



PUERTO RICO

COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION 5th AMENDMENT TO THE ACTION PLAN (SUBSTANTIAL)

AMENDMENT DRAFT FOR PUBLIC COMMENTS
30-DAY PUBLIC COMMENT PERIOD

START: July 2, 2025

END: August 1, 2025

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5TH AMENDMENT TO THE CDBG-MIT ACTION PLAN (SUBSTANTIAL): DRAFT FOR PUBLIC COMMENTS

Public Comment Period

This document constitutes a draft of the CDBG-MIT Action Plan 5th Amendment (Substantial) for a 30-day public comment period starting from July 2, 2025, to August 1, 2025. This draft is subject to change.

Each substantial amendment to the CDBG-MIT action plan must be published on the Puerto Rico Department of Housing (**PRDOH**) website for a public comment period of no less than thirty (30)¹ calendar days to ensure adequate citizen participation, as required by the United States Department of Housing and Urban Development (**HUD**).

PRDOH will consider comments on this substantial amendment draft before submitting the document to HUD for review. The approved amendment will be posted on PRDOH's website and incorporated into the Action Plan as a whole. This will allow the public and HUD access to PRDOH's entire action plan for viewing as a single document, rather than having to search for and cross-reference its multiple changes.²

The most current version of the CDBG-MIT Action Plan, including all approved amendments, is available in English and Spanish at PRDOH's website 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/. All citizens are encouraged to present their public comments to PRDOH through any of the following methods:

- Via telephone: 1-833-234-CDBG or 1-833-234-2324 (TTY: 787-522-5950)
- Via email at: <u>infoCDBG@vivienda.pr.gov</u>
- Online at: https://recuperacion.pr.gov/en/action-plans/action-plan-cdbg-mit/
- In writing at:

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

Public comments related to this substantial amendment will be posted on the CDBG-MIT website, along with the responses provided by PRDOH, as Appendix G and G.1.

¹ See Federal Register Notice Vol. 84, No. 169 (August 30, 2019), 84 FR 45838, 45850.

² See 84 FR 45838, 45850.

SUMMARY OF THE SUBSTANTIAL AMENDMENT

This substantial amendment to the Action Plan includes programmatic changes for planning, housing, infrastructure and multisector programs. A summary of the changes is provided on the table below:

Section	Subsection	Proposed Changes	
Planning Sector			
Mitigation and Adaptation Policy Support (MAPS) Program	Program Outcomes	Language in the Program Outcomes section under the MAPS Program was updated to better clarify how the implementation of activities aligns between the CDBG-DR and CDBG-MIT Programs.	
Planning and Capacity Building (PCB) Program	Program Goals	The PCB Program proposes to remove language under the Program Goals section concerning fixed funding limits and timeframe to awardees, allowing greater flexibility to address specific needs and allocate resources effectively within programmatic areas. This change will provide the capacity to evaluate potential extensions to SRAs, improving the Program's proficiency to achieve its mitigation and outcome objectives.	
Infrastructure Sector			
Infrastructure Mitigation Program (IMP)	Risk-Benefit Score Analysis	The IMP Program removed the feasibility language as it is redundant within the program narrative. Details on the feasibility criteria are outlined in the Program Guidelines.	
Housing Sector	Housing Sector		
Single-Family Housing Mitigation (SFM) Program	National Objectives	The SFM Program reduced its LMI benefit goal from 100% to 95%. This adjustment was made not only to align with the DRGR system, but also for PRDOH to be able to assist participants with urgent recovery needs who are over the 80% Area Median Family Income (AMFI) LMI threshold.	

Section	Subsection	Proposed Changes
Leverage for Low- Income Housing Tax Credits - Mitigation (LIHTC-MIT) Program	National Objectives	The LIHTC-MIT Program removed the UNM National Objective, as the program is designed to serve only LMI participants.
Social Interest Housing Mitigation (SIHM) Program	Eligible Entities	The SIHM Program has included units of general local government as an eligible entity without limiting their participation only to the public facilities set-aside. This eligibility criteria modification will help the program collaborate with units of general local government in the execution of projects that will serve vulnerable populations, increasing the opportunity to provide a safe home to these communities.
	Eligible projects	The SIHM Program revised its eligibility criteria by including single-family housing as an eligible type of housing project to benefit vulnerable communities.
	Maximum Award	A footnote under the Maximum Award section in the SIHM Program was modified to clarify that the Program will conduct a cost reasonableness analysis, as well as a review of the scope of work, to determine if changes to the implementation of the project are needed due to unforeseen factors.
Multi-Sector Community Mitigation (MSC) Program	Program Implementation	The MSC Program included a new alternative under the Program Implementation section for PRDOH to be able to offer alternative relocation or mitigation options from the broader CDBG portfolio if full-community relocation isn't feasible. This change allows communities to have flexibility within the process and prevents residents from remaining in high-risk areas due to relocation delays.

Section	Subsection	Proposed Changes
	Eligible Beneficiaries	Due to zoning permitting and other implementation complexities that the business relocations bring, the MSC Program will focus its efforts on relocating only community residents away from high-risk areas.
New Program: Homebuyer Assistance Mitigation (HBA-MIT) Program	N/A	The proposed HBA-MIT Program is designed to provide housing assistance to address the unmet mitigation needs of low-and moderate-income (LMI) households and the Critical Recovery Workforce (CRW), allowing them to own a property outside of high-risk areas. This Program builds on the CDBG-DR Homebuyer Assistance Program by extending its scope to address identified risks, ensuring that LMI and CRW populations gain access to safe, resilient housing outside high-risk areas, while fostering family stability and community cohesion. A total of \$100,000,000 is being proposed to fund this new program, which would be reallocated from the Infrastructure Mitigation Program.
Multisector		
Economic Development Investment Portfolio for Growth – Lifeline Mitigation (IPGM) Program	National Objectives	The IPGM Program adjusted the national objectives percentages' goal to 60% for LMI and 40% for UN. This change was made to better align the program activities with its objectives and ensure effective implementation.
Community Installations of the Community Energy and Water Resilience Installations Program	Maximum award	The CEWRI Program removed language under the Maximum Award section to provide flexibility to households that may require structural improvements for the installation of renewable energy systems. Details for award

Section	Subsection	Proposed Changes
		exceptions are already included in subprogram descriptions, as applicable.
Appendices		
New Covered Project: San Juan Bay Pier 1 & Walkway Project	Appendix P	The proposed San Juan Bay Pier 1 and Walkway Covered Project consists of rebuilding Pier 1 with modern maritime structures and enhanced resilience to natural disasters, while rehabilitating Walkway 2 at Paseo Gilberto Concepción de Gracia to improve seismic performance and ensure compliance with safety standards. This phased project aims to maintain maritime operations, enhance structural integrity, and support vital interactions between locals and cruise passengers. The total cost for this project is \$114,007,521.00.
New Covered Project: Improvements and Rehabilitation of the Rafael Hernandez Airport in Aguadilla	Appendix Q	The proposed Improvements and Rehabilitation of the Rafael Hernández International Airport in Aguadilla Covered Project focuses on the reconstruction of runways and taxiways and the rehabilitation of the passengers' terminals, while also increasing the infrastructure's resiliency against future disasters. These activities will help with the continuation of supply chain network as well as transportation in Puerto Rico. The total cost for this project is \$146,038,500.00.

Budget Reallocation Table

The following table illustrates where funds are coming from and where they are moving to in this amendment, as required at 84 FR 45838, 45850.

Program	Previous Budget	Change	Revised Budget
Planning Total	\$150,000,000.00		\$150,000,000.00
Risk and Asset Data	\$130,000,000.00		\$130,000,000.00
Collection Program			
Mitigation and	\$10,000,000.00		\$10,000,000.00
Adaptation Policy			
Support Program			
Planning and	\$ 10,000,000.00		\$10,000,000.00
Capacity Building			
Program			
Infrastructure	\$4,391,451,166.00		\$4,291,451,166.00
Total			
Infrastructure	\$4,391,451,166.00	(\$100,000,000.00)	\$4,291,451,166.00
Mitigation Program			
Housing Total	\$2,100,896,086.00		\$2,200,896,086.00
Single-Family	\$1,600,896,086.00		\$1,600,896,086.00
Housing Mitigation			
Program			
Social Interest	\$100,000,000.00		\$100,000,000.00
Housing Mitigation			
Program			
Multi-Sector	\$300,000,000.00		\$300,000,000.00
Community			
Mitigation Program			
CDBG-MIT	\$100,000,000.00		\$100,000,000.00
Leverage for Low-			
Income Housing			
Tax Credits			
Program			
Homebuyer	\$0	\$100,000,000.00	\$100,000,000.00
Assistance			
Mitigation Program			
Multi-Sector Total	\$1,203,816,696.00		\$1,203,816,696.00

Economic	\$628,816,696.00	\$628,816,696.00
Development		
Investment		
Portfolio for Growth		
- Lifeline Mitigation		
Program		
Community Energy	\$500,000,000.00	\$500,000,000.00
and Water		
Resilience		
Installations		
Program		
Farm and Energy	\$75,000,000.00	\$75,000,000.00
Resilience Program		
Administrative	\$414,264,200.00	\$414,264,200.00
Budget		
State Planning	\$24,855,852.00	\$24,855,852.00
Total	\$8,285,284,000.00	8,285,284,000.00

PROPOSED SUBSTANTIAL AMENDMENT CHANGES

The following changes are proposed for the 5th Amendment to the CDBG-MIT Action Plan (Substantial). This draft is subject to change.

PROGRAM BUDGET

Program	Budget	% LMI Goal
PLANNING PROGRAMS	\$150,000,000.00	NIA
Risk and Asset Data Collection Program	\$130,000,000.00	N/A
Mitigation and Adaptation Policy Support Program	\$10,000,000.00	N/A
Planning and Capacity Building Program	\$10,000,000.00	N/A
INFRASTRUCTURE PROGRAMS	\$4,291,451,166.00	_
INFRASTROCTORE PROGRAMIS	\$4,391,451,166.00	
Infrastructure Mitigation Program*	\$2,291,451,166.00	50%
I mastracture mitigation rrogiam	\$2,391,451,166.00	30 /8
.HMGP Match Set-Aside	\$1,000,000,000.00	
Healthcare Facilities Set-Aside	\$1,000,000,000.00	
HOUSING PROGRAMS	\$2,200,896,086.00	_
HOUSING PROGRAMS	\$2,100,896,086.00	
Single-Family Housing Mitigation Program	\$1,600,896,086.00	<mark>95%</mark> 100%
Social Interest Housing Mitigation Program	\$100,000,000.00	100%
Public Facilities Reconstruction or Rehabilitation for Social Interest Housing Set- Aside	\$15,000,000.00	
Multi-Sector Community Mitigation Program	\$300,000,000.00	51%
Leverage for Low-Income Housing Tax Credits Program-Mitigation (LIHTC-MIT)	\$100,000,000.00	100%
Homebuyer Assistance Mitigation Program	\$100,000,000.00	55%
MULTI-SECTOR SUPPORT PROGRAMS	\$1,203,816,696.00	-
Economic Development Investment Portfolio for Growth Program	\$628,816,696.00	60% 0%
Community Energy and Water Resilience Installations Program	\$500,000,000.00	70%

Farm and Energy Resilience Program	\$75,000,000.00	0%
ADMINISTRATIVE	\$414,264,200.00	N/A
Administrative Budget	\$414,264,200.00	N/A
STATE PLANNING	\$24,855,852.00	N/A
Planning Oversight	\$24,855,852.00	N/A
Total	\$8,285,284,000.00	

*Infrastructure Mitigation Program budget encompasses all project activity eligible under public facilities improvement.

LMI Goal	Total	% of Total Budget
Due annual anti- IAM O and	\$4,801,866,882.00	62.39%
Programmatic LMI Goal	\$4,499,621,669.00	58.47%

MITIGATION AND ADAPTATION POLICY SUPPORT PROGRAM

RISK-BASED NEED: Mitigation activities to harden and modernize the built environment (i.e., the technological systems) to withstand hazardous events in the absence of policy support is an incomplete solution. True resilience is supported through the consideration and incorporation of the natural environment (i.e., ecological systems), and policy and governance structures (i.e., social systems) that impact human behavior. In addition, policies that result in mitigation are among the most cost-effective methods for enhancing resilience.

Centralized building code and land use plans in Puerto Rico are not restrictive of mitigation activities, but their effectiveness is are hindered by a lack of modernization at the local level, limiting to ensure cohesion, enforcement, and granularity. The outcomes of the GeoFrame Program will increase mitigation adaptation efforts by delivering a cadastral database that enables an increased understanding of residents and housing stock in relation to geographic risks, as well as a publicly available mapping of land use plans. However, further information is needed through an objective and sweeping review of Puerto Rico's state and local policy and process, building code, land use plans, and zoning in relation to the updated Risk Assessment completed by PRDOH and in consideration of modernized mitigation solutions, green infrastructure, and benefits gained through the utilization and protection of cultural and natural resources.

PROGRAM DESCRIPTION: The Mitigation and Adaptation Policy Support Program builds on information related to policy needs across the Island. The information is collected through the stakeholder engagement process for the Action Plan, the Disaster Recovery Planning Programs, including the MRP Program, WCRP Program, and the GeoFrame Program. It shall also utilize, as it becomes available, the information collected under the CDBG-MIT Planning and Capacity Building and RAD Programs.

Adaptation and policy support refer to the use of policy, building code, land use plans, zoning, and planning and capacity-building interventions to enhance local jurisdictional and community ability to prepare and plan for, avoid, absorb, recover from, and more successfully adapt to potential risks from hazardous events. The evaluation of social structures, such as policy and governance of development in

Puerto Rico, shall be founded on the geographically based Risk Assessment completed and made available to the public. This evaluation yields an increased understanding of risk to integrate and align local, state, and federal policies that impact mitigation and long-term resilience in Puerto Rico.

The Mitigation and Adaptation Policy Support Program will further the policy-related goals identified by HUD in 84 FR 45838. The Federal Register seeks to support the adoption of policies that reflect municipal and regional priorities that will have long-lasting effects on community risk reduction and lessen the cost of future disasters. The Federal Register also encourages grantees to use CDBG-MIT funds to improve many of their governmental functions to better position jurisdictions for more resilience in the face of future disasters.

A comprehensive policy analysis shall consider multi-hazard mitigation policy changes to create a policy framework that increases the adaptive capacity of local jurisdictions and neighborhoods, including, but not limited to:³

- Limiting and preventing development in high-hazard areas, such as: using
 conservation easements to protect environmentally significant portions of
 parcels from development; acquiring hazardous areas for conservation or
 restoration as a functional public park or natural mitigation asset; and/or
 acquiring safe sites for public facilities (e.g., schools, police/fire stations, etc.).
- Adopting development regulations in hazard areas, such as: requiring setbacks from hazardous areas such as shorelines, steep slopes, or wetlands; requiring conditional or special use permits for the development of known hazard areas; adopting impervious cover limits; offering expanded development rights to developers/businesses for performing mitigation retrofits; and/or incorporating restrictive covenants on properties located in known hazard areas.
- Limiting density of development in high-hazard areas, such as: increasing minimum lot size for development; designating agricultural use districts; ensuring zoning ordinance encourages higher density outside of high-risk areas; requiring clustering for planned unit developments in the zoning ordinance to reduce densities in known hazard areas; establishing a local transfer of development rights (TDR) program for risk in known hazard areas;

³ FEMA. *Mitigation Ideas for Natural Hazards*. June 2017. Accessed at: https://www.fema.gov/sites/default/files/2020-06/fema-mitigation-ideas_02-13-2013.pdf

- and/or establishing a process to reduce densities in damaged areas following a disaster event.
- Strengthening land use regulations to reduce hazard risk through activities such as: using bonus/incentive zoning to encourage mitigation measures for private land development; using conditional use zoning to require mitigation measures for private land development; establishing a process to use overlay zones to require mitigation techniques in high-hazard districts; adopting a post-disaster recovery ordinance based on a plan to regulate repair activity; adopting environmental review standards; and/or incorporating proper species selection, planting, and maintenance practices into landscape ordinances.
- Supporting local adoption and enforcement of building code and inspections to help ensure buildings can adequately withstand damage during hazard events such as: adopting locally the requirements of Puerto Rico Codes 2018⁴ standards and appropriate International Residential Code (IRC); incorporating higher standards for hazard resistance in the local application of the building code; considering the orientation of new development during design (e.g., subdivisions, buildings, infrastructure, etc.); establishing moratorium procedures to guide the suspension of post-disaster reconstruction permits; and/or establishing "value-added" incentives for hazard-resistant construction practices beyond code requirements.
- Creating local funding mechanisms to leverage resources through measures such as: establishing a local reserve fund for public mitigation measures; using impact fees to help fund public hazard mitigation projects related to land development (e.g., increased runoff); requiring a development impact tax on new construction to mitigate the impacts of that development; recruiting local financial institutions to participate in "good neighbor" lending for private mitigation practices; and/or providing a local match to federal funds that can pay for private mitigation practices.
- Utilize incentives and disincentives to promote hazard mitigation through measures such as: using special tax assessments to discourage builders from constructing in hazardous areas; using insurance incentives and disincentives; providing tax incentives for the development of low-risk hazard parcels and to

⁴ Puerto Rico Codes 2018, Regulation No. 9049 can be found here: http://app.estado.gobierno.pr/ReglamentosOnLine/Reglamentos/9105.pdf

encourage infill development; waiving permitting fees for home construction projects related to mitigation; using tax abatements, public subsidies, and other incentives to encourage private mitigation practices; and/or reducing or deferring the tax burden for undeveloped hazard areas facing development pressure.

PROGRAM GOALS: The goal of the Mitigation and Adaptation Policy Support Program is to enhance the mitigative efficacy of policies, programs, plans, and projects across the portfolio of CDBG investments and other capital investments. Using a thorough stakeholder engagement process, political and regulatory analysis, and providing recommendations for new or enhanced processes or frameworks, the Program will improve the ability of state and local agencies to reduce risks and mitigate future damages from hazard events.

The Program will identify and analyze existing rules, laws, regulations, and policies that impact hazards, risk, mitigation, and resilience on the Island, and propose amendments to strengthen their mitigative and resilience impact. The Program will develop a policy toolbox that includes best practices, model ordinances, funding models, and other regulatory documents that can be adapted to local circumstances. The analysis will inform the Planning and Capacity Building Program of the possibility to fund inspectors.

