as rockfalls, slope failures, and debris flow. This earth movement threatens life and property and can

[54] Cutter, Susan L., Emrich, Christopher T. Moral Hazard, Social Catastrophe: The Changing Face of Vulnerability along the Hurricane Coasts. The ANNALS of the American Academy of Political and Social Science. March 1, 2006. Accessed at: https://journals.sagepub.com/doi/10.1177/0002716205285515.
[55] Birkmann, Jörn. Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies Second Edition. United National University Press. December 2013.

disrupt transit, dragging trees, houses, bridges, and cars, among others. Meteorological variations of intense rainfall, such as hurricanes, can trigger landslides. In the 2021 PRSNHMP, many of the landslides in Puerto Rico are in a special category known as "debris flow". The flow occurs in mountainous areas with significant slopes during heavy rains. The rain saturates the soil and causes the ground level and peel strength to lose, usually where the ground contacts the bedrock. There are many types of landslides, however, associated with soil saturation by water:

1. Slow landslides: slow and steady movement of soil or rock falls down the slope, often recognized by their content of tree trunks, twisted pieces of fences or retaining walls, tilted poles or fences.

2. Debris flow: fast-moving mass which combines loose soils, rocks, organic matter, air infiltration, and water to form a viscous flow that slides down the slope.

3. Debris avalanche: fast, or extremely fast, debris flow range.

4. Mud flow: the mass rapid flow of wet material containing at least fifty percent (50%) sand, silt, and clay particles.

As described in the map below, (Fig.42) represents the landslide risk in the MID Areas.

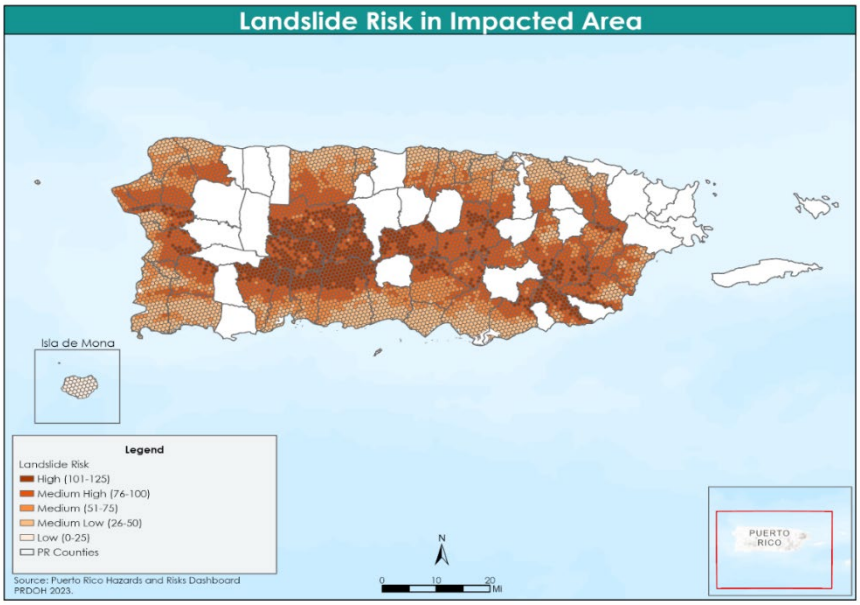


Figure 42: Map of Puerto Rico, representing Landslide Risk in the MID Area.

Floods are generally the result of excessive precipitation and can be classified under two (2) categories: flash floods, the product of heavy localized rainfall in a brief time over a given location, and general floods, caused by precipitation over a longer time period and over a given river basin. The severity of a flooding event is determined by a combination of stream and river basin topography and physiography, precipitation and weather patterns, recent soil moisture conditions, and the degree of a vegetative clearing.

Flash flooding usually occurs within minutes or hours of heavy rainfall, from a dam or levee failure, or from a sudden release of water held by an ice jam. Slow-moving thunderstorms cause most flash flooding in a local area or by heavy rains associated with hurricanes and tropical storms. Although flash flooding often occurs along mountain streams, it is also common in urbanized areas where much of the ground is covered by impervious surfaces. General floods are usually longer-term events and may last for several days.

The primary types of general flooding include riverine, coastal, and urban flooding. Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Coastal flooding is typically a result of storm surges, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, and other large coastal storms. Urban flooding occurs where man-made development has obstructed the natural flow of water and/or decreased the ability of natural ground cover to absorb and retain surface water runoff. As presented in Figure 43 below, the MID Areas are located in several municipalities at high risk of 100-year flooding.