PLANNING PROGRAM OUTCOMES:

OUTCOME 1: Municipal and Government of Puerto Rico Policy Framework Analysis and Recommendations		
Analysis	PRDOH and/or subrecipients will collaborate with relevant state and local entities to identify and analyze policies, procedures, incentives, codes, or regulations pertaining to, or impacted by, current and future hazards identified as relevant in the Risk and Hazard Analysis.	
,	Topics of importance include land use, planning and zoning, development and building codes, code enforcement methods, transportation, and affordable housing, as well as others that may be identified as important during implementation.	
Recommendations	PRDOH and/or subrecipients will work closely with relevant state and local entities to recommend adjustments to identified policies, incentives, codes and regulations, and tailor those regulatory tools to the needs and goals of	

the administering entity. Recommendations will be aimed at strengthening the resilience or mitigative value of regulatory tools and processes.

One example of a proposed enhancement includes amendments to affordable housing policies to incorporate incentives pertaining to the location of affordable or subsidized housing outside of hazard zones and within proximity to lifeline assets.

OUTCOME 2: Policy Toolbox

Roct	Dractices

PRDOH and/or subrecipients will develop a suite of best practices related to Mitigation Planning, Programs and Projects. Best Practices will include regulatory or policy-oriented methods to enhance resilience for multiple scenarios. For example, the use of development restrictions in certain high-hazard areas, or enhanced construction standards in other hazard areas, or policy for managing debris to mitigate landfill impact.

PRDOH and/or subrecipients will develop model ordinances or regulatory tools to address specific identified mitigation or hazard concerns, including any trends identified during the Municipal and Government of Puerto Rico Policy Analysis.

Model Ordinances

Model ordinances or regulatory tools should speak to issues relevant to multiple governmental entities or jurisdictions. They should be drafted with the flexibility to be tailored to the specific needs of the implementing entity but should otherwise be a complete package ready for adoption by each entity.

Relocation

PRDOH and/or subrecipients will develop policies that support the relocation of at-risk communities.

Increase Access to Insurance

PRDOH and/or subrecipients will develop model ordinances or regulatory tools to support actions that promote an increase in hazard insurance coverage.

Others as deemed necessary

OUTCOME 3: Planning and Policy Integration and Alignment

Resilience Scorecard

PRDOH and/or subrecipients will evaluate and communicate hazards and mitigation opportunities using a mitigation and/or resilience scorecard. The scorecard will be powered by the geospatial data collected under the CDBG-

	DR and -MIT data programs (GeoFrame and RAD Programs). the data collected by the CDBG-DR Municipal Recovery Planning (MRP) Program. Additional geospatial data collected under the CDBG-DR GeoFrame and the CDBG-MIT RAD programs may be used as it becomes available.	
Data Integration	PRDOH and/or subrecipients will work closely with relevant entities, including PRPB and municipalities, to integrate spatial data collected under the CDBG-DR and CDBC-MIT data programs (GeoFrame and RAD Programs) data collected by the CDBG-DR Municipal Recovery Planning (MRP) Program into statewide planning processes, such as land use plans, mitigation plans, and zoning codes using the scorecard approach. Additional geospatial data collected under the CDBG-DR GeoFrame and the CDBG-MIT RAD programs may be used as it becomes available. The goal is to address hazards identified in the Mitigation Risk-Based Needs Assessment using spatially informed plans, policies, and regulations.	
Mitigation Plans	PRDOH and/or subrecipients will ensure the availability of geospatial data collected under the CDBG-DR and CDBG-MIT data programs (GeoFrame and RAD Programs) data collected by the CDBG-DR Municipal Recovery Planning (MRP) Program for development, enhancements, and updates to the State, local, or FEMA HMPs, or development of a FEMA-approved enhanced mitigation plan. Additional geospatial data collected under the CDBG-DR GeoFrame and the CDBG-MIT RAD programs may be used as it becomes available. PRDOH and/or subrecipients will also coordinate with HMP entities to support timely and current plans.	
Plan/Policy Alignment	PRDOH and/or subrecipients will work towards alignment of multiple policies, procedures and plans into comprehensive framework that promotes a cohesive, Island-wide approach to mitigation. One example illustrating this need is that a hazard mitigation plan may call for acquisitions and buy-outs in high-hazard areas, while the comprehensive plan may set goals to increase investments in the same location.	

The need for additional policy and planning support will become apparent as the Mitigation and Adaptation Policy Support Program is refined and developed through the Program Guidelines. The Action Plan description does not limit the program description.

PROGRAM PHASING: The Mitigation and Adaptation Policy Support Program will launch immediately upon approval of the Action Plan. Additional phasing of research and development of toolbox will be determined in collaboration with selected subrecipient(s).

ELIGIBLE ACTIVITIES:

Pursuant to the HCDA, the following are eligible activities:

- Section 105(a)(3) Code Enforcement
- Section 105(a)(12) Planning and Capacity Building
- Section 105(a)(14) Activities Carried Out through Nonprofit Development Organizations
- Section 105(a)(21) Assistance to Institutions of Higher Education

INELIGIBLE ACTIVITIES:

• Legislative lobby activities are prohibited.

METHOD OF DISTRIBUTION: Direct Distribution and Subrecipient Distribution Models. The Mitigation and Adaptation Policy Support Program will be administered by PRDOH or a Government of Puerto Rico entity by Subrecipient Agreements, Interagency Agreements, or Memorandums of Understanding, which may be utilized to execute defined portions of this Program.

NATIONAL OBJECTIVE: N/A

ELIGIBLE ENTITIES:

- Units of general local government/ municipalities (including departments and divisions)
- Government of Puerto Rico Agencies, Authorities, Trusts, and Boards
- Community-Based Development Organizations and private non-profits
- Non-governmental organization (501(c)(3)) or Not-for-Profit Entities

MIN/MAX AWARD: PRDOH will designate a Subrecipient entity who will assist in administering program activities on behalf of Puerto Rico for the benefit of all citizens. No awards will be made to beneficiaries.

ALIGNMENT WITH CDBG-DR PROGRAMS:

 The Mitigation and Adaptation Policy Support Program builds on information related to policy needs across the Island collected through the CDBG-DR Planning Programs, including the MRP Program, WCRP Program, and the GeoFrame Program.

ALIGNMENT WITH HUD OBJECTIVES:

- **Build the capacity of states and local governments** to comprehensively analyze disaster risks and to update hazard mitigation plans through the use of data and meaningful community engagement.
- Support the adoption of policies that reflect municipal and regional priorities that will have long-lasting effects on community risk reduction, including risk

reduction to community lifelines such as Safety and Security, Communications, Food, Water, Sheltering, Transportation, Health and Medical, Hazardous Material (management) and Energy (Power & Fuel); and future disaster costs (e.g., adoption of forward-looking land use plans that integrate the hazard mitigation plan, the latest edition of the published disaster-resistant building codes and standards, vertical flood elevation protection, and policies that encourage hazard insurance for private and public facilities).

ALIGNMENT WITH ECONOMIC RECOVERY PLAN:

- MUN 4 Build the Capacity of Municipalities to Apply for, Secure, and Manage Grants
- HOU 6 Enforce Land Use Plans and Improve Compliance with Building Permitting
- CIT 16 Government Digital Reform Planning and Capacity Building
- **CIT 23** Data Collection and Standardization for Disaster Preparedness and Emergency Response
- CPCB 1 Disaster Preparedness Data Analysis and Decision Support Capability
- **CPCB 3** Capacity Building to Incorporate Hazard Risk Reduction into Planning and Design

PLANNING AND CAPACITY BUILDING PROGRAM

RISK-BASED NEED: Through stakeholder engagement during the development of the Action Plan, PRDOH received various requests from federal, municipal, and NGO stakeholders for funding opportunities and mechanisms to increase development capacity on the Island. Most often, participants advocated that regional cooperation and coordination were the most effective means towards building the capacity needed to facilitate the implementation of mitigative activities.

This regionalized capacity building is intended to support local solutions. This includes, but is not limited to, localized policy and social mitigation solutions in that lead to extending of existing utilities, or alternative lifeline infrastructure, to ensure critical utilities and basic services reach underserved communities. By Through sharing resources and minimizing costs, while avoiding duplicative or conflicting efforts, regional approaches serve to offer the most effectively means of addressing shared mitigation needs. To achieve this goal, PRDOH will award project funds dollars to initiatives that foster support the alignment of regional partnerships, shared resources, and community-strengthening support activities which—also may include the adoption and enforcement of adopting and enforcing up-to-date building codes, the protection of safeguarding lifelines and critical infrastructure, and the development or expansion of using and expanding financial products and approaches strategies that transfer and reduce risk.

PROGRAM DESCRIPTION: The Planning and Capacity Building Program will build on information and progress made through the CDBG-DR Planning Programs, including the MRP Program, WCRP Program, and the GeoFrame Program. It will also utilize, as it becomes available, information collected under the CDBG-MIT RAD Program. Finally, the program will continue and expand on stakeholder engagement to develop and implement a regional approach to planning, permitting, and enforcement that supports risk identification and mitigation.

The Planning and Capacity Building Program is intended to strengthen the capacity of state agencies, municipalities, NGOs, and existing regional partnerships by assisting in the formation and/or strengthening and formalizing existing, regional consortia to conduct mitigation enhancing activities. These activities will range from narrow to broad. Some activities may include mitigation planning, green infrastructure education programs, emergency management training and demonstrations for building code compliance. Additional activities may include broad-based mandates such as furthering regional economic development planning, promoting safe and

affordable housing, and assisting in access to private, state, and federal funding for activities that benefit the lifeline sectors, among others.

HUD emphasizes capacity building in 84 FR 45838 for multiple levels of government and the benefits of regional (multi-jurisdictional) planning and cooperation as a means for increasing capacity. The Planning and Capacity Building Program seeks to further those goals by supporting regional and multi-jurisdictional approaches to planning that enhances assessment and mitigation of risk.

PROGRAM GOALS: Through the Planning and Capacity Building Program, PRDOH will work directly with applicant entities to create formalized regional consortia or strengthen existing entities that provide increased development capacity on a multi-jurisdictional basis. The program will offer technical assistance by partnering with federal agencies, national associations, and other organizations to provide educational and capacity building support services. This increase in capacity will benefit state agencies, municipalities, NGOs, planning and development organizations, and other public-serving entities and organizations in the evaluation and support of partnerships to promote mitigation.

Activities of regional cooperation that promote mitigation by strengthening lifelines can include, but are not limited to:

- Disaster and Mitigation Planning
- Economic and Community Development activities
- Housing
- Natural Resource Conservation and Protection
- Materials Management
- Watershed Management
- Transportation and Transit
- Social Services

According to the Lincoln Institute of Land Policy, regionalism "generally refers to ways of thinking and acting at the regional scale." As one example, the National Association of Development Organizations (NADO) states, "(N) atural disasters do not obey local jurisdictional boundaries. [...] (R) egional hazard mitigation planning

⁵ Foster, Kathryn A. *Regionalism on Purpose*, Lincoln Institute of Land Policy. 2001. Accessed at: https://www.lincolninst.edu/sites/default/files/pubfiles/regionalism-on-purpose-full.pdf

activities offer the benefit of pooling regional resources and developing a more integrated regional approach to disaster planning across jurisdictional lines."

Further, the benefits of regionalism can extend far beyond disaster planning variety of other activities that contribute and encompass to an area's greater natural, economic, and social resilience. Again, according to NADO, such regional benefit can be achieved through the formal development of regional consortia, commonly known as Regional Development Organizations (RDOs). "Known locally as councils of governments, regional planning commissions, economic development districts, and other names, RDOs provide various types of support to their member communities in a host of service areas. RDOs can open the door to grant and loan funding, provide administrative support, and supply valuable staff support and access to technology. For rural places, primarily, they can play a critical role in towns that may have limited capacity and resources."

Recognizing these benefits, the Economic Development Administration (**EDA**) is currently pursuing a pilot project to establish the first Economic Development District (**EDD**) in Puerto Rico. "EDDs are multi-jurisdictional entities...that help lead the locally-based, regionally driven economic development planning process that leverages the involvement of the public, private and non-profit sectors to establish a strategic blueprint (i.e., an economic development roadmap) for regional collaboration." While EDDs function as direct partners with EDA, EDA also has a current initiative to strengthen the capacities of municipalities to leverage and manage other federal grants, broadening the impact beyond their own funding opportunities. Finally, as noted by NADO above, EDDs are most often housed within, or take on the broader role of, an RDO.

Acknowledging the financial constraints expressed during the public engagement process, the Planning and Capacity Building Program will provide funding to support the formation and operation of a new consortium, or to strengthen the capacity of an existing consortium. Each awardee will be allocated a funding maximum to be expended over a two (2)-year time period for programs and capacity building proposals that will be evaluated on their mitigation merits and impact. Applications

⁶ National Association of Development Organizations. *Hazard Mitigation Planning*. June 25, 2015. Accessed at: https://www.nado.org/hazard-mitigation-planning/

⁷ U.S. Economic Development Administration. *Economic Development Districts*. Accessed at: https://eda.gov/edd/#:~:text=Economic%20Development%20Districts%20(EDDs)%20are,cases%20even%20cross%2Ds tate%20borders.&text=A%20CEDS%20is%20the%20result,of%20an%20area%20or%20region.

will need to be accompanied by an endorsement of the municipalities and participating entities in the proposed region.

PLANNING PROGRAM OUTCOMES:

OUTCOME 1: Increas	sed Regional Capacity through Multi-jurisdictional Solutions
Facilitate Intergovernmental Cooperation	Subrecipients will perform a detailed analysis of existing public partnerships and identify opportunities for multi-jurisdictional approaches to issue resolution.
	This includes identification and establishment of roles and responsibilities, including responsible parties, necessary to implement a regional approach to planning and permitting that enhances the ability of the community to identify, track, and mitigate risk.
Development of Regional Consortia	Subrecipients will capitalize on existing efforts to establish regional entities, utilizing established models of regional organizations. These could potentially include RDOs, leveraging the current pilot project by the EDA to establish EDDs in Puerto Rico, and/or strengthening regional partnerships or consortiums identified through the MRP Program.
	The Planning and Capacity Building Program will provide funding for staff of local, regional, or state entities to form regional partnerships or strengthen interagency coordination with the goal of creating an impact on disaster risk reduction and mitigation.
	These activities could include hosting stakeholder meetings and roundtables, organizing listening sessions, and identifying common issues with regional solutions.
Mitigation Activities of Regional Consortia	Through Regional Consortia, PRDOH will support opportunities to fulfill stakeholder requested capacity-building needs, including but not limited to:
	Funding for staff to implement a regional materials management program, activities for landfill permitting, landfill inspections, and/or implementation of the Integrated Materials Management Plan.
	Funding for compliance training and enforcement of activities required for Consent Decree Case 3:14-cv-1476-CCC for violations of the Clean Water Act (CWA) and MS4 Permit.
	Build a workforce for shared needs such as code enforcement activities.
	Consider the potential for other shared-staffing needs identified through the public engagement process.

OUTCOME 2: Support and Integrate Hazard Mitigation Planning

FEMA Hazard Mitigation Planning Allow for planning match opportunities, where needed, in support of the five (5)-year mitigation planning cycle under FEMA's HMA programs.

FEMA Building Resilient Infrastructure and Communities Planning

Allow for planning match opportunities as the new FEMA BRIC comes online.

OUTCOME 3: Training and Technical Assistance

Supportive education and compliance activities to increase compliance with code requirements while reducing the penalty costs associated with non-compliance. Building local knowledge on the impact of activities that may affect air, water, land use, and quality in Puerto Rico; can help state agencies and municipal governments identify risks, support; and inform emergency preparedness; and response, municipal and Island-wide recovery, mitigation, and economic development planning efforts. Public outreach and education for the development of a sustainable waste management program in Puerto Rico. Awareness Raising awareness of water protection measures, enforcing land-use regulations, studies, and analysis. Develop capacity and collaboration among practitioners to increase awareness and compliance on septic systems. Public outreach and education for the protection of dune systems to reduce erosion and protect coastal assets. Align with the current EDA initiative to strengthen overall grant-writing and administrative capacity—beyond either EDA or CDBG-MIT resources. Increase general grant-writing and administration capacity to leverage state, federal, and private funding that can support lifeline activities. Support implementation of lifelines through workforce training programs in direct support of one (1) or more of the seven (7) community lifelines. Train and certify Puerto Ricans in environmental skills trades needed to recover critical services after disasters, such as flood management, disaster debris removal, mold, lead and asbestos remediation, community water systems operators, and municipal sanitation workers.			
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Lifeline Support and Adaptation Training Programs Train and certify Puerto Ricans in environmental skills trades needed to recover critical services after disasters, such as flood management, disaster debris removal, mold, lead and asbestos remediation, community water systems operators, and municipal sanitation workers. Build capacity through training and development of a community health	,		
Adaptation Training Programs recover critical services after disasters, such as flood management, disaster debris removal, mold, lead and asbestos remediation, community water systems operators, and municipal sanitation workers. Build capacity through training and development of a community health	Adaptation Training		
		recover critical services after disasters, such as flood management, disaster debris removal, mold, lead and asbestos remediation, community water	
		Build capacity through training and development of a community health worker program.	

Build capacity for mitigation, resilience, and preservation of historic assets (properties, artifacts, and collections) through training and development on traditional trades (lime plaster, timber, ironwork, etc.) and asset management.

ELIGIBLE ACTIVITIES:

Pursuant to the HCDA, the following are eligible activities:

- Section 105(a)(3) Code Enforcement
- Section 105(a)(8) Provision of Public Services
- Section 105(a)(12) Planning and Capacity Building
- Section 105(a)(14) Activities Carried Out through Nonprofit Development Organizations
- Section 105 (a)(19) Assistance to Public or Private Non-profit Entities
- Section 105(a)(21) Assistance to Institutions of Higher Education

INELIGIBLE ACTIVITIES:

 Supplanting of funds for inherently governmental staff duties that are not temporary in nature to address mitigation planning surge capacity needs.

METHOD OF DISTRIBUTION: Direct Distribution and Subrecipient Distribution Models. The Planning and Capacity Building Program will be administered by PRDOH or a Government of Puerto Rico entity by through Subrecipient Agreements, Interagency Agreements, or Memorandums of Understanding, which may be utilized to execute defined portions of this Program.

NATIONAL OBJECTIVE: N/A

ELIGIBLE ENTITIES:

- Units of general local government/ municipalities (including departments and divisions)
- Government of Puerto Rico Agencies, Authorities, Trusts, and Boards
- Community-Based Development Organizations and private non-profits
- Non-governmental organization (501(c)(3)) or Not-for-Profit Entities
- A consortium of any of the above with the established authority and internal controls necessary to receive federal grant funds.

MIN AWARD: \$100,000

MAX AWARD: \$500,000. No exceptions to the maximum award will be considered.

ALIGNMENT WITH CDBG-DR PROGRAMS:

 The Planning and Capacity Building Program will build on information and progress made through the CDBG-DR planning programs, including the MRP Program, WCRP Program, and the GeoFrame Program. It will also utilize, as it becomes available, information collected under the CDBG-MIT RAD Program.