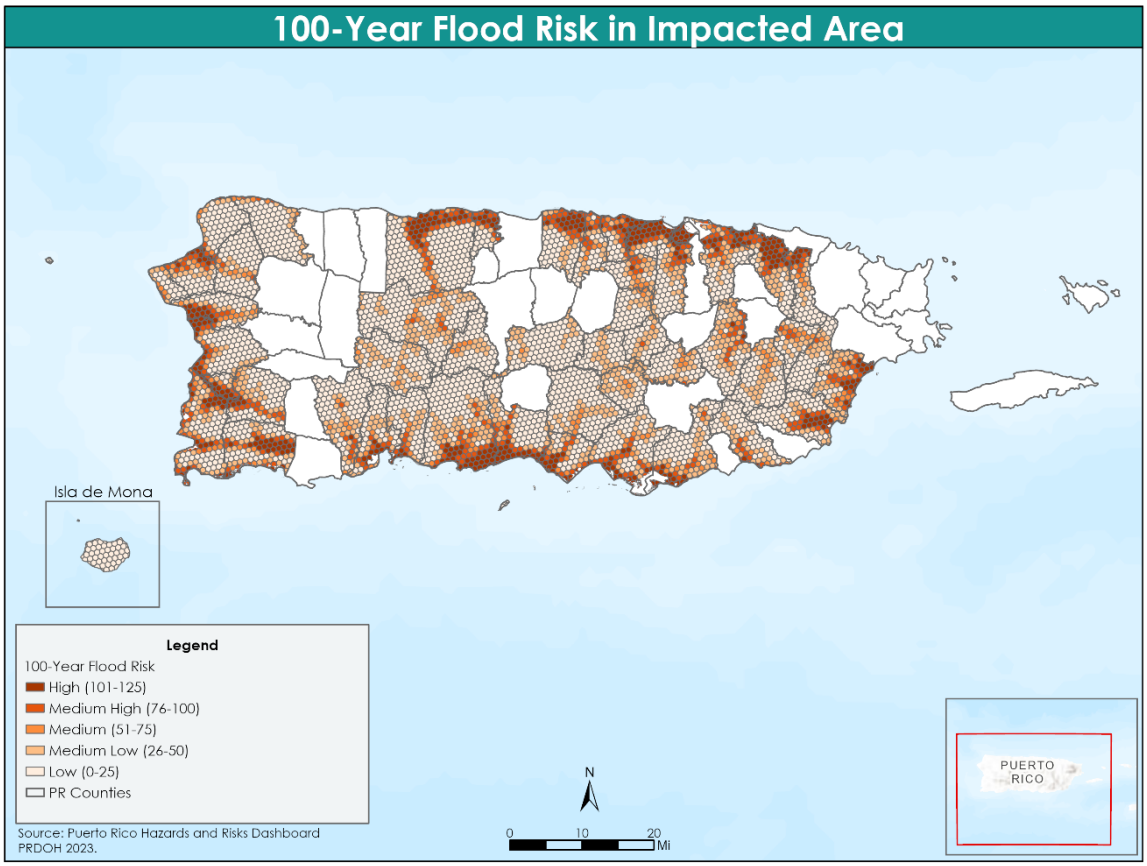


Figure 43: Map of Puerto Rico identifying the100-year Flood Risk in the MID Area.

Top 5 Hazard Risk by Municipality					
Municipality	**Top Risk**	**2nd Highest Risk**	**3rd Highest Risk**	**4th Highest Risk**	**5th Highest Risk**
Aguadilla	Hurricane_Wind	Earthquake	Flood_100	Landslide	Liquefaction
Coamo	Hurricane_Wind	Landslide	Earthquake	Drought	Flood_100
Arecibo	Hurricane_Wind	Earthquake	Flood_100	Landslide	Liquefaction
Cataño	Flood_100	SLR10Ft	Hurricane_Wind	Earthquake	Cat5_Surge
Comerío	Hurricane_Wind	Landslide	Drought	Earthquake	Liquefaction
Guayanilla	Hurricane_Wind	Flood_100	Earthquake	Landslide	Drought
Ponce	Flood_100	Hurricane_ Wind	Earthquake	Landslide	Drought
Juncos	Hurricane_Wind	Landslide	Flood_100	Earthquake	Drought
Naranjito	Hurricane_Wind	Landslide	Earthquake	Drought	Flood_100
Vega Baja	Hurricane_Wind	Flood_100	Earthquake	Landslide	Liquefaction
Rincón	Hurricane_Wind	Earthquake	Landslide	Flood_100	SLR10Ft
San Lorenzo	Hurricane_Wind	Landslide	Earthquake	Drought	Severe_Storm

Top 5 Hazard Risk by Municipality					
Municipality	**Top Risk**	**2nd Highest Risk**	**3rd Highest Risk**	**4th Highest Risk**	**5th Highest Risk**
Mayagüez	Flood_100	Hurricane_Wind	Earthquake	Landslide	SLR10Ft
Peñuelas	Hurricane_Wind	Earthquake	Flood_100	Landslide	Drought
Añasco	Flood_100	Hurricane_Wind	Earthquake	Landslide	Severe_Storm
Lajas	Flood_100	Earthquake	Hurricane_Wind	Landslide	Liquefaction
Toa Baja	Flood_100	Hurricane_Wind	SLR10Ft	Earthquake	Liquefaction
Barranquitas	Hurricane_Wind	Landslide	Earthquake	Drought	Wildfire
Santa Isabel	Flood_100	Hurricane_Wind	Earthquake	Drought	SLR10Ft
Salinas	Hurricane_Wind	Flood_100	Drought	Earthquake	Landslide
Cidra	Hurricane_Wind	Landslide	Drought	Earthquake	Flood_100
Carolina	Flood_100	Hurricane_Wind	Earthquake	Landslide	SLR10Ft
Humacao	Flood_100	Hurricane_Wind	Landslide	Earthquake	Drought
Aguada	Hurricane_Wind	Flood_100	Earthquake	Landslide	Liquefaction
San Germán	Hurricane_Wind	Earthquake	Flood_100	Landslide	Liquefaction
Toa Alta	Hurricane_Wind	Earthquake	Landslide	Flood_100	Liquefaction
Yabucoa	Hurricane_Wind	Flood_100	Landslide	Earthquake	Drought
Guayama	Hurricane_Wind	Flood_100	Drought	Landslide	Earthquake
Barceloneta	Flood_100	Hurricane_Wind	Earthquake	SLR10Ft	Liquefaction
Isabela	Hurricane_Wind	Earthquake	Landslide	Flood_100	Liquefaction
Canóvanas	Hurricane_Wind	Flood_100	Landslide	Earthquake	Severe_Storm
Las Piedras	Hurricane_Wind	Landslide	Earthquake	Drought	Severe_Storm
Adjuntas	Hurricane_Wind	Landslide	Earthquake	Flood_100	Lightning
Yauco	Hurricane_Wind	Earthquake	Landslide	Flood_100	Drought
Jayuya	Hurricane_Wind	Landslide	Earthquake	Severe_Storm	Liquefaction
Hormigueros	Flood_100	Hurricane_Wind	Earthquake	Liquefaction	Landslide
Cabo Rojo	Flood_100	Hurricane_Wind	Earthquake	Liquefaction	SLR10Ft
Vega Alta	Hurricane_Wind	Flood_100	Earthquake	Landslide	Liquefaction
Juana Díaz	Hurricane_Wind	Flood_100	Earthquake	Landslide	Drought
Dorado	Flood_100	Hurricane_Wind	Earthquake	Liquefaction	SLR10Ft
Moca	Hurricane_Wind	Earthquake	Landslide	Severe_Storm	Liquefaction

Top 5 Hazard Risk by Municipality					
Municipality	**Top Risk**	**2nd Highest Risk**	**3rd Highest Risk**	**4th Highest Risk**	**5th Highest Risk**
Caguas	Hurricane_Wind	Flood_100	Landslide	Earthquake	Drought
Orocovis	Hurricane_Wind	Landslide	Earthquake	Drought	Severe_Storm
Aibonito	Hurricane_Wind	Landslide	Drought	Earthquake	Flood_100
Utuado	Hurricane_Wind	Landslide	Earthquake	Flood_100	Lightning
San Juan	Hurricane_Wind	Flood_100	Human_Hazard	Earthquake	Landslide
Bayamón	Hurricane_Wind	Flood_100	Earthquake	Landslide	Liquefaction
Patillas	Hurricane_Wind	Landslide	Flood_100	Earthquake	Drought

Table 25: Top 5 Hazard Risk by Municipality in the MID Area. Source: CDBG-MIT Action Plan.

Furthermore, PRDOH will continue to gather data and consider risk factors associated with the vulnerability level, as illustrated in Figure 44.