ALIGNMENT WITH HUD POLICY OBJECTIVES:

- Build the capacity of States and local governments to comprehensively analyze disaster risks and to update hazard mitigation plans through the use of using data and meaningful community engagement.
- Support the adoption of policies that reflect local⁸ and regional priorities that will have long-lasting effects on community risk reduction, to include the risk reduction to community lifelines such as Safety and Security, Communications, Food, Water, Sheltering, Transportation, Health and Medical, Hazardous Material (management) and Energy (Power & Fuel); and future disaster costs (e.g., adoption of forward-looking land use plans that integrate the hazard mitigation plan, latest edition of the published disaster-resistant building codes and standards, vertical flood elevation protection, and policies that encourage hazard insurance for private and public facilities).
- Maximize the impact of available funds by **encouraging leverage**, **public- private partnerships**, **and coordination** with other Federal programs.

ALIGNMENT WITH ECONOMIC RECOVERY PLAN ALIGNMENT:

- **CPCB 4** Resilience Building in Collaboration with High-Risk Communities
- MUN 4 Build the Capacity of Municipalities to Apply for, Secure, and Manage Grants
- MUN 7 Create and Implement a Model of Regional Service Delivery and Planning
- HSS 22 Move to a More Regionally Integrated Approach to Emergency Planning, Exercising, Response, and Recovery
- HSS 3 Implement Integrated Waste Management Program and Expand Programs to Increase Recycling Rates
- NCR 1 Historic and Cultural Properties and Collections Preservation
- NCR 11 Establish a Long-Term, Sustainable, Integrated Materials Management Program

⁸ PRDOH interprets the word local to mean municipal in this context.

• NCR 15 Coral Reef and Seagrass Protection and Restoration

ALIGNMENT WITH OTHER FEDERAL PROGRAMS:

- EDA grant programs that support planning and development grants to established EDDs.
- FEMA Hazard Mitigation and Pre-Disaster planning programs. HUD stipulates at 84 FR 45838, 45849 that planning programs may also use these funds for planning activities, including but not limited to, regional mitigation planning; the integration of mitigation plans with other planning initiatives; regional or multi-jurisdictional planning activities that are mitigative in nature; activities related to FEMA's Pre-Disaster Mitigation (PDM, to be renamed Building (BRIC) Resilient and Infrastructure Communities as part of the implementation of section 1234 of the Disaster Recovery Reform Act of 2018, which amended section 203 of the Stafford Act (42 U.S.C.§ 5133)) and Flood Mitigation Assistance (FMA); modernizing building codes and regional land-use plans; and upgrading mapping, data, and other capabilities to better understand evolving disaster risks.

INFRASTRUCTURE MITIGATION PROGRAM

RISK-BASED NEED: The Infrastructure Mitigation Program serves to address mitigation needs by improving the built environment to mitigate hazardous threats. Infrastructure mitigation projects must mitigate risk to infrastructure assets within one (1) or more of the seven (7) community lifelines. Due to the multi-hazard threats that Puerto Rican communities face, the Island needs transformative mitigation projects that not only address facility hardening or retrofits; but, more importantly, address the reduction of multiple threats to lifeline infrastructure and citizens by mitigating the localized conditions that cause wide-scale destruction and lead to disaster events. Such transformative projects are therefore incentivized in project selection criteria, explained in the Project Evaluation section. The program design represents a practical approach to maximizing limited mitigation dollars to serve the greatest need possible.

The PRDOH Risk Assessment revealed the top ten (10) risk⁹ from an Island-wide perspective as the following:

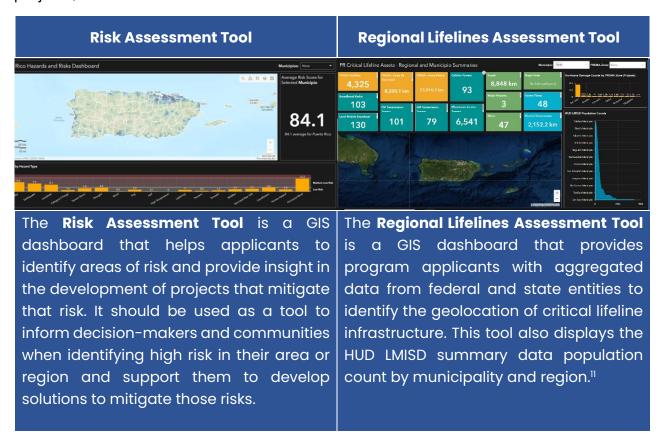
1	Hurricane Wind
2	Flood 100
3	Earthquake
4	Landslide
5	Liquefaction
6	Drought
7	Severe Storm
8	Sea Level Rise (10ft)
9	Wildfire
10	Human-Caused Hazard

Municipal, neighborhood, community, and regional threats differ greatly when local geography and geographic susceptibility to hazards is considered. It is For this reason, the Infrastructure Mitigation Program promotes data-informed decision-making for

⁹ The full results of the Risk Assessment with a complete ranking of all eighteen (18) hazards can be found in the Risk Assessment section of this draft.

all eligible applicant entities by launching the publicly transparent Risk Assessment and Regional Lifeline Assessment tools.

Because it is understood Recognizing that the risk at any individual location may diverge from the top Island-wide risk assessment results provided by the PRDOH analysis, the Risk Assessment Tool is not intended to serve as a doctrine to restrict projects, but to enable decision makers.¹⁰



The results of the Risk Assessment should inform the public sector, emergency response, private sector service providers, and communities of an initial ranking of risk to aid in the development of mitigative solutions. The purpose of this Program is to empower applicant entities to identify risks, and develop solutions to mitigate risk them, through innovative, eco-conscious, and self-sustaining solutions that support stability in lifelines to create a resilient infrastructure system for Puerto Rico.

¹⁰ Planning tools shown here can always be found as link on the CDBG-MIT website in English and Spanish at https://recuperacion.pr.gov/en/cdbg-mit/ and https://recuperacion.pr.gov/en/cdbg-mit/ and https://recuperacion.pr.gov/edbg-mit/.

¹¹ HUD LMISD data is the required beneficiary data set for qualifying projects according to area benefit.

PROGRAM DESCRIPTION: PRDOH will administer one (1) Mitigation Infrastructure Program intended to fund projects within the full range of eligible public facilities improvement activities so long as the project mitigates identified risk(s). Projects must demonstrate risk mitigation properties that benefit the population under the urgent need or LMI national objective, and LMI beneficiaries must be prioritized. The greater number of hazards mitigated by one (1) project, the better. Smaller-scale projects that mitigate the most risk for specific neighborhoods, municipalities, or regions shall be considered if they are an established priority project and supported by a sound feasibility analysis and justification. The most competitive projects, however, will be those that leverage regional solutions and partnerships, provide a greater risk reduction benefit to the critical lifelines, and benefit more citizens.

Due to the varying and localized need for mitigation against several hazardous threats, PRDOH does not want to limit projects based on the top risks at the Island-wide level, nor by an assumption of need in a generalized way. The ultimate goal of this Program is to strategically identify areas of risk and mitigate the most risk for the greatest amount of people in a cost-effective manner. This is best accomplished through planning, design, and innovation realized through the implementation of public facilities improvement eligible under this Program. Projects eligible for funding are intended to serve the needs of the people by allowing for scaled investments that make critical mitigation dollars accessible to all communities on the Island: municipal, regional, or Island-wide.

PROJECT EVALUATION CRITERIA:

Applicants should refer to the Risk-Based Needs Assessment section of the Action Plan for advisory activities to serve mitigation and resilience needs. The Program will require projects to align with the public interest to result in mitigated conditions or wide-reaching impact through lifeline strengthening or redundancy for critical and essential facilities. At a high level, the Program intends to fund mitigation projects that support:

- Strengthening the resilience of corridors within the **transportation** lifeline.
- Building improvements should incorporate alternative energy technology and equipment, where appropriate, into facilities improved by mitigation dollars.¹²
 Equipment must be permanent in nature and be considered an integral part of the facility.

¹² Projects for alternative energy infrastructure solutions that reduce Puerto Rico's fossil-fuel dependence should apply to the Community Energy and Water Resilience Incentives Program.

- Improving the resilience of publicly owned Communications lifeline infrastructure, especially communications assets that are needed to facilitate critical response activities.¹³ Building improvements should consider incorporating redundant communications technology and equipment, where appropriate, into facilities improved by mitigation dollars. Equipment must be permanent in nature and be considered an integral part of the facility.
- Strengthening, modernizing, replacing, or building **water/wastewater** infrastructure to withstand high-risk hazardous activity that poses a threat to asset stability in a disaster event.
- Improving, expanding, or constructing **healthcare and medical** facilities to fortify and innovate buildings and permanent equipment.
- Improving or fortifying **solid waste** infrastructure to reduce the risk of health threats associated with landfills overfill and instances of clandestine dump sites that only increase with every hazardous event.
- Improving or fortifying Safety and Security lifeline infrastructure to supports law enforcement/security, fire service, search and rescue, community safety, etc.¹⁴

In addition to the mitigative properties described, projects will be evaluated for criteria concerning compliance, innovation, and eco-conscious measures including but not limited to:

- Percentage of LMI benefit. Projects that serve fifty-one percent (51%) or more LMI households within the area of benefit will be prioritized.
- The scale of impact in terms of beneficiaries. PRDOH fosters projects that serve a greater number of people.
- If the project capitalizes on public and private partnerships for which the public match (only) is requested through this Program.
- If the project leverages CDBG-MIT funding with other federal, Government of Puerto Rico, and/or local funding sources.
- The feasibility of the project's long-term operations and maintenance plan that addresses the operations and maintenance costs of the infrastructure improved. All applicants are required to submit a long-term operations and maintenance plan and must identify reasonable milestones for any plan that

Projects for improvement of privately-owned communications infrastructure should apply to the Economic Development Portfolio for Growth – Lifeline Mitigation Program.

¹⁴ On June 21, 2022, HUD granted a waiver allowing CDBG-MIT funds to be used for buildings for the general conduct of government. However, "[t]he grantee is prohibited from using CDBG-DR or CDBG-MIT funds for buildings that do not provide services all year around and is prohibited from using funds for buildings that are used exclusively as emergency operations centers." Federal Register Vol. 87, No. 118, 87 FR 36869.

- will be reliant on proposed changes to existing taxation policies or tax collection practices.
- Whether the natural infrastructure is preserved, or other eco-conscious measures are included in project design to minimize the unintended consequences of grey infrastructure and other development. Applicants are encouraged to incorporate innovative nature-based solutions and natural or green infrastructure solutions during project development that reduce the negative impacts on the surrounding human and natural environment. Natural or green infrastructure is defined at 84 FR 45838, 45848 as the integration of natural processes or systems (such as wetlands or land barriers) or engineered systems that mimic natural systems and processes into investments in resilient infrastructure, including, for example, using permeable pavements and amended soils to improve infiltration and pollutant removal.
- Whether the project considered innovative design solutions that:
 - o Improve the quality of life
 - o Stimulate sustainable growthn and development
 - o Enhance public health and safety
 - Minimize noise and vibration
 - Minimize light pollution
 - o Improve community mobility and access
 - o Encourage alternative modes of transportation
 - o Improve site accessibility and safety
 - o Preserve Historic and Cultural resources
 - o Preserve or improve views and local character
 - Encourage stakeholder involvement
 - Address conflicting regulations and policies
 - Extend the project facility lifespan
 - o Reduce energy consumption
 - o Make use of recycled materials
 - Make use of local or regional materials
 - Divert waste from landfills
 - Reduce waste during construction.

Projects will be evaluated for level of project readiness, representing an opportunity to comply with HUD regulations in 84 FR 48538, 45862, Section V.A.26, which requires grantees to expend fifty percent (50%) of their allocation of CDBG-MIT funds on eligible activities within six (6) years of HUD's execution of the grant agreement. Indicators of readiness may include, but are not limited to:

- Status of Permits, including the Certificate of Need and Convenience (CNC) for healthcare facilities, if applicable.
- Details of the implementation plan and schedule
- Projects that do not result in the displacement of individuals or businesses through acquisition in order to be completed
- Status of project design
- Status of environmental review and level of environmental impact
- Status of BCA, if applicable

Other project evaluation criteria will depend on whether the project is a covered or non-covered project. HUD has defined a "Covered Project" as an infrastructure project with a total cost of \$100 million or more, with at least \$50 million or more of CDBG funds (regardless of source: CDBG-MIT, CDBG-DR or CDBG). Non-Covered Projects do not trigger the Covered Project requirements. Covered and Non-Covered Projects will be initially evaluated and ranked following the process defined in the Risk-Benefit Score Analysis section. Covered Projects are subject to BCA requirements, as required by HUD.

RISK-BENEFIT SCORE ANALYSIS: Eligibility and competitive qualities evaluation will include criteria focused on mitigation of threats identified within the jurisdiction(s) where the project is intended to provide benefit. By applying the results of the risk assessment, each project will be given a Risk-Benefit Score (**RBS**). This score is based on potential mitigated risk, or a Mitigation Index Ratio (**MIT Index**), the Area of Benefit (**AOB**), and project cost.

Equation 9: Risk-Benefit Score

$$RBS = \frac{(MIT\ INDEX)(AOB\ BENEFICIARIES)}{(PROJECT\ COST)}\ x\ 100$$

By basing project selection on the Risk-Benefit Score, projects which reduce risk to the most significant number of people at the lowest cost will be prioritized. Furthermore, because critical lifelines are intrinsic to the calculation of risk, as part of the risk assessment, and notably of their interdependent nature, projects that mitigate risk to one (1) or more of these lifelines will receive a higher RBS than those that mitigate risk to only secondary lifelines. Applicants can predict their RBS by employing the Risk Assessment Tool.

In general, projects that address the following will inherently score better:

- Projects that mitigate multiple risks under one (1) project activity.
- Projects that reduce risk for socially vulnerable populations.
- Projects that reduce risk on a regional scale rather than at the site level.
- Projects that mitigate risk to critical lifeline infrastructure will score better than those that serve secondary infrastructure.

High Scoring Contributors	Low Scoring Contributors
 Mitigates risk from multiple hazards Mitigates risk regionally Mitigates risk to critical infrastructure 	 Does not mitigate risk from multiple hazards Risk mitigated in a limited area Does not mitigate high risk
 Mitigates risk to large numbers of people 	 Does not mitigate risk to critical infrastructure
Result	Result
 Low-cost relative to risk mitigated and people receiving benefit 	 High-cost relative to risk mitigated and people receiving benefit

Any non-covered project over \$50 million (total project value) shall also be evaluated for feasibility to ensure delivery of the benefit of mitigation from risk to the greatest number of people. A feasible project will demonstrate the ability to complete all necessary activities for the amount requested in the application. The applicant will be required to demonstrate the capacity to complete acquisition, permitting, design, environmental clearance, and all other activities necessary for completing the construction of the mitigation project. Depending on the level of feasibility exhibited by the applicant/project and the potential of the project, PRDOH may choose to allocate additional funding for design, environmental, and other activities required prior to construction.

The feasibility study should include, but is not limited to, details on the following items:

- 1.—Scope of Work including a description of the main project requirements
- 2.—Project Cost Estimate and Financial Analysis
- 3.—Project Estimated Completion Schedule

- 4. Status of Pre-Development Activities (construction documents, environmental assessments, permits and endorsements, etc.)
- 5.—Site condition Analysis.

Final scoring and evaluation criteria will be released are available in the Program Guidelines published on PRDOH's website.

PROJECT EXAMPLES: To illustrate for public benefit, the risk and beneficiary considerations that should be taken into account when developing or evaluating the mitigative properties of a project, PRDOH provides two (2) scenarios shown in the pages that follow. For these scenarios, the following terms should be understood:

- Area of Benefit (AOB) represents the total beneficiaries or persons receiving a mitigation benefit from the project. An AOB could be the service area of a wastewater treatment plant, neighborhoods served by an elevated roadway, or a residential neighborhood affected by community level flood mitigation. The geographic area represented by the AOB is then used to determine the Risk Benefit Area.
- Risk Benefit Area (**RBA**) is the aggregate of the hex grids found in the Risk Assessment Tool that reside within or connect to the AOB. If a hex-grid from the Risk Assessment is within the AOB it is part of the RBA. Furthermore, if a hex-grid is partially within or touching the AOB, it is also included as part of the RBA. Each hex-grid is one-half mile (0.5 mile) square. Therefore, the RBA is an area in square mile(s).
- Risk Score each hex-grid has a risk score for each of the eighteen (18) hazards. Only the risk or risks mitigated should be considered when calculating a project Risk Score. This score can be added up based on the AOB to determine a total risk score for the project. The risk score is then used to determine the MIT Index Score and subsequently the RBS.
- MIT Index Score the total Risk Score, determined by adding each hex-grid
 risk score together, divided by the square miles of the RBA is used to
 determine the MIT Index. The MIT Index represents the total potential risk
 mitigated by a project per area. The MIT Index Score is then used to
 determine the RBS through consideration of beneficiaries, determined by the
 AOB, and Project Cost.
- Project Cost is the total project cost, including all funding sources, necessary to complete construction or implementation of the CDBG-MIT project.

 Risk Benefit Score – determined by multiplying the MIT Index by the AOB, or beneficiaries, and then dividing that result by the Project Cost. The resulting number is then multiplied by 100.

In Scenario One (S1) and Scenario Two (S2), the RBA is determined by identifying the total number hex-grids in the RBA and multiplying that total by the area of each hex-grid, half a mile (0.5 mile). The Risk Score for each hex-grid is then added together and then divided by the RBA to determine the MIT Index. Finally, the MIT Index is multiplied by the total beneficiaries in the AOB, divided by the Project Cost and multiplied by 100. This yields the RBS.

Scenario One (S1): Illustrates the calculation of an RBS for a wetland restoration project that benefits a residential neighborhood by reducing the flood risk downstream through restoration of a natural environment resource.

First, the AOB is determined to identify total beneficiaries or persons receiving a mitigation benefit from the project. In this case, the population of neighborhood receiving the flood mitigation benefit from the wetland restoration project upstream is 10,000. Figure 104 illustrates the determination of the AOB for the S1 wetland restoration project.



Figure 1: Scenario 1: Determination of Area of Benefit

Next, the RBA is determined. The square miles for each half mile (0.5 mile) hex-grid wholly or partially within or touching the AOB are added up for the total square miles of the RBA. Figure 105 illustrates the determination of RBA.



Figure 2: Scenario 1: Risk Benefit Area Determination

The Risk Score is then calculated by adding the flood score for each half mile (0.5 mile) hex-grid wholly or partially within, or touching, the AOB. The aggregate total of the risks for each hex-grid is then added together and divided by the square miles of the RBA to determine the MIT Index.