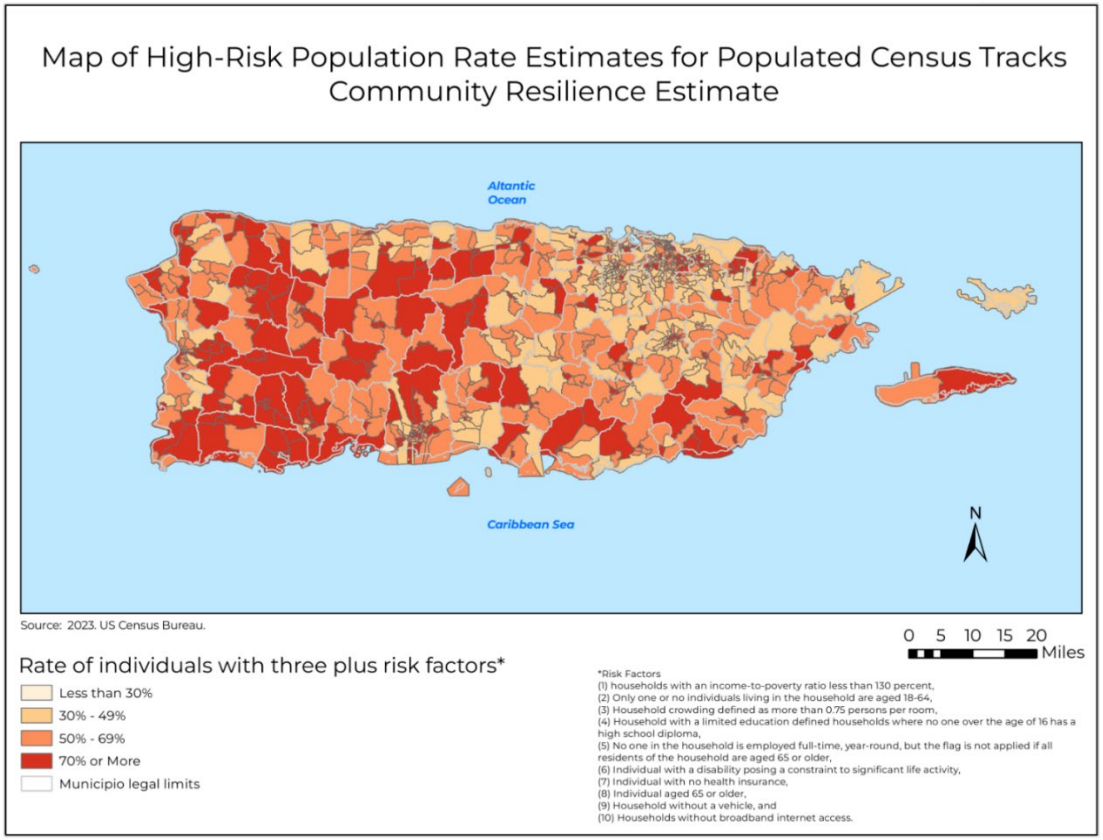


Figure 44: Map of Puerto Rico identifying the High-risk population estimates based on Census tracts. US Census Bureau Community Resilience Estimates.

Cost-Effectiveness

PRDOH will review all projects for feasibility through cost-benefit analysis or comparison of repair costs plus mitigation measures versus reconstruction to the highest resiliency standard. Procurement procedures pertaining to the planning, acquisition of materials, construction or reconstruction and services will be reviewed for compliance with 2 C.F.R. Part 200 Cost Principles including: necessary costs, cost reasonableness standards, allowable costs, and cost allocability.

Duplication of Benefits.

In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. §§ 5121–5207), as amended, and CDBG-DR appropriations acts, 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 Hurricane Fiona. Federal law prohibits any person, business concern, or other entity from receiving Federal funds for any part of such loss as to which they have received financial assistance under any other program, from private insurance, charitable assistance, or any other source. Detailed policies and procedures for assessing DOB will be included in program guidelines. The DOB guidance included in Federal Register Vol. 84, No. 119 (June 20, 2019), 84 FR 28836, updates the duplication of benefits guidance issued in Federal Register Vol. 76, No. 221 (November 16, 2011), 76 FR 71060, for CDBG-DR grants received in response to disasters declared between January 1, 2015, and December 31, 2021. As such, the DOB policy to be outlined in the program guidelines will follow the guidance issued in 84 FR 28836.[56]

[56] The Disaster Recovery Reform Act of 2018 DRRA loan exception does not apply to disasters occurring in 2022, therefore, subsidized loans may be a duplication of benefits for CDBG–DR grants announced in 88 FR 32046 notice (depending on a grantee's DOB analysis).

4. Grantee Proposed Use of Funds

Overview

a. Program Budget

The program budget outlines how funds will be spent. PRDOH will comply with the requirement that must use at least eighty percent (87%) of the funds provided under the Federal Registry Notice must address unmet disaster needs or mitigation activities within the "most impacted and distressed" counties identified in 88 FR 32046 and not less than seventy percent (70%) of the aggregate of CDBG-DR program funds to support activities benefitting LMI population. Funds assigned to the program will be distributed amongst the forty-eight (48) municipalities as approved in the MID Area, considering the amount of unmet needs and damage reports submitted to FEMA and used by HUD.

The program budget aligns with the categories identified in the unmet need assessment, with funds designated for Infrastructure activities within the MID areas. PRDOH may propose the use of funds for housing and economic revitalization needs unrelated to the grantee's unmet infrastructure needs. However, the grantee must demonstrate, in its need assessment, that there is no remaining unmet infrastructure need or that the remaining unmet infrastructure need will be addressed by other funding sources.

Allocation		
Distribution	**Total**	**Percent**
PL-117-180 & PL-117-328 Grand Total	$166,312,000	100%
PL-117-180 DR Unmet Needs	$144,039,000	
PL-117-328 DR Unmet Needs	$580,000	
DR Unmet Needs Total	$144,619,000	87%
PL-117-180 MIT Set-aside	$21,606,000	
PL-117-328 MIT Set-aside	$87,000	
MIT Set-aside Total	$21,693,000	13%
Administrative PRDOH DR	$7,230,950	

Administrative PRDOH MIT	$1,084,650	
Administrative PRDOH Total	$8,315,600	5%
DR Allocation for Program Delivery	$137,388,050	
MIT Allocation for Program Delivery	$20,608,350	
Program Delivery Total	$157,996,400	95%
PL-117-180 MID Area Minimum Allocation	$132,516,000	
PL-117-328 MID Area Minimum Allocation	$533,600	
MID Area Minimum Total	$133,049,600	80%

Table 26: Overall allocation distribution.

4649 Floods & Landslides (5 Municipalities)		4671 H. Fiona MID Area (48 Municipalities)		4649 H. Fiona NON-MID Area (30 Municipalities)	
Total	Percent	Total	Percent	Total	Percent
$20,000,000	13%	$113,049,600	72%	$24,946,800	16%
$17,400,000	87%	$98,353,152	87%	$21,703,716	87%
$2,600,000	13%	$14,696,448	13%	$3,243,084	13%
$20,000,000	100%	$113,049,600	100%	$24,946,800	100%

Table 27: Allocation distribution per disaster.

Connection to Unmet Needs

PRDOH has analyzed the best available data for FEMA/COR3 damages reports, as presented in COR3's transparency portal, showing that seventy-four percent (74%) of projects submitted are directed at roads and bridges. Moreover, FEMA IA data applications for the Severe storm, landslide, and floods reflect eighty-nine percent (89%) of valid registration damage reported was approved ($1,496,881.99 and $1,329,145.49 respectively). As for Hurricane Fiona's impact, FEMA IA data reflect sixty-six percent (66%) of valid registration damage reported was approved ($648,941,798.85 and FEMA PA $611,981,993.33 respectively). During the data analysis period, PRDOH considered that not all affected individuals applied to FEMA. However, the type of impact based on flooding and

landslides, as well as the community engagement after the event, suggests the most effective, cost-efficient use of the allocation should be focused on projects to recover the damages in MID areas, as well as prevent and mitigate future floods and, consequently landslides. As the 88 FR 32046 requires, PRDOH will allocate at least eighty percent (80%) of the funds to address unmet needs in HUD-identified "most impacted and distressed" areas. The remaining percent of the allocation may be used to address unmet needs as more data and/or planning processes are gathered and completed. It is estimated that at least seventy percent (70%) of all program funds will benefit LMI persons or households.

This Action Plan primarily considers and addresses floods at the community level as the main impact of both disasters, supporting efforts that can benefit vulnerable low- to moderate-income communities. At least seventy percent (70%) of all program funds will benefit LMI persons or households. Using the best available data to identify vulnerable LMI communities, priority will be given across the forty-eight (48) municipalities in the MID Area in the project evaluation process.

Leveraging Funds

For PRDOH to maximize a cost-effective use of other federal and local infrastructure disaster recovery funds, coordination with FEMA, COR3, Municipalities and Non-governmental Organizations will continue through the preparation and approval of the action plan and the program design. This approach will identify the available and ideal funding sources and expedite the necessary and cost-reasonable aid to most vulnerable communities needing immediate flood and/or landslide recovery assistance. However, PRDOH also recognizes that Puerto Rico's economic situation limits the available state and municipal funding to leverage the reconstruction and rehabilitation of LMI households, primarily based on current construction constraints in terms of cost, labor, and projects already in process across the island.

Distribution of Funds.

METHOD OF DISTRIBUTION

PRDOH may utilize two (2) distribution models for its flood recovery and mitigation disaster recovery program, as shown in models A and B in the graphic below.

These Methods of Distribution (MODs) shall be utilized to implement the program as outlined in detail within the program description on the following pages. Municipalities and stakeholders will play an active role in the program. PRDOH will administer the Program under one of these models:

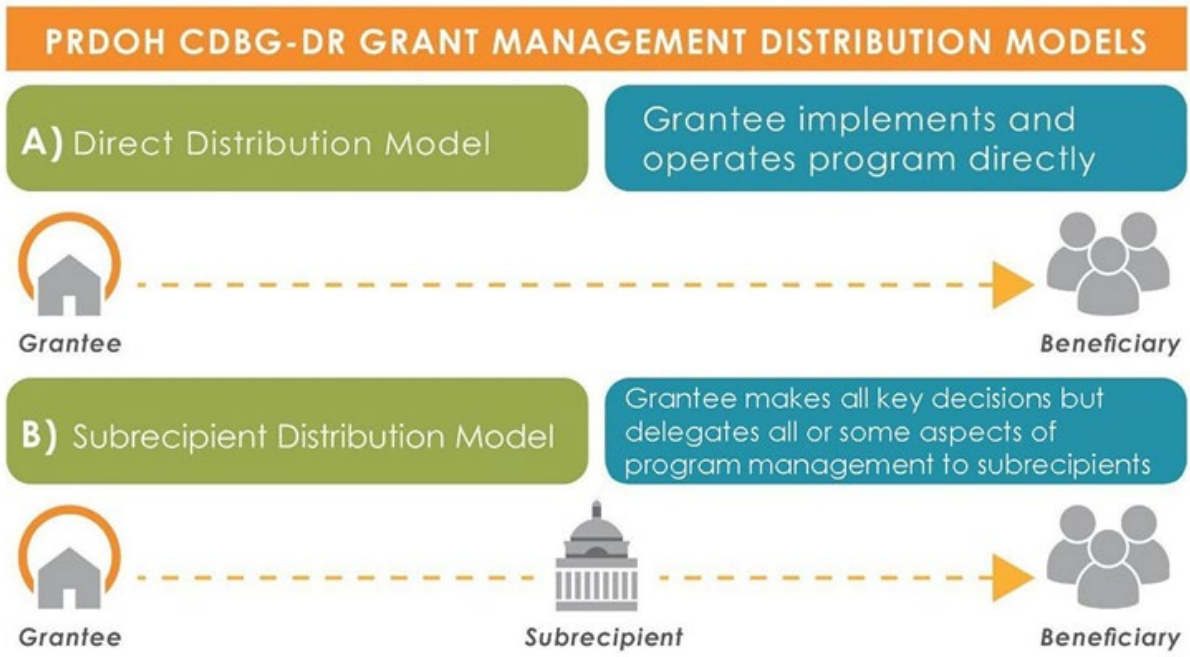


Figure 45: Method of Distribution models for PRDOH CDBG – DR Programs

Grantee

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

Subrecipients

The grantee chooses subrecipients to undertake certain eligible CDBG activities. Subrecipient means a public or private nonprofit agency, authority, organization, or for-profit entity authorized under 24 C.F.R. §570.201(o), receiving CDBG funds from the recipient or another subrecipient to undertake activities eligible for such assistance. Subrecipients may include public and private organizations, agencies, including nonprofit and for-profit subrecipients, as applicable for the program established in the Action Plan. For-profits may only be included as