Finally, the MIT Index is multiplied by the total beneficiaries in the AOB, divided by the Project Cost and multiplied by 100. This yields the RBS. Figure 106 illustrates the calculation necessary to determine the RBS.

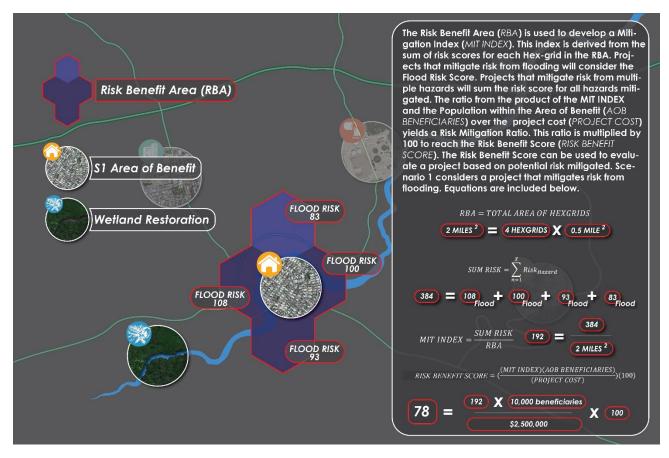


Figure 3: Scenario 1: Example Calculation

Scenario Two (S2): Illustrates the evaluation criteria for a wetland restoration project that benefits a residential neighborhood as well as critical infrastructure facilities downstream of the wetland restoration project. Mitigation of risk to critical lifeline infrastructure provides a significant enhancement to overall risk mitigation and, therefore, increases the project's RBS.

Just as we saw in the S1 example, for S2 the AOB is determined to identify total beneficiaries or persons receiving a mitigation benefit from the project. In this case, in addition to wetland restoration reducing the flood risk to the residential neighborhood, the project also reduces flood risk for nearby critical lifeline infrastructure facilities. In this includes a downstream wastewater treatment plant, and a downstream roadway bridge, and neighboring residential areas served by this critical lifeline infrastructure.

Figure 107 illustrates the determination of the AOB for the S2 wetland restoration project.

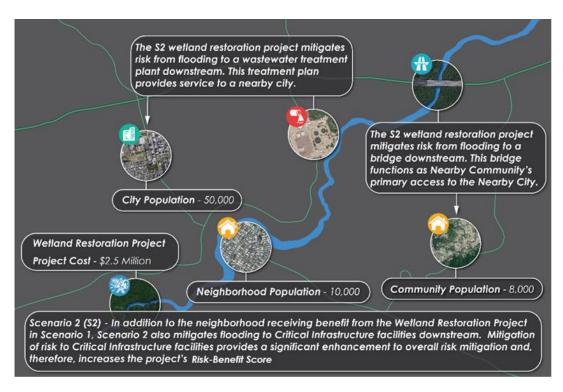


Figure 4: Scenario 2: Area of Benefit Determination

The RBA is determined with the same method used in S1 but considers a much broader square mile area. The square miles for each half-mile (0.5-mile) hex-grid wholly or partially within or touching the AOB are added up for the total square miles of the RBA. Figure 108 illustrates the determination of the RBA.

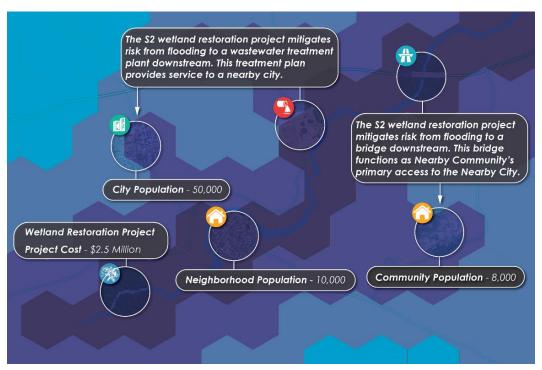


Figure 5: Scenario 2: Risk Benefit Area Determination

The RBS is determined for S2 by the same method as Scenario 1; however, by providing risk mitigation benefit to critical infrastructure lifelines, there is an increase in the MIT Index, total beneficiaries, and RBS.

The Risk Score is calculated by adding the flood score for each half-mile (0.5 mile) hex-grid wholly or partially within or touching the AOB. The aggregate total of the risks for each hex-grid is then added together and divided by the square miles of the RBA to determine the MIT Index.

Finally, the MIT Index is multiplied by the total beneficiaries in the AOB, divided by the Project Cost, and multiplied by 100. This yields the RBS. Figure 109 illustrates the calculation necessary to determine the RBS.

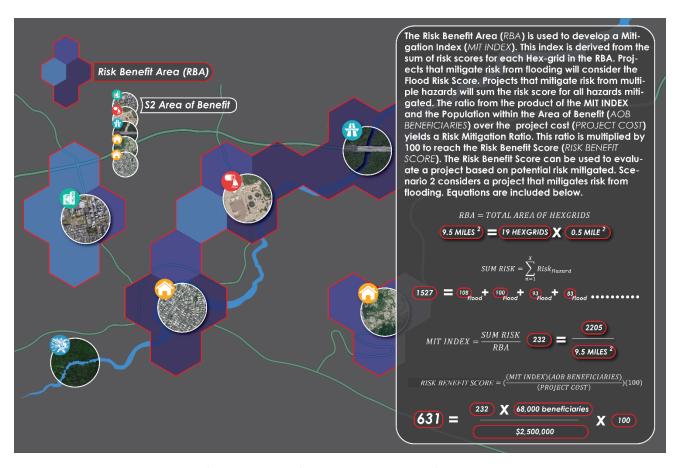


Figure 6: Scenario 2: Example Calculation

BENEFIT COST ANALYSIS FOR COVERED PROJECTS. For Covered Projects, the project benefits must outweigh the costs. The preferred method for demonstrating benefit is through the application of FEMA's BCA model, and the result must conclude in a benefit-to-cost ratio equal to or greater than one-point zero (1.0). HUD also allows for alternative methods when the BCA results are less than one-point zero (1.0). The requirements and procedures for Covered Projects are discussed in detail in the Covered Projects section of this Action Plan. ¹⁵

PROGRAM FUNDING: The release of program funds shall be administered on a schedule to be determined and published in the Program Guidelines. In consideration of the HUD requirement to expend fifty percent (50%) of grant funds within six (6) years, priority may be given to projects that, prior to construction, will have completed an extensive analysis of existing conditions, repetitive loss, past and future disasters, existing data, studies, and relevant federal, state, and local publications. Project

¹⁵ United States, Department of Housing and Urban Development *Allocations, Common Application, Waivers, and Alternative Requirements for Community Development Block Grant Mitigation Grantees*. Federal Register Vol. No, 84 FR 45838. (August 30, 2019)

design must show a significant improvement to existing conditions; and, to the greatest extent feasible, mitigate risk to the population, public and private properties, infrastructure, the economy, economic assets, and/or natural resources of the Government of Puerto Rico.

Funding for the \$2.5 billion Infrastructure Mitigation Program will be awarded to eligible entities by one (1) of two (2) project selection methods: (1) direct selection of strategic projects which serve the MID area; or (2) competitive application.

The first method shall be dedicated to **direct selection of strategic projects** that demonstrably serve the MID area. These projects are intended to be large-scale transformative projects that require a higher threshold of funding to foster high-impact mitigation for this this substantially large area of designation. It is for this reason that PRDOH minimum project thresholds shall be published in Program Guidelines, and the following maximum award shall apply to this selection method:

MAX AWARD: \$600,000,000

The second method shall be dedicated to the competitive application projects, which are those that arise from public entities, local jurisdictions, and regional consortia to serve mitigation needs according to neighborhood, community, regional, or municipal. Because it is understood that the risk at any individual location may diverge from the top statewide risk assessment results, provided by in the PRDOH CDBG-MIT Action Plan, this competitive application represents a locally driven capacity-building opportunity. For this selection method, PRDOH intends to foster maximum participation within reasonable cost parameters by publishing minimum project threshold in Program Guidelines and applying the following maximum award as part of this selection method:

MAX AWARD: \$100,000,000

Exceptions to the maximum and minimum award shall be considered by PRDOH on a case-by-case basis, which shall contemplate the project's long-term mitigation potential, the circumstances under which an exception is needed, whether the project's BCA demonstrates that the cost of providing assistance is necessary and reasonable, and the project's operations and maintenance plan.

¹⁶ This strategy is inspired by the HUD requirements stated in 84 FR 45838, 45841 requiring that at least fifty percent (50%) of all CDBG-MIT funds must be used for mitigation activities that address identified risks within the HUD identified MID areas. Directly selected strategic projects ensure wide-scale benefit to this vast area of designation.

Funding for the \$2 billion set-aside shall be released on individual timelines to be published in Program Guidelines. Project selection methods for both set-aside shall adhere to one (1) of the two (2) mentioned methods, and maximum awards for direct or competitive selection.

PRDOH acknowledges that some potential subrecipients have already undergone some level of architectural, engineering, and environmental review work for projects that are eligible for CDBG-MIT funding. If a project that is selected for CDBG-MIT funding has already incurred costs related to these activities as well as administrative activities prior to their award, PRDOH may reimburse those pre-award costs provided that the activities are CDBG-eligible, were undertaken in accordance with the grant requirements at 24 C.F.R. Part 570 and 24 C.F.R. Part 58 and were incurred after September 4, 2019.

HEALTHCARE STRENGTHENING SET-ASIDE: The Program includes a one (\$1) billion-dollars set-aside to strengthen healthcare facilities for the benefit of medically underserved citizens, and minimize, through accessible healthcare, the fatalities likely from a disaster event. As such, it shall be implemented in consultation with the Puerto Rico Department of Health. Method for administration of funds shall be published in the Program Guidelines. Program activities can include improvements, expansions, and construction of new facilities to fortify and innovate buildings and permanent equipment. Improved and new facilities should demonstrably increase the capacity of Puerto Rico's healthcare system to mitigate the impacts of future disasters, both natural and human-caused, such as the COVID-19 pandemic. Building architecture for new construction must incorporate disaster-resistant building elements and self-sustaining power, water, and data communication features.

Such facilities should prove resistant to disaster-induced threats, thereby increasing the number of patients that can be sheltered and served in a disaster event. New resilient hospitals and clinics must be constructed to the most recent IBC 2018 standards and strategically located to reduce vulnerability to flooding and earthquakes. New facilities will be encouraged to meet LEED or other appropriate green building standards. Building design should consider the integration of information technology and building architecture to support sustainable power and data communication. New construction must include the installation of tele-health technology.

Projects for the Healthcare Strengthening Set-Aside shall be selected employing both the competitive and the strategic selection methods. Requirements for direct selection of strategic health projects shall be identified to the Program by the Central Government in coordination with the Puerto Rico Department of Health and/or other State Agencies.

Projects at or above \$100 million could exceed the Covered Project threshold established by HUD, thereby requiring a full BCA for the projects to qualify for funding.

HMGP MATCH SET-ASIDE: The Program includes a one (\$1) billion dollars set-aside for HMGP match to provide the required twenty-five percent (25%) non-federal match funding for FEMA HMGP projects through a Global Match Program. Projects funded by FEMA HMGP must comply with HMGP resilience standards and meet the mitigation standards of this Program according to the project evaluation criteria. For HMGP match projects, mitigation merit shall be determined by the BCA results of each project selected for match funding. By working with COR3 to execute dually funded resilience projects, PRDOH will advance long-term resilience to hazard risk identified in the Risk Assessment. HMGP projects selected for match shall be determined in direct coordination with COR3, and shall therefore adhere to the direct selection method maximum award:

MAX AWARD: \$600,000,000

Exceptions to the maximum award will be considered by PRDOH on a case-by-case basis, which shall contemplate the project's long-term mitigation potential, the circumstances under which an exception is needed, whether the project BCA demonstrates that the cost of providing assistance is necessary and reasonable, and the project operations and maintenance plan. Exceptions to the maximum award will be considered when necessary to comply with federal accessibility standards, or to reasonably accommodate persons with disabilities.

ELIGIBLE ACTIVITIES:

Pursuant to the HCDA, the following are eligible activities:

- Section 105(a)(1) Acquisition of Real Property
- Section 105(a)(2) Public Facilities and Improvements
- Section 105(a)(4) Clearance, Rehabilitation, Reconstruction, and Construction of Buildings
- Section 105(a)(7) Disposition of Real Property
- Section 105(a)(8) Public Services
- Section 105(a)(9) Payment of Non-Federal Share
- Section 105(a)(11) Relocation
- Section 105(a)(12) Planning

- Section 105(a)(13) Payment of reasonable administrative costs
- Section 105(a)(14) Activities Carried Out through Non-profit Development Organizations
- Section 105(a)(15) Assistance to Eligible Entities for Neighborhood Revitalization, Community Economic Development, and Energy Conservation
- Section 105(a)(16) Energy Use Strategies Related to Development Goals (resiliency)
- Section 105(a)(17) Economic Development Assistance to For-Profit Business
- Section 105(a)(21) Assistance to Institutions of Higher Education

The following activity is deemed eligible as permitted by the waiver granted by HUD through the Federal Register Vol. 87, No. 236 (December 9, 2022), 87 FR 75644, 75645:

• Assistance to privately owned utilities

INELIGIBLE ACTIVITIES:

- Projects that do not mitigate risk are ineligible.
- Projects may not enlarge a dam or levee beyond the original footprint of the structure that existed prior.
- The following activities are ineligible unless otherwise permitted by a waiver from HUD
 - Operations and maintenance costs cannot be funded with CDBG-MIT
 - Projects that address the national objective to address conditions of slum and blight are not eligible.

METHOD OF DISTRIBUTION: Direct Distribution Model and Subrecipient Distribution Model

NATIONAL OBJECTIVE: UNM; LMI. LMI prioritized up to fifty percent (50%). Projects qualifying under the UNM national objective will be required to submit as part of the application documentation evidence showing how the proposed project will address risk(s) identified in the Mitigation Needs Assessment to mitigate loss of life or impacts to properties in the project Area of Benefit (AOB). Additional guidance for UNM project justification requirements will be released in the program guidelines.

ELIGIBLE ENTITIES:

- Units of general local government/ municipalities (including departments and divisions)
- Government of Puerto Rico Agencies, Authorities, Trusts, and Boards
- Community-Based Development Organizations and private non-profits

- Non-governmental organization (501c(3)) or other non-profit entities
- A consortium of any of the above.
- Private for-profit businesses are eligible to apply for the Healthcare Strengthening Set-Aside only.

All applicants are encouraged to seek community support for proposed projects. Community support can be evidenced with documentation of consultation with the local municipality(ies) in which the project area and persons of benefit reside, letter(s) of support from community organizations or leaders representing the project area and persons of benefit, or through instruments such as formalized consortia or executed memoranda of agreement (MOA). All applicants will be required to submit an operations and maintenance plan to qualify.

ALIGNMENT WITH CDBG-DR FUNDS FOR ELECTRICAL SYSTEM ENHANCEMENTS:

- Projects that directly improve the electrical power grid should be funded through PRDOH Energy programs described in the CDBG-DR Action Plan for the Electrical Power Systems Enhancements and Improvements,¹⁷ prior to being considered for CDBG-MIT.
- The Electrical Systems Enhancements and Improvements Programs consist of two (2) lines of effort as follows:
 - The Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program is designed to meet the non-federal cost-share need of FEMA's unprecedented PA allocation for PREPA's Island-wide FEMA Accelerated Award Strategy (FAASt) Project.¹⁸
 - The Electrical Power Reliability and Resilience Program (ER2) will serve
 the needs of communities by funding projects that are not currently
 anticipated to be funded from other federal or local sources.

ALIGNMENT WITH CDBG-DR PROGRAMS:

 Risk mitigation projects which reduce risk to housing communities shall be monitored for community-based trends by the PRDOH Planning Group in collaboration with CDBG-DR Home Repair, Reconstruction, or Relocation (R3)
 Program and the Multi-Sector Housing Mitigation Program and Single-Family Housing Mitigation Program applicants under CDBG-MIT.

¹⁷ The Action Plan for Electrical Power System Enhancements and Improvements is available in English and Spanish on the PRDOH website at https://recuperacion.pr.gov/en/action-plans/action-plan-electrical-system-enhancements/ and https://recuperacion.pr.gov/planes-de-accion/plan-de-accion-optimizacion-del-sistema-electrico/.

¹⁸ ERI pending HUD approval.

ALIGNMENT WITH HUD POLICY OBJECTIVES:

- **Support data-informed investments** in high-impact projects that will reduce risks attributable to natural disasters, with particular focus on repetitive loss of property and critical infrastructure.
- Maximize the impact of available funds by encouraging leverage, privatepublic partnerships, and coordination with other Federal programs.

ALIGNMENT WITH ECONOMIC RECOVERY PLAN:

- WTR 1 Resilient Repair or Replacement of the PRASA Drinking Water System
- WTR 2 Improve the Operational Efficiency and Performance of PRASA Water and Wastewater Systems
- WTR 3 Enhance the Efficiency and Resilience of PRASA Electricity Services
- WTR 4 Enhance Ability to Transfer Potable Water Among PRASA Service Zones
- WTR 5 Improve Treatment and Storage Capacity to Handle High Turbidity Events
- WTR 6 Expand PRASA Services to Unconnected Areas. Connect and convert non-PRASA systems to PRASA drinking water systems and connect communities with septic tanks and publicly owned wastewater systems to PRASA sewage, where technically and financially practical. Where not technically feasible, please see the Sustainable Communities section.
- WTR 10 Curtail Unauthorized Releases into Sanitary Sewers
- **WTR 11** Repair, Replace, and Improve PRASA Wastewater Treatment Plants and Sanitary Sewer Collection Systems
- TXN 2 Harden Vulnerable Transportation Infrastructure
- TXN 7 Incentivize a Variety of Mobility Options
- TXN 10 Develop Redundant Seaport Capacity
- TXN 16 Repair Damage to Surface Transportation Network
- TXN 22 Increase Port Facility Resilience
- NCR 9 Landfill Repair and Closure
- NCR 13 Reduce Sediment Pollution and Risk from Landslides
- NCR 14 Water Quality Improvements at the Watershed Scale
- NCR 16 Wetlands Restoration
- NCR 17 Reduce Coastal Erosion and Provide Disaster Protection Through Beaches and Dunes
- WTR 18 Invest in Stormwater System Management
- WTR 19 Reduce Urban Nuisance Flooding
- WTR 20 Relocate or Redesign Assets in Flood Zones

- NCR 8 Increase Landfill Capacity to Dispose of Hurricane-Related Waste and to Properly Manage Future Waste
- PBD 9 Repair All Essential Public Buildings Damaged by Hurricanes Irma and María
- PBD 10 Incentivize State-of-the-Art Building Design, Practices, and Technologies
- WTR 19 Reduce Urban Nuisance Flooding
- WTR 23 Evaluate, Repair, and Improve Flood Control Infrastructure
- **CIT 22** Use Federal Programs to Spur Deployment of Broadband Internet Island-Wide
- **HSS 1** Increased Use of Solar-Powered Generators and Solar Backup Power Sources
- **HSS 9** Increase Access to Tele-Health Options as Telecommunication Supports Become More Robust
 - **PBD 8** Mitigate Flood Risk for Critical Government Functions

SOCIAL INTEREST HOUSING MITIGATION PROGRAM

RISK-BASED NEED: Socially vulnerable populations that have lower capacity to absorb shocks and stresses, have increased susceptibility associated with their demographic characteristics and other barriers such as access to lifelines.¹⁹ The Risk Analysis calculation of vulnerability identifies socially vulnerable populations as having fewer resources to aid in preparation for disasters, while often bearing the brunt of disaster impacts as well as taking longer to bounce back recover from disaster events. For those persons sheltering in unfit structures or in homeless situations, access to critical lifelines (water, power, transportation) is limited or nonexistent. Additionally, the Housing Sector needs assessment identified as a contributor to the lifeline's instability: vulnerable populations, citizens who are homeless, and citizens at-risk of homelessness who are unable to recover quickly from disaster events and lack housing options.