subrecipients when assisting with economic development and micro-enterprise activities, unless otherwise waived by HUD. Subrecipients will meet the selection criteria outlined in the Action Plan and/or program guidelines and will: CDBG-DR Severe Flood, landslide and Hurricane Fiona Allocation Action Plan and/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 and Environmental Review under 24 C.F.R. § Part 58. Agreements with subrecipients will comply with 24 C.F.R. § 570.503. Therefore, Subrecipients who fail to meet any of the criteria outlined above, or as specified in their SRA, may have their ability to carry out program activities rescinded, in which case, activities would be managed by PRDOH or its Subrecipient, or funds redistributed in accordance with the Action Plan.

PRDOH will meet the applicable environmental requirements, listed under 24 CFR Part 58, before the use or commitment of funds for each activity. After PRDOH, as the Responsible Entity (RE), 1) completes environmental review(s) pursuant to 24 CFR Part 58 and receives from HUD an approved Request for Release of Funds (RROF) and certification (as applicable), or 2) adopts another Federal agency's environmental review, approval, or permit and receives from HUD (or the state) an approved Request for Release of Funds and certification (as applicable), may draw down funds from the line of credit for an activity.

Program Income.

Puerto Rico does not anticipate it will generate program income as part of the activities allowed under these allocations. Should any funds be generated, recovery of funds including program income, refunds, and rebates will be used before drawing down additional CDBG-DR funds, as per 88 FR 32074. 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 at least quarterly and will be subject to applicable regulations from PRDOH and HUD directives. Retention of program income will be in compliance with any subrecipient agreements.

Repayment or Recapture.

Instances may arise where a beneficiary must return all or part of the awarded funding to PRDOH. PRDOH is responsible for recapturing duplicative funds from beneficiaries or from beneficiaries who become non-compliant. All files will be reviewed and reconciled for accuracy to ensure that DOB did not occur and that beneficiaries are in compliance with program requirements and federal guidelines. If a beneficiary has been identified as receiving a potential overpayment, PRDOH will document the amount and basis for the repayment. All funds recovered because of this policy will be tracked in the DRGR system and returned to the CDBG-DR account or U.S. Treasury if the CDBG-DR grant has been closed out.

Further information about program award requirements, occupancy and residency periods, ongoing monitoring during compliance periods, and/or applicant responsibilities related to acceptance of the Program assistance will be further developed in Program Guidelines that will be published in English and Spanish at: https://recuperacion.pr.gov/welcome/en/index.html and https://recuperacion.pr.gov/welcome/index.html.

PROGRAM DETAILS

b. Program Details

Infrastructure Program

Community Flood Recovery and Mitigation Program

PROGRAM BUDGET	ADMINISTERING ENTITY	NATIONAL OBJECTIVE
$157,996,400.00	PRDOH	LMI, SB
MAX AWARD	**START – END DATE**	**ELIGIBLE AREA**
$16,000,000.00		All 78 Municipalities

Public Laws PL-117-180 and PL-117-328 allocate a total of $166,312,000, which is distributed into $144,619,000 (87%) to be used for disaster recovery unmet needs and $21,693,000 (13%) for mitigation activities. Of this total, 5% ($8,315,600) is reserved to cover administrative expenses for grant management, resulting in $157,996,400 for program execution. Both laws also establish the amount of $133,049,600 as the minimum budget to be available for the 48 municipalities identified within the MID areas.

These funds will be distributed in two-line items, one of $20,000,000 to be assigned equally to the five municipalities identified as MID for disaster 4649 corresponding to the February's 2022 flood and landslide event, and the second of $113,049,600 to be allocated proportionally based to the damages reported by the 48 municipalities identified as MID area for disaster 4671 corresponding to Hurricane Fiona.

The remaining budget, $24,946,800, is being allocated, in equal parts, to cover unmet needs for the 30 municipalities that suffered damage but were not identified as MID.

Severe storm, floods, landslides (DR-4649-PR) and Hurricane Fiona (DR-4671-PR)

Whilst Hurricane Fiona and the February floods impacted all seventy-eight (78) municipalities in Puerto Rico, forty-eight (48) are included in the MID area. Moreover, although Municipal governments and state agencies are undertaking active efforts to rebuild or enhance infrastructure vital to community recovery and revitalization, projects in the planning, design and even construction phase

were impacted by the disasters. Severe rainfall flooded streets and overwhelmed water management infrastructure.