As the additional analysis of demographics and protected classes section in this Action Plan shows, there are several socio-economic characteristics throughout Puerto Rico that are markedly different from those of other states receiving CDBG-MIT funds. These characteristics put residents at an immediate disadvantage in terms of their capacity to prepare for, respond to, or rebound recover from shocks and stresses, such as disasters.

While previous disaster recovery social interest housing programs concentrated on addressing unmet needs connected to the Hurricanes Irma and María, this mitigation program expands the opportunity for social interest housing to address multiple risks, not just hurricanes. The program will use risk-based mitigation criteria for the analysis, prioritization, and selection of projects.

Social Interest Housing Needs in Puerto Rico: The last two (2) Point in Time Surveys (**PIT**)²⁰ reports from Puerto Rico's Continuum of Care (**CoC**) Systems counted an estimated homeless population of 3,501 for the year 2017 and 2,535 in 2019. Although

¹⁹ Cutter, S., & Emrich, C. (2006). *Moral Hazard, Social Catastrophe: The Changing Face of Vulnerability along the Hurricane Coasts.* The Annals of the American Academy of Political and Social Science, 604, 102-112. Accessed at: http://www.jstor.org/stable/25097783

²⁰ Estudios Técnicos, Inc. *Conteo de Personas Sin Hogar 2017*. Accessed at:

http://www.agencias.pr.gov/agencias/secretariado/ProgramasServicios/Documents/COC_2017/INFORME%20CONTE O-2017.pdf https://docs.pr.gov/files/Familia/Programas%20y%20Servicios/COC/2022/INFORME%20CONTEO-2017.pdf. Conteo de Personas sin Hogar 2019. Accessed at:

http://www.agencias.pr.gov/agencias/secretariado/ProgramasServicios/Documents/PRESENTACION%20CONTEO%20 PERSONAS%20SIN%20HOGAR%202019.pdf https://www.coc502pr.com/wp-content/uploads/2024/05/PRESENTACION-INFORME-FINAL-INTEGRADO-FINAL-2019.pdf.

homelessness is a complex issue, both reports have consistently shown that a high percentage of this population is not sheltered, with seventy-two percent (72%) of the population identified in 2017 and seventy-five percent (75%) in 2019, proportions that add up to 2,512 and 1,902 people, respectively.

Among the factors identified as the main reasons why they are homeless, responses from 2017 and 2019 indicated abuse or problematic use of drugs or alcohol and mental health problems. Additionally, the 2019 report indicates that nine-point one percent (9.1%) of the people surveyed identified Hurricanes Irma or María as a contributing reason for their homelessness and two-point two percent (2.2%) indicated other natural or human-caused disasters as a cause. Another factor consistently mentioned was being a victim of domestic or gender violence with three percent (3%) for 2017, while in 2019 five-point two percent (5.2%) indicated domestic violence or gender violence, sexual assault, or harassment. Regarding the LGBTQ+ homeless population, the 2017 survey reflected a population of three percent (3%), or eighty-nine (89) people who identified as homosexual or bisexual. On the other hand Furthermore, eight (8) people identified as transgender, all of whom were unsheltered.

The 2017 PIT counted 118 homeless families, with a total of 218 minors, out of which eighty-six (86) minors were counted as not sheltered (thirty-nine-point five percent (39.5%) of all homeless minors). In the 2019 count it was estimated that four-point three percent (4.3%) of the total homeless population was under eighteen (18) years old, equaling 109 homeless minors.

The next table indicates the physical and mental health conditions that survey respondents expressed suffering from. For both 2017 and 2019, a significant portion identified problematic use of substances, alcohol and medications, mental health conditions, persistent or chronic illnesses, physical disability, and other situations.

Health Conditions Suffered by Surveyed Participants ²¹			
Conditions	2017	2019	
	Percent (%)	ount Percent Count*	

²¹ Source information taken from the 2017 and 2019 Point in Time Surveys reports developed by Estudios Técnicos, Inc. 2017 data accessed under the file name "Conteo de Personas Sin Hogar 2017" at: http://www.agencias.pr.gov/agencias/secretariado/ProgramasServicios/Documents/COC_2017/INFORME%20CONTEO-2017.pdf and 2019 data accessed under file name "Conteo de Personas sin Hogar 2019" at: http://www.agencias.pr.gov/agencias/secretariado/ProgramasServicios/Documents/PRESENTACION%20CONTEO%20 PERSONAS%20SIN%20HOGAR%202019.pdf https://www.coc502pr.com/wp-content/uploads/2024/05/PRESENTACION-INFORME-FINAL-INTEGRADO-FINAL-2019.pdf.

Illegal Drug Use	41.6%	1,207	46.3%	888
Mental Health Condition	34.1%	990	38.8%	744
Alcohol Use	29.6%	858	29.3%	562
Persistent or Chronic illnesses, such as: cancer, diabetes, among others/heart disease	27.0%	783	35.7%	685
Hepatitis C	19.1%	554	N/A	N/A
Use of Prescription Drugs and/or Medicine	19.0%	552	N/A	N/A
Use of medicine without Prescription	N/A	N/A	16.9%	324
Physical Disability	18.4%	535	18.8%	361
Brain Injury or Trauma	12.7%	369	13.8%	265
Post-Traumatic Stress Disorder	9.9%	287	7.6%	146
Developmental disabilities or problems	8.8%	256	N/A	N/A
HIV or AIDS	7.2%	208	6.8%	130

^{*}The count amounts were estimated based on the percentages reported and the total number of people surveyed. No exact count was provided in the report or executive summary.

These conditions result in the populations suffering disproportionately when natural and human-caused disasters occur, deepening physical and social vulnerability. PRDOH is focused on taking proactive steps towards mitigating the risk of loss of life for those extremely vulnerable populations by funding for the rehabilitation and hardening of existing housing structures or new construction of multi-family social interest housing and service projects.

Housing Need Data Gathered During CDBG-DR Implementation: Proposals submitted to the CDBG-DR Social Interest Housing (**SIH**) Program also provide valuable data on the identified social interest housing needs, as well as population characteristics that service organizations have experienced, researched, and gathered. Table 9 summarizes data assembled from the forty-three (43) proposal applications that were received as a response to the Notice of Funding Availability from the CDBG-DR SIH Program. PRDOH is utilizing this research as a preliminary assessment of existing needs for socially vulnerable housing.²² However, the agency recognizes that some of the mentioned needs will be addressed by CDBG-DR program implementation, as part of hurricane recovery efforts. The mitigation program is

²² The information in the Table is not intended to cite specific source documentation. PRDOH is relying on the applicant organizations' knowledge of data and resources in their respective fields.

meant to further address similar housing needs by expanding eligibility to cover other risks identified in the Risk Assessment and by emphasizing construction standards that address the long-term mitigation needs of the project site and/or community.

Table 1: Summary of Notable Information Extracted from Social Interest Housing Applications by Topic

Topic	Notable Information Extracted from Applications*
Gender or Domestic Violence	 In the Municipality of San Juan, although there are several ambulatory programs, there is only one (1) organization that provides emergency shelter for women and children fleeing domestic violence. The number of Domestic Violence Emergency Shelters in Puerto Rico has decreased from twelve (12) shelters at some point in history to currently eight (8). After Hurricane María, only five (5) of the eight (8) domestic violence shelters were functioning. According to data from the Office of the Women's Advocate, from 2017 to 2020 there have been 24,832 incidents of domestic violence. Office of Women's Advocate data on fatal domestic violence cases for 2016, 2017, and 2018 have increased from eight (8) to eleven (11) to twenty-five (25), respectively. In the first six (6) months of the year 2020, the Office of the Women's Advocate reported 2,974 incidents of domestic violence in Puerto Rico. Gender Equality Observatory's Fourth Report (Upegui-Hernández, 2020) states that from March 15 to April 21, 2020, during Puerto Rico's Pandemic Curfew, 675 domestic violence incidents occurred, and 740 domestic violence protection orders were issued. Organizations reported lifelines system collapse that complicated the provision of services to their socially vulnerable populations: shutdowns for power service lasted seven (7) months and for potable water five (5) months. Additionally, organizations reported phone calls to have tripled once the phone lines were restored. Domestic violence tends to increase in the wake of natural disasters due to high levels of stress, difficulty in meeting basic needs, and the breakdown of social support networks.
Mental or Intellectual Disability	 Only four (4) organizations provide services to adults with severe intellectual disability in Puerto Rico. The Department of Justice reported from their Program for Services for People with Intellectual Disability: 302 participants in the year 1999, an increase to 660 participants in 2000, and 141 participants in August of 2019.

- An estimate of the global number of people of all ages with Intellectual Disabilities indicates that there are 5,000 people with Intellectual Disabilities in Puerto Rico, most of them under the care of their relatives.
- There are no residential facilities for persons with physical and mental disabilities in Puerto Rico focused on the needs of adults with Autism Spectrum Disorder (ASD).
- In 2011 the Puerto Rico Department of Health carried out "Prevalence of Autism in Children in Puerto Rico: Results Report of the 2011". The study estimated that 28,745 people at the time had autism. The first data on the prevalence of autism in children ages between four (4) and seventeen (17) found a total of 154 cases of autism in households in a sample of 9,894 children, for an estimated rate of one-point fifty-six percent (1.56%).
- Estimates by UPR's Medical Sciences Campus--Graduate School of Public Health in late 2012 and based on 2010 Census population levels, were that the population of people with autism in Puerto Rico is between 19,695 and 21,822. Also, the distribution by regions is uniform, that is, no statistically significant differences were found by area, which indicates that autism is an Island-wide challenge.
- Organizations reported that many families in Puerto Rico that have an autistic child are obligated to look for facilities in the U.S., for when they become too old to continue to take care of their child. Families that look for a residential facility outside of Puerto Rico face the added burden of separation from their child, anxiety over the child living in a linguistically and culturally foreign place, and the anguish of believing the that they were unable to care for their child. Added to this emotionally charged situation, there is also the desperation caused by the long-distance separation; many families cannot to live close to their child, for economic, social, and other reasons.
- Many adults with ASD will have serious difficulties in situations occasioned by natural disasters, as they do not function well at all with forced displacement or the interruption of their routines or any support services they receive, let alone within inadequate refugee camps conditions.

• Organizations cited the Mental Health and Addiction Services

Administration (AMSSCA) research that indicated shows the widespread use of drugs in Puerto Rico indicates the need for the provision of substance use and/or co-occurring substance abuse and mental

disorders treatment in the community.

• In Puerto Rico, three-point eight percent (3.8%) of the population, were found to have drug abuse or dependence disorders. Of these over 16,300 were heroin users or abusers, many of them injection drug users (IDUs). It has been estimated that ten point seven (10.7%) of individuals from fifteen (15) to sixty-four (64) years of age report using illicit drugs and that

Addiction

nineteen-point six percent (19.6%) of men of said age range had used drugs in their lifetime. Mental disorders represent a relevant factor related to the homeless, as well as HIV/AIDS. According to the organizations, the comprehensive HIV prevention Plan in Puerto Rico, indicates primary health care does not meet the needs of the population of focus. The Plan reports that forty-HIV/AIDS seven percent (47%) of patients with HIV classified as unattended are injecting drug users. Thirteen percent (13%) correspond to male-to-male sexual contact compared to those with HIV (15.39%) and without AIDS (10.25%). Men constituted sixty-nine-point four percent (69.40%) of people with HIV with uncovered primary care needs. • The 2018: ACS 5-Year Estimates Data Profiles from the American Community Survey Report shows a total of 718,344 individuals with one or more disability conditions in Puerto Rico. From this estimated number, a **Adults with** total of 356,530 persons, or approximately 49%, falls under the range of Self-Care or eighteen (18) to sixty-four (64) years old. Within this group, a total of 64,271 Independent (18%) have self-care difficulty and 126,930 individuals (35%) have an Living independent living difficulty. In addition, a total of 307,182 individuals **Difficulties** (44%) fall under the range of sixty-five (65) years and over. Within this group, a total of 95,937 (31%) have self-care difficulty, and 175,229 persons (57%) have an independent living difficulty. • The Kids Count study from 2015 data shows that the mothers and fathers of six (6) out of ten (10) children do not have a secure job and that fiftyseven percent (57%) live in single-parent families, which complicates this scenario and has an adverse effect on their development. • Of these single-parent families, the study showed that eighty-two percent (82%) are female heads of family and forty-seven percent (47%) of the grandparents who live with their grandchildren under eighteen (18) years of age are in charge of their basic needs. An organization that provides housing for children reported having to reject seventy-three (73) minors, aging from newborn to eleven (11) years Youth old due to lack of capacity, from January 2019 to June 2020. This organization reports the increase in demand was as a result of Hurricane Irma, Hurricane María and the earthquakes due to, but not limited to: deaths of their relatives or, guardians, neglect, physical, psychological, and sexual abuse due to these being exposed for to more time with their relatives and / or guardians during and after these traumatic events. • Organizations reported the homicide rate in Puerto Rico is highest among men ageds eighteen (18) to twenty-five (25), according to the CDC. Many youths served by these organizations engage are members of the foster care system. Numerous studies indicate that youth aging out of the

system are at higher risk for acute homelessness. In Puerto Rico, 463 youth age out of the system each year. • Puerto Rico has a forty-three percent (43%) dropout rate from the Public Education System. • Before Hurricanes Irma and María, nearly 8,000 families were on Section 8 waiting lists. Organizations reported this to evidence the need for lowincome housing in Puerto Rico, identified with the most vulnerable populations. **Poverty** • According to the Puerto Rico Institute of Statistics, around sixty one percent (61%) Puerto Rico citizens are beneficiaries of Nutritional Assistance (PAN). • Organization-cited studies showed that with every ten (10) years after reaching the age of sixty-five (65), the odds of losing mobility doubles. • The Association of Home Builders (ACH) studies confirm that there is a need for adequate housing for these older people, that there are 64,000 heads of households where 250,000 people live in poor quality housing, in poor conditions, of those 67,549 are older adults. For them, the challenges are greater, as more rental projects and low-income housing are needed than those that are being built. • Of the total population, 417,218 are sixty-five (65) years old and over (11%). Of those sixty-five (65) years old and over, 183,500 (44%) live below the poverty level in Puerto Rico. The vast majority of the older persons that live below the poverty level reside in municipalities that have limited job opportunities and limited resources. **Elderly** According to the World Health Organization, Puerto Rico ranks sixth (6th) **Population** among thirty-five (35) countries in Latin America with accelerated aging of its population. • Organizations cited report a December 2014 report indicating that in Puerto Rico close relatives are abusing to elderly parents because of their inability to pay for care services related to the economic crisis that overwhelms them, as one of many motivators to for negligence, emotional abuse, and financial exploitation. • From 2000 to 2015, the population over sixty (60) years of age in Puerto Rico increased from eleven-point two percent (11.2%) to eighteen percent (18%). The factors that have influenced this process according to scholars are due to demographic changes such as decreased fertility, increased mortality, and greater migration among groups of reproductive ages, as well as an increase in life expectancy. Participants that follow the housing first model are more likely to remain **Homeless** stably housed with a long-term housing retention rate of ninety-eight percent (98%).

 Organizations mention studies that have reported that the longer young people remain homeless, the more likely they are to be exposed to being victims of sexual and economic exploitation, as well as experiencing traumatic experiences, suffering health problems, nutritional deficiencies, or addictions (Boivin, Roy, Haley, and Gaulbaud du Fort, 2005). Once on the street, large numbers of young people quickly fall into these damaging dynamics associated with homelessness.

*Information provided as part of the applications for the Social Interest Housing Program in CDBG-DR.

PROGRAM DESCRIPTION: The Social Interest Housing Mitigation Program (SIHM) will be available for eligible organizations that have demonstrated experience working with the vulnerable populations to be served under this housing program, such as: homeless, senior citizens, domestic violence victims, persons with intellectual disability, persons with developmental and/ or physical disability, persons living with HIV/AIDS, individuals recovering from addiction and individuals with other functional or access needs.

The SIHM Program is intended to address the varying and localized need for mitigation against a number of hazardous threats; and does not limit projects based on the top risks at the Island-wide level, nor by an assumption of need in a generalized way. Community threats differ greatly when local geography and geographic susceptibility to hazards are considered. As such, the Program promotes data-informed decision making for all eligible applicant entities by launching the publicly transparent Puerto Rico Hazard and Risks Dashboard Risk and Critical Assets Assessment tools.

The Program's goal is to address mitigation needs by funding projects with high-quality, modern, resilient housing solutions for vulnerable populations and protected classes.

DESIGN CONSIDERATIONS: Social interest housing project proposals submitted by eligible entities will be evaluated based on the risks mitigated by indicating the site-specific risks being addressed and the structural and nonstructural measures taken to mitigate such risks. Additional evaluation criteria concerning compliance, innovation, and eco-conscious measures will include, but not be limited to:

 The proposed project serves one or more socially vulnerable populations such as: homeless, senior citizens, domestic violence victims, persons with intellectual disability, persons with developmental and/or physical disability, persons living with HIV/AIDS, individuals recovering from addiction and individuals with other functional or access needs.