Infrastructure Coordination

PRDOH is aware of the infrastructure needs of communities across the island, as identified by the municipalities through outreach efforts of ongoing disaster recovery and mitigation programs and initiatives detailed in active Action Plans. Thus, PRDOH will continue to work closely with FEMA, COR3, Municipalities, NGO's and communities as project worksheets are developed in an effort to effectively address funding gaps for actual projects and support future projects. PRDOH will collaborate with the COR3 to develop strategies for long-term resilience to natural hazards and detail how infrastructure investments align with other planned capital improvements. This funding coordination may include working with local governments on the construction, maintenance, or improvements of flood control systems including but not limited to levees, bridges and other functionally dependent uses as defined by HUD under 24 CFR 55.2(b)(6)".

Prioritizing infrastructure in identified MID areas is of paramount importance to prevent and mitigate flood and landslide impacts in the most vulnerable communities across the island. PRDOH will continue to support ongoing efforts of active CDBG-DR and CDBG-MIT infrastructure Programs, focusing on community flooding needs in both urban centers and rural communities. This program seeks to promote the redevelopment, re-greening, and restoration of lost natural resources. PRDOH is looking to improve public infrastructure or their extension to implement a wide range of "RE-Green" initiatives such as using green best practice in infrastructure projects and promoting a positive restorative and protective effect on the natural infrastructure. Other allowable activities under this initiative includes minor grubbing, clearing of debris, pruning, sodding, seeding and reforestation of floodplains and wetlands to restore and preserve its natural and beneficial functions and values (certain conditions needs to be met to comply with 24 CFR Part 55 requirements). It may also include public infrastructure extensions and/or improvements, as well as the establishment of a Community Resilience Center, if deemed as the best recovery and mitigation strategy for a vulnerable community.

Taking into consideration the common factors for both disasters were floods and landslides, there will also be a focus on Low Impact Development (**LID**). LID refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration, or use of stormwater[57]. It's also an approach to land development or redevelopment that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions. EPA promotes the use of LID and Green Infrastructure (**GI**) as a stormwater management approach that provides many community benefits and that can supplement flood protection. LID/GI projects may allow a community to claim points under the Community Rating System (**CRS**) developed by FEMA.

RECOVERY PLAN ALIGNMENT

The proposed Community Flood Recovery and Mitigation Program aligns with current CDBG-DR, CDBG-MIT, and CDBG-DR Earthquakes and Isaias Storm Action Plan efforts.

ELIGIBLE ACTIVITIES

Projects located within FEMA designated Special Flood Hazard Areas must comply with Executive Orders 11990 (Protection of Wetlands) and 11988 (Floodplain Management). Eligible/covered activities include the proposed acquisition, construction, demolition, improvement, disposition, financing, and use of properties located in floodplains or wetlands were no practicable alternatives exists and they met the 24 CFR Part 55 requirements.

[57] Planning Regulation #40, by PRPB.

- As per 24 CFR 55.1(a)(5) "Nonstructural alternatives to floodplain development and the destruction of wetlands are both favored and encouraged to reduce the loss of life and property caused by floods, and to restore the natural resources and functions of floodplains and wetlands. Nonstructural alternatives should be discussed in the decision-making process where practicable."

- Activities located within a floodway must be limited to functionally dependent use, floodplain function restorations or others as listed under 24 CFR Part 55.12(c).

- All projects under this program must include a mitigation component.

All projects in this Program will meet at least one (1) of the following eligible activities:

• Section 105 (a) (3) – Code Enforcement in deteriorated or deteriorating areas in which such enforcement, together with public or private improvements or services to be provided, may be expected to arrest the decline of the area

• Section 105 (a) (4) – Clearance, demolition, removal, reconstruction, and rehabilitation (including rehabilitation which promotes energy efficiency) of buildings and improvements

• Section 105 (a) (5) – Architectural Barrier Removal

• Section 105 (a) (7) – Disposition of Real Property

• Section 105 (a) (8) – Public Facilities

• Section 105 (a) (12) – Planning Activities

• Section 105 (a) (14) – Activities Carried Out through Nonprofit Development Organizations

PROGRAM ACCOMPLISHMENTS

Promotes widespread re-greening (green infrastructure, etc.) efforts across the island to provide multiple benefits to communities. When applicable, if a Municipality has not benefited from the development of Community Resilience Centers (**CRC**) through the City Revitalization Program, a CRC proposal may be evaluated in order to support communities during disasters, provide with provision of critical functions and increase social resilience through potential expansion of year-round day-to-day functions.

ELIGIBILITY

Applicants must be one (1) of the following types of entities:

- Unit of General Local Government (Municipal Governments);
    - State Agencies
    - Alliances, Consortiums, Private/Public Alliances between Municipalities and NGO's
        - The proposed Community Flood Recovery and Mitigation Program will build upon the established designs and processes developed of the City Revitalization Program (**CRP**), from the CDBG-DR Portfolio. The CRP focuses on infrastructure improvements to urban centers and the physical infrastructure that supports them, particularly addressing the reconstruction needs resulting from hurricanes Irma and María. The Program encourages the establishment of alliances between NGO's and municipalities to deliver their services or programs to the communities they serve.

Additional Eligibility Criteria

- CDBG-DR funds cannot be used for long-term operations and maintenance. Subrecipients must submit an Operations and Maintenance Plan (O&M Plan) for proposed projects to be funded through this program, including daily operations.