- Percentage of LMI benefit: Projects that serve fifty-one percent (51%) or more LMI households within the area of benefit will be prioritized.
- Whether the natural infrastructure is preserved, or other eco-conscious measures are included in project design to minimize the unintended consequences of grey infrastructure and other developments. Applicants Projects are encouraged to incorporate innovative nature-based solutions and natural or green infrastructure solutions during project development that reduce the negative impacts on the surrounding human and natural environment. Natural or green infrastructure is defined at 84 FR 45838, 45848 as the integration of natural processes or systems (such as wetlands or land barriers) or engineered systems that mimic natural systems and processes into investments in resilient infrastructure, including, for example, using permeable pavements and amended soils to improve infiltration and pollutant removal.
- Whether or not local code enforcement supports modern and/or resilient building codes and mitigation of identified hazard risks.
- Complies with ADA standards to the most largest extent feasible.
- Whether it includes on-site support services for the special need vulnerable population served or is to be located near a service facility.
- Whether the project is accessible to public transportation, grocery shopping, recreation, and socialization, etc.
- When feasible Whether the projects may implement considered innovative design solutions that:
 - o Improve the quality of life,
 - Stimulate sustainable growth design and development,
 - Improve community mobility and access,
 - o Improve site accessibility and safety,
 - o Preserve historic and cultural resources,
 - o Preserve or improve views and local character,
 - o Encourage stakeholder involvement,
 - o Address conflicting regulations and policies,
 - o Extend the project facility lifespan,
 - Reduce energy consumption,
 - Make use of recycled materials,
 - o Make use of local or regional materials,
 - o Divert waste from landfills, and
 - Reduce waste during construction.

Submissions may include proposals for more than one (1) project. Public services provided as part of a proposed project may not supplant other funds and must be part of a new service or quantifiable increase in the level of a service previously provided. Program guidelines may incentivize projects that address multiple risks.

QUALITY CONSTRUCTION: PRDOH will implement construction methods that emphasize quality, durability, energy efficiency, sustainability, and mold resistance. All housing must be designed to incorporate principles of sustainability, including water and energy efficiency, resilience, and mitigation against the impact of future shocks and stressors.

Where feasible, Puerto Rico will follow best practices such as those provided by the U.S. Department of Energy's Guidelines for Home Energy Professionals. For reconstructed structures, this may include installed appliances that, at a minimum, meet ENERGY STAR certification standards.

BROADBAND INFRASTRUCTURE REQUIREMENTS: Under 84 FR 45838, 45864, projects that include four (4) or more rental units are required to include installation of broadband infrastructure at the time of multifamily new construction or substantial rehabilitation that is funded or supported by HUD.

PRDOH aims to narrow the digital divide in low-income communities served by HUD. Installing unit-based broadband infrastructure in multi-family housing that is newly constructed or substantially rehabilitated with or supported by HUD funding will provide a platform for individuals and families residing in such housing to participate in the digital economy and increase their access to economic opportunities.

Projects are excluded from this requirement only if one (1) of the below exclusions can be documented and validated by PRDOH:

- The location of the new construction or substantial rehabilitation makes installation of broadband infeasible;
- The cost of installing broadband infrastructure would result in a fundamental alteration in nature of its program, or activity, or in an undue financial burden; or
- The structure of housing, to be substantially rehabilitated, makes installation of broadband infrastructure infeasible.

ELIGIBLE ACTIVITIES:

- Section 105(a)(2) Public Facilities and Improvements
- Section 105(a)(3) Code Enforcement

- Section 105(a)(4) Clearance, demolition, removal, reconstruction, and rehabilitation (including rehabilitation which promotes energy efficiency) of buildings and improvements
- Section 105(a)(5) Removal of mobility barriers
- Section 105(a)(8) Supplementary Public Services as a component to place limited clientele (such as homeless persons, etc.) in the housing projects, once completed
- Section 105(a)(14) Activities Carried Out through Non-profit Development Organizations;
- Section 105(a)(15) Assistance to Eligible Entities for Neighborhood Revitalization, Community Economic Development and Energy Conservation
- 84 FR 45838, 45863 V.B.1 Housing-related eligibility waiver permitting new housing construction that addresses disaster risks identified in the grantee's Mitigation Needs Assessment.

ELIGIBLE PROJECTS:

- New construction, renovation, rebuilding, reconstruction, repair, improvements, rehabilitation, substantial improvement or substantial rehabilitation of multifamily and single-family housing units buildings serving socially vulnerable populations.
- Socially vulnerable populations may include homeless, senior citizens, domestic violence victims, persons with intellectual disability, persons with developmental and/or physical disability, persons living with HIV/AIDS, individuals recovering from addiction and individuals with other functional or access needs.

METHOD OF DISTRIBUTION: Direct and Subrecipient Distribution Model

NATIONAL OBJECTIVE: LMI only

ELIGIBLE ENTITIES:

- Non-governmental organization (501(c)(3)); or
- Not for Profit Entities;
- Community-Based Development Organizations; and
- pPrivate non-profits; and
- Units of general local government/municipalities (including departments and divisions), only applicable under the public facilities set-aside.

MAX AWARD: \$2,500,000.00²³

PUBLIC FACILITIES RECONSTRUCTION OR REHABILITATION FOR SOCIAL INTEREST HOUSING SET-ASIDE: The Program includes a fifteen (\$15) million dollars set-aside for the construction, rebuilding, renovation, reconstruction, repair, improvements, rehabilitation, substantial improvement or substantial rehabilitation of publicly-owned facilities and buildings to be used as multi-family unit buildings serving socially vulnerable populations. This set-aside provides a unique opportunity for repurposing vacant publicly-owned properties to achieve SIHM Program goals. Funding under this set-aside will be available to general local government/municipalities (including departments and divisions), with demonstrated capacity or experience working with populations to be served under this housing program, such as the homeless, senior citizens, domestic violence victims, persons with intellectual disability, persons with developmental and/or physical disability, persons living with HIV/AIDS, individuals recovering from addiction and individuals with other functional or access needs.

MAX AWARD: PRDOH will directly administer or enter into agreements with units of general local government/municipalities to administer this set-aside activity on behalf of PRDOH. No awards will be made to beneficiaries.

ALIGNMENT WITH CDBG-DR PROGRAMS:

This Program directly aligns with the CDBG-DR Social Interest Housing Program
which offers program assistance to eligible housing entities applicants with an
unmet hurricane recovery need. However, this Program expands eligibility to
other risks identified in the Risk Assessment for the specific project site and
places an emphasis on construction standards that address said risks.

ALIGNMENT WITH HUD POLICY OBJECTIVES:

- Support data-informed investments in high-impact projects that will reduce risks attributable to natural disasters, with a particular focus on the repetitive loss of property and critical infrastructure.
- Maximize the impact of available funds by encouraging leverage, publicprivate partnerships, and coordination with other federal programs.

²³ Every award calculation will consider a percentage for contingencies. However, if unforeseen conditions or additional extenuating factors arise, the program will conduct an evaluation on a case-by-case basis to address those conditions to allow for implementation to continue. In such cases, a cost reasonableness analysis will be conducted, and the scope of work will be reviewed to determine if modifications are required. Examples of post-award conditions include but are not limited to an increase in materials and labor costs due to current construction market conditions, regulatory compliance, and design changes following the conclusion of technical studies.

RECOVERY PLAN ALIGNMENT:

- HOU 2 Assess, Repair, and Mitigate Damaged Subsidized Rental Housing
- **HOU 7** Assess Need for—and Adopt and Implement Programs to Provide—Additional Subsidized Rental Housing and Special Housing

MULTI-SECTOR COMMUNITY MITIGATION PROGRAM

RISK-BASED NEED: Puerto Rico's top threatening hazards according to the Risk Assessment²⁴ results are: hurricane-force winds, flooding, earthquakes, landslides, and liquefaction. As tropical storms and hurricanes bring in bouts of flooding induced by rainfall each year, thousands of homes face the risk of flooding, flood-induced landslides, and hurricane force winds. Recent seismic activity and its resulting landslides and liquefaction have highlighted the need to also mitigate these risks as well.

1	Hurricane Force Winds			
2	Flood (100-year)			
3	Earthquake			
4	Landslide			
5	Liquefaction			
6	Drought			
7	Severe Storm			
8	Sea Level Rise (10 ft)			
9	Wildfire			
10	Human Hazard			
11	Fog			
12	Lightning			
13	Category 5 Storm Surge			
14	Tornado			
15	Tsunami			
16	Wind			
17	Hail			
18	High Temp			

Figure 7: Ranking of Risks in Puerto Rico

Puerto Rico is vulnerable to several disaster-related risk factors, which vary in likelihood of occurrence and degree of threat, depending on geography, population density, and the presence of socially vulnerable communities. This risk is profiled down to the a 0.5-mile hex grid in the PRDOH Risk Assessment. Although the risk levels across

²⁴ The Puerto Rico Hazards and Risk Dashboard is available on the CDBG-MIT website in English at https://recuperacion.pr.gov/iframes/PRpeligrosyriesgosIFRM.html. and Spanish at https://recuperacion.pr.gov/iframes/PRpeligrosyriesgosIFRM.html

Puerto Rico range from high to low, hex-grid level data shows that all of the Island's households face some level of risk.

Approximately eleven percent (11%) of Puerto Rico's residents live in high-risk areas, approximately thirteen percent (13%) live in medium high-risk areas, and approximately twenty-three percent (23%) of the people live in medium-risk areas. Based on the average number of persons per home in Puerto Rico, this represents an estimated 619,000 homes.

Estimated Population, Percentage, and Estimated Number of Homes in High,					
	Medium High, and Medium Risk Areas				
Risk	Estimated	Percent of ACS	Estimated Number		
KISK	Population	Population	of Homes*		
High	393,024	11%	146,651		
Medium High	464,329	13%	173,257		
Medium	801,568	23%	299,093		
	619,000				

^{*}The Eestimated number of homes is based on 2018: ACS 1-Year Estimates; 2.68 persons per-home in Puerto Rico; 1,179,637 estimated homes in Puerto Rico.

The map below shows the location of the high, medium-high, and medium-risk areas in Puerto Rico.²⁵

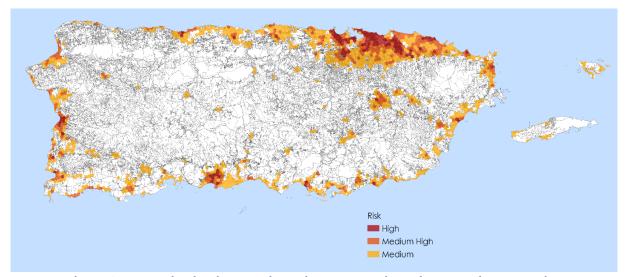


Figure 8: Population in High, Medium High, and Medium Risk Areas in Puerto Rico

²⁵ PRDOH used population data collected from the American Community Survey products developed for HUD's LMI block group dataset at the block group level. This population data was geo-processed with the ESRI ArcGIS Pro Create Random Points tool to randomly distribute the population (Low-Moderate Universe). The data was then analyzed based on location within the high, medium high, and medium risk areas developed as part of the Risk Assessment.

Due to its geographic and topographic diversity as an archipelago, the risk of destructive natural and environmental disasters does not affect all regions or communities equally, thereby requiring a tailored, strategic approach — e.g., coastal regions face a higher risk of rising sea levels, while communities in the central mountain range face a higher risk of landslides, and the southwest region has experienced a higher rate of earthquakes. As Puerto Rico continues its recovery from the aftermath of the 2017–2020 disasters, these damages were exacerbated by the excessive flooding and landslides most recently caused by Hurricane Fiona in September 2022, particularly in the hardest-hit areas like the southern and western regions.

COMMUNITY VALUE: Puerto Rican communities are as diverse as the Island's geographical characteristics. Their composition is highly complex, not limited to single-family households, multi-family homes, or communal infrastructure, or businesses. Rather, communities are formed and developed through the combination of historical, cultural, and socioeconomic elements, all of which are essential to the creation of a community's social fabric. It is the richness of this complexity that not only makes every community unique, but also contributes to the formation of robust social **support systems** that have proven to be key to Puerto Rico's adaptive capacity. Despite the socioeconomic disparities and structural vulnerabilities exacerbated by past natural disasters across Puerto Rico, these disasters also illuminated the formidable spirit and strong sense of solidarity and resourcefulness embedded within even the Island's most vulnerable communities. In the face of adversity, their willingness and ability to self-organize, collaborate, and be active agents in their own recovery was evident.

To ensure Puerto Rico's long-term resiliency and support its potential to fully thrive, there must be an intentional effort to preserve and nurture the culture and unique set of characteristics and values that form the social fabric of its communities.

PROGRAM DESCRIPTION: The Multi-Sector Community Mitigation Program **(MSC Program–MIT/MSC)**²⁶ is designed to provide socially vulnerable communities (or community sectors) who experience socioeconomic and environmental disparities the opportunity to relocate away from high-risk zones while ensuring their communities stay together. Most, if not all, of the socially vulnerable communities in Puerto Rico have also suffered significant hardships and damages from past natural disasters and are disproportionately located in high-risk zones, such as coastal zones

²⁶ For the purposes of this document, these terms will be used interchangeably to refer to the Multisector Community Mitigation Program.

threatened by rising sea levels, floodplains, landslides, and liquefaction-prone areas among others.

The MSC Program recognizes that Puerto Rican communities face a pressing need to reduce environmental risks. The types and degree of natural hazards that threaten the health, safety, and well-being of these communities can vary greatly. Addressing these risks locally, and at a community level (rather than an individual) by relocating neighborhoods and communities out of high-risk zones, allows the MSC Program to help-residents thrive in a lower risk environment. The MSC Program primarily considers mitigation needs for households in high-risk areas, but it also seeks to incorporate a holistic community perspective that can minimize the impact of risk reduction activities which could otherwise displace individuals or disrupt communities.

Due to the complexities of relocating residents and businesses while maintaining the community together, the MSC Program will fund a wide range of activities, including planning and feasibility studies, job creation and retention for relocated businesses, public infrastructure improvements, housing construction, reconstruction and rehabilitation, acquisition, relocation, public services, demolition, and buyout (voluntary acquisition), among other activities.

Targeted Communities participating in the MSC Program will enter a Participatory Design process facilitated by PRDOH through which community residents will decide: where they wish to relocate, housing typology, communal infrastructure, and values and priorities they wish to apply to their new community project design. PRDOH aims to engage with community-based organizations and community stakeholders to collaborate on the implementation of the Participatory Design processes.

The MSC Program stands to offer the following benefits:

- Raise community awareness of regional risks Engage vulnerable communities and their stakeholders to discuss the specific natural threats they face, including the current and projected impacts of climate change. Partner with trusted voices and leaders in the communities to facilitate information sharing across their networks and promote resident participation.
- Relocate communities out of harm's way Work with residents, stakeholders, and leaders to ensure a community-driven relocation to safer, low-risk areas and away from high-risk zones.
- Provide Technical Assistance Provide equitable access to participatory planning, design, construction, and other related technical assistance as

needed, thereby facilitating direct citizen participation and implementation of community-scale relocation projects.

- Keep communities together— Respect and safeguard the integrity of each
 community by incorporating resident participation in all phases of the
 relocation project's development (from design to implementation). Together,
 identify the community's values, priorities, and needs, ensuring these serve as
 the project's foundation and maintain the essence of the community intact in
 the process.
- **Restore floodplains** Reinstate the natural absorption capacity of floodplains.

PROGRAM PRIORITIES: The MSC Program will approach socially vulnerable communities (or community sectors) who experience socioeconomic and environmental disparities and who have expressed the desire to reduce environmental risks and mitigate loss of life and property through relocation. PRDOH aims to leverage CDBG-MIT funds allocated for the MSC Program with other CDBG-DR Programs by building upon recently established or ongoing disaster recovery efforts that can complement and further support community-wide revitalization and risk mitigation. PRDOH will review Municipal Recovery Plans submitted by municipalities participating in the CDBG-DR Municipal Recovery Planning (**MRP**) Program to identify other proposed community relocation projects that are in an advanced planning stage and can be prioritized for potential implementation through the MSC Program.

PROGRAM IMPLEMENTATION: Through research using various data-gathering strategies, evaluations, community and stakeholder outreach and consultations with subject-matter experts in related fields, the MSC Program will approach socially vulnerable communities with a high-risk score rating (as determined by the Puerto Rico Risk and Hazards Dashboard). Once approached, these communities will decide if they wish to join the MSC Program and engage in a PRDOH-facilitated Participatory Design process, which aims to empower and provide technical assistance with the development of the Community Relocation Proposal (including relocation project strategy, site location and community design) and its submission to PRDOH for final review and approval. PRDOH-procured vendors and contractors will implement the final PRDOH-approved MSC projects, which will consider community "Buy In" and project feasibility, among other evaluation criteria specified in the Program Guidelines.

In instances where a Targeted Community has commenced participation in the MSC Program, and PRDOH identifies circumstances that preclude the relocation of the full community, PRDOH may present the community with alternative relocation or

mitigation options available within the CDBG-MIT portfolio. These alternatives will be provided to the community for their review and agreement. This alternative allows communities flexibility within the mitigation process and ensures that residents are not retained in high-risk areas.

SUSTAINABLE AND RESILIENT CONSTRUCTION: PRDOH will implement resilient housing design and construction methods that follow sustainable architecture principles to emphasize quality, durability, energy sustainability, and adaptability. Additional information regarding construction standards can be found in the HUD Compliance Requirements section of this Action Plan (under "Protection of People and Property and Construction Methods").

ELIGIBLE ACTIVITIES:

- Section 105(a)(1) Acquisition of Real Property
- Section 105(a)(2) Public Facilities and Improvements
- Section 105(a)(3) Code Enforcement
- Section 105(a)(4) Clearance, Rehabilitation, and Reconstruction of Buildings
- Section 105(a)(5) Architectural Barrier Removal
- Section 105(a)(7) Disposition of Real Property
- Section 105(a)(8) Public Service
- Section 105(a)(9) Payment of Non-Federal Share
- Section 105(a)(11) Relocation
- Section 105(a)(12) Planning Activities
- Section 105(a)(14) Activities Carried Out through Non-profit Development Organizations;
- Section 105(a)(15) Assistance to Eligible Entities for to Neighborhood Revitalization, Community Economic Development and Energy Conservation
- Section 105(a)(17) Economic Development Assistance to For-Profit Business
- Section 105(a)(19) Assistance to Public or Private Non-profit Entities
- Section 105(a)(22) Microenterprise Assistance, Economic Development; Job Creation and Retention
- 84 FR 45838, 45863 V.B.1 Housing-related eligibility waiver permitting new housing construction that addresses disaster risks identified in the grantee's Mitigation Needs Assessment

INELIGIBLE ACTIVITIES:

Development within the floodway is prohibited.

 Proposed new construction located in the 100-year floodplain, as identified in the most current FEMA Flood Maps, must comply with 24 C.F.R. Part 55.

METHOD OF DISTRIBUTION: Subrecipient Distribution Model and Direct Distribution Model

During implementation the of the MSC Program, PRDOH may use reasonable criteria to directly select a nonprofit organization or community-based organization as a subrecipient. The subrecipient distribution model allows PRDOH to delegate roles and responsibilities such as project management, program operational support, data gathering, community outreach and engagement, participatory design process implementation, and project closeout, among others.