- All construction work, repair or new, shall utilize the services of an architect or engineer with a valid professional license to practice in Puerto Rico to design the facilities and improvements in accordance with PRDOH and FEMA standards and all applicable local codes and regulations.

- The Project must be within the Municipal boundary.

- Demonstrate tie-back to the disaster.

- Projects must have a CDBG-DR eligible activity.

- CRCs are considered critical facilities under 24 CFR Part 55.2 (b)(3). Critical actions are not allowable if they are located within the floodway or Coastal High Hazard Area (24 CFR Part 55.1 (c). If the proposed

construction/rehab site is located within the 500-year floodplain or 100 year floodplain, restriction might apply in terms of elevation, flood insurance, among others.

AWARD

- Min Award: $500,000.00
- Max Award: $16,000,000.00

METHOD OF DISTRIBUTION

Subrecipient Distribution Model

To best assist and continue the community recovery process, PRDOH plans to distribute funding for this Program amongst the seventy-eight (78) municipal governments of Puerto Rico, taking into consideration the minimum allocation established by Public Laws PL-117-180 and PL-117-328 for the forty-eight (48) municipal governments approved by HUD in the MID area expansion. PRDOH encourages Program collaboration between Municipalities, State Agencies and NGO's during the design and implementation phase of disaster recovery projects. Municipalities will have a specified period to submit project concepts that meet program objectives to PRDOH. The selection process for these projects will be overseen by PRDOH and will utilize a Direct Selection Method. Community Flood and Landslide Recovery and Mitigation Program funding distribution information will be publicly available and posted to the PRDOH CDBG-DR website. In situations where municipal governments do not comply with their funding subrecipient agreements, PRDOH reserves the right to cancel said agreement and carry out an alternate funding distribution process to allow other eligible entities to submit applications to implement eligible projects under this Program.

NATIONAL OBJETIVE

The activities funded by the Community Flood and Landslide Recovery and Mitigation Program will comply with the first two (2) National Objectives; (1) benefiting low- to moderate-income (LMI) persons, (2) aiding in the prevention or elimination of slums or blight. Moreover, projects presented with a particular urgency (as per the urgent need National Objective) will be evaluated.

PROGRAM OBJECTIVE & DESCRIPTION

Community Flood and Landslide Recovery and Mitigation Program establishes a fund for NGOs and municipalities to address the infrastructure needs of vulnerable communities in coordination with state and federal agencies. Eligible projects include rehabilitation or reconstruction of public infrastructure improvements, RE-GREEN and LID initiatives, and projects that use green infrastructure techniques or restore and replant impacted natural resources. Municipalities that do not develop a CRC within the CDBG-DR City Revitalization Program may opt to develop a CRC facility if deemed necessary, cost-effective, and if the vulnerable surrounding community endorses it. As per PRDOH intentions to maximize fund investment, CRCs shall provide year-round community gathering spaces where citizens may receive educational materials and information on preparedness and home/community resilience initiatives. While not required, applicants will be strongly encouraged, in the application process, to provide non-CDBG-DR funding to the project, which may include in-kind contributions, land donations, long-term maintenance and operations, or support from non-profits or civic/community groups, and other measures.

Broadly stated, mitigation activities favored by the Community Flood Recovery and Mitigation Program seek to promote "re-greening" initiatives and green best practices. Specific strategies may include but are not limited to, the management of stormwater to ameliorate the needs of grey infrastructure, soil structure conservation, and infiltration through landscaped areas as a method to reduce landslides. Moreover, PRDOH will promote mitigation activities and restoration of lost natural resources while improving public infrastructure or their extension through; reforestation as a strategy to recover part of the urban forests affected by the disasters and to mitigate the heat island effect; provide landscaped areas in urban centers and sidewalks as a way to capture and control the excess rain resulting from impervious surfaces while also responding to municipalities' compliance with EPA's - MS4 program; resurface with pervious constructive materials and re-design to increase soil infiltration and reduce flooding issues; structural planting to reinforce soil's mechanical strength and reduce minor landslides.

As previously stated, detailed actions could encompass rain harvesting, reforestation, resurfacing with pervious constructive materials, thus reducing

effects upon the built environment, the health, safety, and welfare of residents. The following list provides examples of possible project mitigation activities:

1. Local Planning and Regulations
    a. Planning and zoning
    b. Adopting and enforcing building codes and standards
2. Structure and Infrastructure Projects
    a. Property acquisition and relocation
    b. Acquisition and demolition of flood prone structures
    c. Floodplain protection
    d. Transitioning to renewable energy sources
    e. Elevating structures above the floodplain
    f. Replacing culverts damaged by flooding to increase capacity to prevent future damage
    g. Retrofitting structures to withstand earthquakes and hurricanes
    h. Enhancing energy efficiency
    i. Securing shelves and water heaters to walls
3. Natural Systems Protection
    a. Protecting and restoring forests and critical ecosystems.
    b. Adopting regenerative agricultural practices
    c. Buying flood insurance to protect personal property and belongings
4. Education and Awareness Programs
    a. Public outreach projects
    b. Developing and implementing business or community plans to reduce susceptibility to hazards