To manage the Caño Martín Peña (**CMP**) communities' set-aside, the *Corporación del Proyecto ENLACE del Caño Martín Peña* (**ENLACE**) and the *Compañía para el Desarrollo Integral de la Península de Cantera* (**CDIPC**) will serve as MSC Subrecipients.

NATIONAL OBJECTIVE: LMI, UNM

ELIGIBLE BENEFICIARIES:

Individuals:

 Homeowners or occupants of an eligible single-family property located in a targeted and documented high-risk area (Targeted Community), including but not limited to, FEMA floodway.

Business

- Business located in the Targeted Community and registered to do business in Puerto Rico.
- Business must be current on Puerto Rico tax obligations.

MAX AWARD: \$100,000,000 per community.

<u>Note</u>: The MSC Program's total allocation is **\$300,000,000**, which includes a \$52,000,000 set-aside designated for the Caño Martín Peña Communities. Therefore, the remaining total MSC Program allocation is \$248,000,000. Final award amounts will be based on the selected projects' design and needs. Allocations are subject to change per amendments and funding availability, as determined by PRDOH.

CAÑO MARTÍN PEÑA (CMP) COMMUNITIES SET-ASIDE: Located within the San Juan Municipality, the CMP Communities at-large is comprised of an estimated 30,000 residents across eight (8) distinct neighborhoods or community sectors: ²⁷

- 1. Las Monjas
- 2. Barrio Obrero San Ciprián
- 3. Barrio Obrero Marina
- 4. Buena Vista Santurce
- 5. Buena Vista Hato Rey
- 6. Parada 27
- 7. Israel-Bitumúl
- 8. Península de Cantera

The CMP Community at-large is currently living an environmental crisis which affects the residents who live below the poverty line and are experiencing recurrent flooding. In recognition of their initiative to formally unite under a flagship community-scale dredging project that is in an advanced planning stage, PRDOH designated an MSC-MIT funding set-aside totaling \$52,000,000 to assist the CMP Communities with implementation of MSC projects that will better serve their residents' housing needs. ENLACE and CDIPC will serve as MSC Subrecipients (\$46,000,000 and \$6,000,000, respectively) to manage the set-aside. Both entities have proposed to use the setaside funds to relocate selected households that lie within the CMP Community footprint of the Martín Peña Channel's dredging path. This is an ongoing process which is being implemented through civic engagement and Participatory Design processes led by both entities, ENLACE and CDIPC. These entities will be responsible for completing their Participatory Design processes, acquiring Architecture and Engineering (A/E) services for project design and construction (among any other services needed for project development and implementation), and for the overall implementation and closeout of their projects.

ALIGNMENT WITH CDBG-DR PROGRAMS:

- Aligns with the **City Revitalization Program**, which has as a major objective the revitalization of urban centers, downtown areas, and key corridors.
- Provides a long-term and complementary program to the CDBG-DR Gap to Low-Income Housing Tax Credits Program and the Social Interest Housing Program, both of which are currently underway.

²⁷ As identified in Act 489-2004.

• Coordination with these three (3) programs provides the opportunity to address housing, supportive services, and infrastructure, and economic needs of the benefitting community in a holistic manner.

ALIGNMENT WITH HUD POLICY OBJECTIVES:

- **Support data-informed investments** in high-impact projects that will reduce risks attributable to natural disasters, with a particular focus on repetitive loss of property and critical infrastructure.
- Increase the resiliency of housing that typically serves vulnerable populations, including the following housing: transitional housing, permanent supportive housing, permanent housing serving individuals and families (including subpopulations) that are homeless and at-risk of homelessness, and public housing developments.
- Maximize the impact of available funds by encouraging leverage, publicprivate partnerships, and coordination with other Federal programs.

RECOVERY PLAN ALIGNMENT:

The wide range of activities contemplated for the Multi-sector Community Mitigation Program aligns with the following courses of action from Puerto Rico's Recovery Plan:

- WTR 1 Resilient Repair or Replacement of the PRASA Drinking Water System
- WTR 6 Expand PRASA Services to Unconnected Areas
- WTR 11 Repair, Replace, and Improve PRASA Wastewater Treatment Plants and Sanitary Sewer Collection Systems
- WTR 20 Relocate or Redesign Assets in Flood Zones
- WTR 23 Evaluate, Repair, and Improve Flood Control Infrastructure
- WTR 24 Reduce Sedimentation of Water Bodies
- **HOU 1** Assess, Repair, Rehabilitate, or Relocate Substantially Damaged Owner-Occupied Homes
- HOU 2 Assess, Repair, and Mitigate Damaged Subsidized Rental Housing
- **HOU 7** Assess Need for-and Adopt and Implement Programs to Provide-Additional Subsidized Rental Housing and Special Housing
- ECN 14 Direct Small Business Investment
- ECN 23 Implement Job Creation Initiative
- ECN 32 Create Business Resiliency Hubs

LEVERAGE FOR LOW-INCOME HOUSING TAX CREDITS PROGRAM - MITIGATION (LIHTC-MIT)

RISK-BASED NEED: The Risk Assessment results show the top threatening hazards for Puerto Rico at an island-wide level to be hurricane-force winds, flooding, earthquakes, landslides, and liquefaction. These hazards have prominently manifested in Puerto Rico's recent history, as evidenced by eight (8) emergency and major disaster declarations between 2017 and 2020.²⁸ Annually, the Island braces for tropical storms and hurricanes, which unleash significant rainfall, thus increasing the vulnerability of thousands of rental units to floods and flood-induced landslides.

1	Hurricane Force Winds			
2	Flood (100-year)			
3	Earthquake			
4	Landslide			
5	Liquefaction			
6	Drought			
7	Severe Storm			
8	Sea Level Rise (10 ft)			
9	Wildfire			
10	Human Hazard			
11	Fog			
12	Lightning			
13	Category 5 Storm Surge			
14	Tornado			
15	Tsunami			
16	Wind			
17	Hail			
18	High Temp			

Figure 3: Ranking of Risks in Puerto Rico

Puerto Rico has approximately three hundred and ninety thousand (390,000) renteroccupied housing units, making up roughly one-third of all occupied housing units in

²⁸ Some of these major disaster declarations include: DR-4571-PR declared on November 5, 2020; DR-4560-PR declared on September 9, 2020; EM-3537-PR declared on August 22, 2020; EM-3532-PR declared on July 29, 2020; DR-4473-PR declared on January 16, 2020; EM-3426-PR declared on January 7, 2020; EM-3417-PR declared on August 27, 2019; DR-4339-PR declared on September 20, 2017, among others. Source: <a href="https://www.fema.gov/disasters/disaster-declarations?field_dv2_state_territory_tribal_value=PR&field_year_value=All&field_dv2_declaration_type_value=All&field_dv2_incident_type_target_id_selective=All.

the Island.²⁹ More than seventy-six percent (76%) of the Island's rental stock was constructed before 1990.³⁰ The risk assessment for rental housing identifies areas where the highest concentration of renters faces very high or extreme risks of landslides and flooding. A similar analysis was performed to identify renters encountering medium-high to high-risk factors for flooding. Introducing lower-risk housing options in areas with a scarcity of housing alternatives can effectively mitigate risk.

Using census data, the analysis began by determining the total number of rental housing units in each municipality of Puerto Rico. Subsequently, this data was cross-referenced with hex grid data identifying areas at high risk of flooding and landslides in the Action Plan³¹ to estimate the number of rental housing units that are subject to higher levels of risk for flooding and landslides both across Puerto Rico and in each municipality.

Rental Units in Medium to High Flood Risk—Puerto Rico				
Medium Medium High High Total Units in Risk % Units in Risk				
31,049	24,105	55,239	110,393	28.33%

Rental Units in High to Extreme Landslide Risk—Puerto Rico				
High Very High Extreme Total Units in Risk % Units in Risk				
122,960	67,344	14,098	204,402	52.45%

Given the substantial number of units situated in high-risk zones across the Island, the need for a program focused on mitigating these threats to the rental housing stock is evident. Continuing this analysis, municipalities with the highest proportions of their rental housing stock located in areas at the highest risk of flooding and/or landslides were identified. These areas have the fewest rental housing options for their residents, making them prime candidates for targeted assistance aimed at addressing the pressing risk mitigation needs of renters who are disproportionately likely to reside in high-risk areas for flooding and/or landslides.

Municipalities with more than 50% of rental units in Medium to High Flood Risk					
	Areas				
Municipality	Municipality Rental Units in Risk Total Rental Units % in Medium to High Flood Risk				
Cataño	3426	3,481	98.42%		

²⁹ American Community Survey, Census 2022, S2502 at https://data.census.gov/table?q=S2502&g=040XX00US72.

³⁰ Estudios Técnicos, Inc. (Ed.). (2018). Report on the Housing Industry Situation (pp. 5-6). San Juan, PR: Puerto Rico Builder's Association.

³¹ See Figure 12: 100-Year Flood Zone Hazard Areas and Figure 17: Rain Induced Landslide Susceptibility Areas.

Areas				
Loíza	2488	2,619	95.00%	
Salinas	1464	2,290	63.93%	
Ponce	9865	15,995	61.68%	
Toa Baja	4844	7,866	61.58%	
Carolina	11397	19,033	59.88%	
Guánica	976	1,652	59.08%	
Añasco	1412	2,402	58.78%	
Arroyo	836	1,425	58.67%	
Luquillo	1098	2,056	53.40%	
Humacao	2264	4,473	50.61%	
Mayagüez	6909	13,795	50.08%	

Municipalities with more than 50% of rental units in Very High to Extreme Landslide Risk Areas				
Municipality	Rental Units in Risk	Total Rental Units	% in Very High to Extreme Risk	
Las Marías	699	699	100.00%	
Maricao	484	485	99.79%	
Comerío	2405	2,411	99.75%	
Orocovis	2157	2,167	99.54%	
Naranjito	2784	2,799	99.46%	
Barranquitas	2921	2,949	99.05%	
Aguas Buenas	3058	3,101	98.61%	
Ciales	1463	1,534	95.37%	
Jayuya	1788	2,011	88.91%	
Adjuntas	1422	1,698	83.75%	
Corozal	2166	2,608	83.05%	
Utuado	3355	4,215	79.60%	
San Lorenzo	2554	3,831	66.67%	
Aibonito	1343	2,026	66.29%	
Rincón	1014	1,607	63.10%	
Patillas	1221	1,953	62.52%	
Lares	2121	3,402	62.35%	
Villalba	1091	1,800	60.61%	
Cidra	2760	4,677	59.01%	
Morovis	1648	2,840	58.03%	

The LIHTC-MIT Program will provide funds to qualifying entities that propose projects which incorporate at least one of the mitigation strategies described above and

prioritize projects in areas with the lowest proportion of rental housing units outside the highest-risk areas.

A significant portion of the renter population needs housing options capable of mitigating the risks that affect Puerto Rico to the greatest extent possible. Based upon the risks identified in the Risk Assessment of the Action Plan, specifically for housing structures, PRDOH has determined that the Leverage for Low-Income Housing Tax Credits - Mitigation (LIHTC-MIT) Program will prioritize mitigating risks presented by flooding and landslides. These risks can both be mitigated through strategic site selection, as the risk severity is based heavily on the geographic characteristics of a given area, unlike other risks which are either associated with exceptional natural events. Any assisted housing development, however, must still incorporate building standards and methods which mitigate other risks that threaten structures in Puerto Rico as identified in this Action Plan.

PROGRAM DESCRIPTION: The LIHTC-MIT Program will address the need for safe, quality, resilient, and affordable rental housing in Puerto Rico. Currently, the Puerto Rico LIHTC Program, administered by the Puerto Rico Housing Finance Authority (**PRHFA**), is the federal government's primary policy tool for encouraging the development and rehabilitation of affordable rental housing. The program awards developers with federal income tax credits to offset construction costs in exchange for agreeing to reserve a certain fraction of units that are rent-restricted for lower-income households. Consequently, LIHTC-MIT Program will help expedite the construction and availability of affordable housing units on the Island.

The CDBG-MIT funds will provide up to eighty percent (80%) of the Developer's funding for the construction of affordable rental housing units. The Developer can secure the remaining funds from a construction and/or permanent loan from a private lender or private source, and equity in exchange for tax credits.

LIHTC offers two forms of tax credits: nine percent (9%) and four percent (4%) for new construction/rehabilitation projects that are partially financed with tax-exempt financing. According to the U.S. Internal Revenue Code (IRC), the respective applicable tax credit percentages are those that will yield amounts of credit, over a ten (10) year period, which have a present value equal to (i) seventy percent (70%) of the qualified basis of a new building which is not federal subsidized for the taxable year; and (ii) thirty percent (30%) of the qualified basis of a project of a building not described in the clause (i) of the 26 U.S.C. § 42.32 The nine percent (9%) credit is generally reserved

³² 26 U.S.C. § 42(b)(1)(B).

for new construction and is intended to deliver up to a seventy percent (70%) subsidy. The four percent (4%) credit covers properties acquired for rehabilitation or for projects funded using tax-exempt bonds and is designed to deliver up to a thirty percent (30%) subsidy.³³ All projects are expected to begin construction within forty-five (45) to sixty (60) days after the CDBG-MIT Agreement is signed and must maintain affordable housing in accordance with the affordability period required by the LIHTC Program.

Projects funded through the LIHTC-MIT Program will mitigate risk for rental housing by one of the following:

- Rehabilitation of existing structures to incorporate modern building codes and methods, such as elevations to make the residential structures more resilient against the impacts of natural disasters. This effort may also entail acquiring properties for rehabilitation purposes; and
- 2. New construction of resilient rental housing options utilizing strategic site selection outside areas where the geography presents localized risks. This initiative may also include the acquisition of properties for new construction.

The LIHTC-MIT Program will additionally incentivize reconverting non-residential (commercial, industrial, etc.), vacant structures located outside of high-risk areas into affordable rental housing.

INTAKE AND PRIORITIZATION: All applications will undergo a preliminary review to determine if they meet the threshold requirements, including the following:

- o Compliance with eligible activities
- Compliance with national objectives
- Duplication of Benefits
- o Authorization to do business in Puerto Rico
- Feasibility analysis
- o Any other requirements established in the Program Guidelines

Projects will be prioritized on the following:

- Shovel-ready projects
- Projects in areas with the lowest proportion of rental housing units outside the highest risk areas.

³³ See, https://sgp.fas.org/crs/misc/RS22389.pdf.

DESIGN CONSIDERATIONS: LIHTC-MIT proposals submitted by eligible entities will be evaluated based on the site-specific risks being addressed and the structural and nonstructural measures taken to mitigate such risks. Additional evaluation criteria concerning compliance, innovation, and eco-conscious measures will encompass, but not be restricted to:

- Whether the natural infrastructure is preserved, or other eco-conscious measures are included in project design to minimize the unintended consequences of grey infrastructure and other development. Applicants are encouraged to incorporate innovative nature-based solutions and natural or green infrastructure solutions during project development that reduce the negative impacts on the surrounding human and natural environment. Natural or green infrastructure is defined at 84 FR 45838, 45848 as the integration of natural processes or systems (such as wetlands or land barriers) or engineered systems that mimic natural systems and processes into investments in resilient infrastructure, including, for example, using permeable pavements and amended soils to improve infiltration and pollutant removal.
- Whether the project is accessible to public transportation, grocery shopping, recreation, socialization, etc.
- Whether the project considered innovative design solutions that:
 - o Improve the quality of life;
 - Stimulate sustainable growth and development;
 - Improve site accessibility and safety;
 - o Preserve historic and cultural resources;
 - Extend the project facility lifespan;
 - Reduce energy consumption;
 - o Make use of recycled materials;
 - Make use of local or regional materials;
 - Divert waste from landfills, and
 - Reduce waste during construction.

ELEVATION: As required in 84 FR 45838, 45864, PRDOH will apply elevation standards for rental housing structures located in the 100-year (or one percent (1%) annual chance) floodplain to require that units elevated, or reconstructed and elevated, raise the lowest floor (including the basement) to at least two (2) feet above the BFE.

Developers requesting elevation of existing structures must be aware that the option for elevation will be contingent upon a feasibility analysis.

QUALITY CONSTRUCTION: PRDOH will require construction methods that emphasize quality, durability, energy efficiency, sustainability, and mold resistance. All rental housing structures must be designed to incorporate principles of sustainability, including water and energy efficiency, resilience, and mitigation against the impact of future shocks and stressors.

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

BROADBAND INFRASTRUCTURE REQUIREMENTS: Under 84 FR 45838, 45864, projects that include any substantial rehabilitation or new construction of a building with more than four (4) rental units must include installation of broadband infrastructure.

PRDOH aims to narrow the digital divide in low-income communities served by HUD. Installing unit-based broadband infrastructure in multi-family housing that is newly constructed or substantially rehabilitated with or supported by HUD funding will provide a platform for individuals and families residing in such housing to participate in the digital economy and increase their access to economic opportunities.

Projects are excluded from this requirement only if one (1) of the below exclusions can be documented and validated by PRDOH:

- The location of the new construction or substantial rehabilitation makes installation of broadband infeasible.
- The cost of installing broadband infrastructure would result in a fundamental alteration in nature of the program, or activity, or in an undue financial burden; or
- The structure of housing, to be substantially rehabilitated, makes installation of broadband infrastructure infeasible.

ELIGIBLE ACTIVITIES:

 Section 105(a)(4) – Clearance, demolition, removal, reconstruction, and rehabilitation (including rehabilitation which promotes energy efficiency) of buildings and improvements, including interim assistance; and financing public or private acquisition for reconstruction or rehabilitation, and reconstruction or rehabilitation, of privately owned properties, and including the renovation of closed school buildings) New housing construction, as allowed in Mitigation Federal Register Notice, 84 FR 45838, at 45863.³⁴

METHOD OF DISTRIBUTION: Subrecipient Distribution Method through the PRHFA. PRHFA will release a new Qualified Allocation Plan (**QAP**) and a subsequent Notice of Funding Opportunity (**NOFO**) that incorporates LIHTC-MIT criteria.

NATIONAL OBJECTIVE: LMI, UNM

ELIGIBLE APPLICANTS:

Eligible projects include rental housing developments that have been awarded or reserved LIHTCs in the applicable QAP. All projects must mitigate a risk-based need identified in the rental housing risk assessment. Therefore, each project must rehabilitate an (1) existing structure into rental housing to mitigate against the impacts of natural disasters, or (2) build new rental housing developments outside areas where the geography presents localized risks.

MAX AWARD: The maximum award amount will depend on the type of project proposed by the applicant. Applicants with projects that will convert abandoned non-residential buildings (commercial, industrial, etc.) into affordable housing can receive up to eighty percent (80%) funding of the cost of the project. Applicants rehabilitating existing residential structures or constructing new residential structures for affordable rental housing can receive up to sixty percent (60%) funding of the cost of the project.

ALIGNMENT WITH CDBG-DR PROGRAMS: The LIHTC-MIT Program will continue the work of CDBG-DR's LIHTC Program to spur the development of safe, resilient, and affordable rental housing for the most vulnerable populations across Puerto Rico.

ALIGNMENT WITH ECONOMIC RECOVERY PLAN:

HOU 2 Assess, Repair, and Mitigate Damaged Subsidized Rental Housing

³⁴ "In addition, 42 U.S.C. 5305(a) and 24 CFR 570.207(b)(3) is waived and alternative requirements adopted to the extent necessary to permit new housing construction that addresses disaster risks identified in the grantee's Mitigation Needs Assessment and to require the following construction standards on structures constructed, reconstructed, or rehabilitated with CDBG-MIT funds as part of activities eligible under 42 U.S.C. 5305(a)", 84 FR 45838, 45863.

HOMEBUYER ASSISTANCE MITIGATION PROGRAM

RISK-BASED NEED: The Risk-Based Needs Assessment identifies the top threatening hazards for Puerto Rico at the Island-wide level to be: hurricane-force winds, flooding, earthquakes, landslides, and liquefaction. Each year, families are exposed to hazards that threaten their livelihoods, including significant damage caused by tropical storms and hurricanes. Powerful hurricane-force winds can tear off roofs, shatter windows, uproot trees, and weaken structural foundations, whereas heavy rainfall can also lead to widespread flooding and flood-triggered landslides that cause even greater devastation to household structures and pose a serious risk to human life. These risks further increase the challenges for individuals seeking to acquire their first home located outside of high-risk areas. Combined with rising property costs, mortgage payments, and a shortage of affordable housing, securing a stable and safe home has become extremely difficult for families looking for long-term security.

As mentioned in the Risk-Based Needs Assessment, flooding is a widespread hazard that affects all municipalities across the Island. Flooding events can occur in different forms, including coastal floods produced by storm surges, hurricanes, and tropical storms. Heavy rainfall can also create flash floods, generating massive destruction to communities located in high-risk areas. Other flooding risks include urban water accumulation, which can develop when excessive rainwater or runoff collects in cities due to deficient and/or limited drainage systems and impervious surfaces such as roads and buildings.

In addition, hurricane wind-force hazards can have a significant impact on communities, especially in the eastern region of the Island. Other regions that face storm frequencies include the central and northwestern regions, whereas southeastern areas experience fewer events. However, it is essential to acknowledge that the whole Island is exposed to hurricanes and tropical storms disaster events, which can also cause additional hazards such as high tides, storm surges, heavy rains, flooding, and tornadoes. These threats cause significant damage to properties, leading to their deterioration or complete loss.

Additionally, it is important to note that the Risk-Based Needs Assessment recognizes the importance of strengthening the Food, Water and Sheltering lifeline, as it is one of the most critical, transformative, and essential lifelines that supports multi-risk mitigation within the priority lifelines. The Safety and Security secondary lifeline also

plays a vital role in ensuring the protection of resources and personnel during emergencies by addressing vulnerabilities in infrastructure, equipment, and workforce readiness to maintain effective disaster response and recovery efforts.

The Homebuyer Assistance Mitigation (**HBA-MIT**) Program is designed to strengthen the Food, Water and Sheltering lifeline and the Safety and Security secondary lifeline by providing housing assistance to address the unmet mitigation needs of LMI households, as well as Critical Recovery Workforce (**CRW**) individuals, seeking to acquire a home outside of high-risk areas. Based upon the risks identified in the Risk Assessment of the Action Plan, PRDOH has determined to provide homeownership assistance to LMI and, in addition, to incentivize CRW individuals. The program also recognizes the significant damage caused by hurricane-force winds, focusing on further reducing risk by supporting homeownership in concrete-built structures that are less vulnerable to extreme weather events.

A significant portion of the LMI population needs affordable housing alternatives to mitigate the risk of loss of life and property for those extremely vulnerable populations. For example, a socioeconomic study published on June 28, 2022, regarding housing needs in Puerto Rico established that factors such as Hurricanes Irma and Maria, earthquakes, and the rising cost of materials and construction have created a net reduction in the amount of affordable housing available to low-income Puerto Rican families. Thus, the study estimates that, in 2022, the need for affordable housing exceeded 60,000 units, which could increase to 90,000 units by 2027.³⁵

The Homebuyer Assistance (**HBA**) Program, under the PRDOH CDBG-DR grant, is focused on increasing the number of families that purchase safe and affordable housing by assisting applicants seeking mortgage loans. The HBA-MIT Program, as a lifeline strengthening project coupled with long-term mitigation strategies, offers additional and increased resilience benefits for Puerto Rico's LMI and CRW populations.

This program directly aligns with the CDBG-DR HBA Program, which offers financial assistance to eligible families to purchase a home that provides a stable place of residence, thus strengthening the unity of the family, neighborhood, and community. In contrast, the HBA-MIT Program will focus eligibility to mitigate against flooding events and hurricane wind-forces in order to provide the LMI and CRW populations with access to safe and resilient housing options outside these highest-risk areas. As

³⁵ Análisis de la Necesidad de Vivienda en Puerto Rico, Estudios Técnicos, June 28, 2022.

such, PRDOH is focusing on critical mitigation funds toward the resilience of the sectors that need it most through this Program.³⁶

PROGRAM DESCRIPTION: The HBA-MIT Program is a mitigation-focused program targeting the Food, Water and Sheltering lifeline and the Safety and Security secondary lifeline, including the Housing, First Responders, and Emergency Services sectors, by providing homeownership assistance as a mitigation solution against floods and hurricane wind-forces for eligible homebuyers. The program aims to provide direct assistance to homebuyers by increasing the opportunity of LMI families and individuals who do not currently own a primary residence to acquire a property outside of high-risks areas, while addressing the need for permanent, safe, quality, resilient, and affordable housing.

Furthermore, HBA-MIT will contribute to the long-term sustainability and viability of the communities impacted by previous disasters across the Island by incentivizing CRW members to reside in local communities. This program recognizes the essential role of employed and documented workforce members authorized to, and currently exercising their profession in Puerto Rico including, but not limited to, atmospheric monitoring specialists, educators, emergency response personnel, firefighters, healthcare providers, infrastructure workers, law enforcement officers, and supply chain professionals. These individuals must qualify as either LMI (up to 80% Area Median Family Income (AMFI)) or Urgent Need (up to 120% AMFI)³⁷ to participate in the program. The program will provide assistance to eligible LMI individuals, including those who are members of the CRW. Documented CRW members include, but are not limited to:

- Atmospheric Surveillance: Staff employed by a federal, state, or local entity to monitor atmospheric conditions.
- Infrastructure: Workers responsible for addressing the needs of Puerto Rico's critical infrastructure, such as maritime ports, airports, aqueducts and sewers, electricity, gas, telecommunications, roads, highways, and transportation.

³⁶ For purposes of this Program, CRW refers to employed and documented recovery workforce members authorized and currently exercising their profession in Puerto Rico.

³⁷ Assistance to individuals with incomes between 116% and 120% AMFI is subject to the granting of a waiver by the Atlanta Homeownership Center to increase the standard 115% income limit established in the Code of Federal Regulations (C.F.R.) and the Handbook. This waiver would allow the Housing Finance Authority to provide assistance to homebuyers using FHA-insured mortgages whose incomes do not exceed 120% of the area median income when purchasing eligible properties in Puerto Rico.

- Supply Chain: Employees engaged in the transportation and delivery of food, health equipment, products, and basic necessities.
- Law Enforcement Officers: Employed by a law enforcement agency of Puerto Rico or a unit of general local government, who, in the performance of their duties, are sworn to uphold and enforce federal, state, or municipal laws and to arrest those who violate them.
- Teachers: Employed by a Puerto Rico-accredited public school or private school that provides direct services to students in grades pre-kindergarten through 12.
- Firefighters/Emergency Medical Technicians/Medical Personnel: Employed by a
 fire department or emergency medical services responder unit of Puerto Rico
 or a unit of general local government, or as a medical professional under the
 Puerto Rico Department of Health definition.
- Other professionals in similar recovery-related fields.

It is important to note that CRW membership is not a requirement for participation in the program but a criterion to determine the award.

Moreover, this program will also play a critical role in retaining professional recovery workers. The retention of CRW and other essential workers was already a challenging factor for the stability and sustainability of Puerto Rico's communities before the hurricanes; following these catastrophes, the problem has only intensified. Risk assessment results show decreasing levels of homeownership and an increasing number of vacant homes throughout the Island. This trend adversely affects communities as well as educational institutions and the Island's broader economy, contributing to business closures, workforce reductions, and decreased revenues. These impacts, in turn, reduce public financial capacity, delay post-disaster recovery, and exacerbate the Island's vulnerability to future hazards. By providing critical recovery workers with the opportunity to acquire a safe home, communities in Puerto Rico will be able to have long-term resilience against disaster events.

In response, the HBA-MIT Program aims to mitigate against flood and wind-force risks through an investment of CDBG-MIT funds to assist as many eligible families as possible with the purchase of safe, secure, and sanitary housing outside of high-risk areas.

INTAKE: Intake will begin with a publicly announced application process. Eligible applicants may apply through a participating Lending Institution.

The application will remain open until program funds are depleted. Once sufficient award notifications are issued to exhaust the program budget, the remaining applications still under evaluation will receive a notification that funds have been depleted.

LENDING INSTITUONS: Puerto Rico Housing Finance Administration (PRHFA) will execute Memorandums of Understanding (MOU) with Lending Institutions to assist with Program intake and related procedures, as applicable.

ELIGIBLE ACTIVITIES:

Pursuant to the Housing and Community Development Act (HCDA), the following are eligible activities:

Section 105(a)(24) (24 C.F.R. 570.201 (n))- Homeownership Assistance

METHOD OF DISTRIBUTION: Subrecipient Distribution Model; PRHFA, also known as AFV for its Spanish acronym, is designated as the Subrecipient tasked with administering this Program and providing direct assistance to individuals.

NATIONAL OBJECTIVE: LMI;³⁸ UNM. Pursuant to the waiver at 84 FR 45838, 45857 (Section V.A.13.C.), the criteria for the urgent need national objective at 24 C.F.R. § 570.483(d) and § 570.208(c) are replaced with the alternative criteria whereby assisted activities (i) address the current and future risks as identified in the CDBG-MIT Action Plan Mitigation Needs Assessment of most impacted and distressed (MID) areas; and (ii) result in a measurable and verifiable reduction in the risk of loss of life and property.³⁹

³⁸ Low-to moderate-income people are those having incomes not more than the "moderate-income" level (80% Area Median Family Income, adjusted for family size) set by the federal government for the HUD-assisted Housing Programs. Federal Register Vol. 86, No. 3 (January 6, 2021), 86 FR 569, Section V.B states, "In order to ensure consistency with the use of CDBG-DR funds that are governed by alternative income limits authorized by the Department, the Department is extending the income limit adjustments of the August 14, 2018 notice to all CDBG-DR funds allocated under Public Laws 115–56, 115–123, and 116–20 and to CDBG-MIT funds allocated to Puerto Rico for mitigation activities under Public Law 115–123. Under this extension, Puerto Rico may use these alternative income limits when determining those activities undertaken with CDBG-DR or CDBG- MIT funds meet the low- and moderate-income benefit CDBG national objective criteria." The applicable income tables change annually and are posted on the U.S. Department of Housing and Urban Development webpage at https://www.hudexchange.info/resource/5334/cdbg-income-limits/

³⁹ 84 FR 45838, 45863 PRDOH sought and was approved by HUD a waiver to expand homeownership opportunities utilizing FHA insurance to borrowers whose incomes are at or below 120% AMI, and down payment assistance for up to 100% of the down payment. While homeownership assistance may be provided to households earning up to 120% AMI, only those funds used for households with up to 80% AMI may qualify as meeting the LMI person benefit national objective.

ELIGIBLE APPLICANTS:

- LMI individuals or households (below 80% AMFI) or Urgent Need individuals or households (below 120% AMFI), who do not own a home;
- Applicants must be able to secure a mortgage loan from a Lending Institution;
- PRDOH will define the term "homebuyer" in the HBA-MIT Program Guidelines to include certain exceptions, such as individuals or single parents who have been displaced from their homes, and married couples where one of the spouses does not own a residential property.
- Eligible applicants must commit to occupy the home as their primary residence for a minimum period of five (5) years.

PROPERTY REQUIREMENTS:

- The property must be acquired through a valid deed, free and clear of any lien and encumbrance that may affect PRDOH's rights over the property under the Deed of Mortgage and Restrictive Covenants.
- The property must be classified as vacant or ready to be sold by the owner at the time of contract signing.
- The property must not be tenant-occupied at the time of executing the Deed of Sale and the Second Direct Mortgage with Imposition of Restrictive Conditions, unless the tenant is in the process of acquiring the property they currently reside in.
- The property must meet the minimum property standards required by the Applicant's primary loan issuer (e.g., U.S. Department of Agriculture, Rural Development (USDA-RD), Fannie Mae), as well as all applicable local codes.
- Properties located within new construction developments must have a valid Occupancy Certification ("Permiso de Uso").
- The property must be free from substantial adverse environmental factors, as determined through an environmental review.

- The property must not be located in a designated Coastal Barrier Resource Area, a Coastal High Hazard Area (FEMA V zones)⁴⁰, and the Regulatory Floodway⁴¹.
- Properties located in a runway clear zone or clear zone, as defined in 24 C.F.R. §
 51.303(a), will require a signed acknowledgment receipt from the buyer.
- Properties with wood, acrylic, or metal structures within the living area of the structure will not be eligible for the Program.
- Properties intended for use as second homes are not eligible under the Program.

Further information regarding property requirements will be detailed in the Program Guidelines to be published on PRDOH's website.

MAX AWARD:

- The program will provide up to \$45,000 per household in assistance to eligible applicants; or
- Up to \$55,000 per household that includes a documented resident who is a member of the CRW.
- Program participants may receive an additional \$5,000 in assistance if they
 purchase a home located within a designated urban and/or redevelopment
 zone, as defined in the Program Guidelines.

ALIGNMENT WITH CDBG-DR PROGRAMS:

The HBA-MIT Program is aligned with the objectives of the CDBG-DR Homebuyer
 Assistance Program by supporting eligible families in achieving
 homeownership while fostering stability and strengthening connections within
 households, neighborhoods, and the community.

⁴⁰ Coastal High Hazard Areas (or V Zones) are areas along the coasts subject to inundation by the 1% annual chance flood event with additional hazards associated with storm or tidal induced waves. Because of the increased risks associated with V Zones, 22 C.F.R. Part 55 prohibits federal assistance to be used at this location if the project is a new construction or critical action unless an exception in section 55.12(c) applies or if project is a functionally dependent use and otherwise requires the action to be designed for location in a Coastal High Hazard Area. See https://www.hudexchange.info/programs/environmental-review/floodplain-management/

⁴¹ A Regulatory Floodway comprises the channel of a river or other watercourse and the adjacent land areas that must be reserved to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. This is the segment of the floodplain that will generally carry flow of flood waters during a flood and is typically the area of greatest risk to structures in the floodplain. HUD financial assistance is prohibited in floodways unless an exception in section 55.12(c) applies or the project is a functionally dependent use (e.g. dams, marinas, and port facilities) or a floodplain function restoration activity. *Id.*

ALIGNMENT WITH HUD POLICY OBJECTIVES:

- Support data-informed investments in high-impact projects that will reduce risks attributable to natural disasters, with particular focus on repetitive loss of property and critical infrastructure.
- **Maximize the impact of available funds** by encouraging leverage, public-private partnerships, and coordination with other Federal programs.

ALIGNMENT WITH ECONOMIC RECOVERY PLAN:

- HOU 8 Increase Adoption of Adequate Wind and Flood Insurance for Homeowners and Renters
- HOU 12 Register Properties and Resolve Titling Issues

COMMUNITY ENERGY AND WATER RESILIENCE INSTALLATIONS PROGRAM

RISK-BASED NEED: Historically, it's been proven that the legacy energy infrastructure in Puerto Rico is unreliable and does not meet the needs of citizens. This reality is made clear when a disaster event occurs and prolonged power outages pose health and safety threats that increase every day as the power and the services it fuels, remain unavailable to households, hospitals, and critical services facilities. Citizens must have additional options to meet this critical need.

The fragile and aging Energy⁴² and Water and Wastewater, sector infrastructure, and lack of access to quality utilities for remote communities, each pose a threat to basic service utilities that generate, store, and distribute essential products to the people of Puerto Rico. Restoring power to every customer impacted by power disruptions due to disasters or infrastructure damages is one of the most significant challenges Puerto Rico continues to face. Despite the increasing disruptions, Puerto Rican energy customers pay approximately 27 to 29 cents per kilowatt hour, double the U.S. average of cents per kWh.⁴³

The population is increasingly relying on power generators during long power outages. Power generators, though intended to be a short-term solution, have become a more permanent substitute. The incremental use of generators is an expensive, unhealthy, and perilous alternative for citizens to mitigate the lack of power. The amount of power generators is increasing and posing higher security threats among residents and neighbors.

As established in the Risk Assessment, Energy and Water and Wastewater lifeline sectors are central to the stability of Puerto Rican communities. The Energy sector and the Water and Wastewater Systems sector have significant interdependencies: water is used in all phases of energy production and electricity generation, while electricity and other fuels are used to extract, convey, and deliver water, and to treat wastewater, prior to its return to the environment. Fragility within these lifeline sectors makes them extremely vulnerable to naturally occurring and human-caused hazards in that localized events can cause a systemic and cascading failure. Both the electric grid and water infrastructure are aged and costly to redevelop.

⁴² The power grid is a main sector within the Energy lifeline.

⁴³ U.S. Energy Information Administration. Puerto Rico Profile. Accessed at: https://www.eia.gov/state/print.php?sid=RQ (August 2022).

Remote rural communities across Puerto Rico are either served by the Water Utility or decentralized with independent community water supply systems. In both cases, communities struggle to receive uninterrupted, health-compliant potable water supply. After Hurricane María, these challenges have grown exponentially. Rural Communities under the service of the Water Utility in Puerto Rico often deal with interruptions. They also face the challenges of deteriorated infrastructure, sedimentation of water bodies and artificial lakes, increased water demand, and damages caused by disasters. Swift repairs in last-mile, remote communities are a challenge due to complexities including accessibility, but also due to the prioritizing prioritization of repairs in densely populated areas.

For this reason, we recognize that these communities face more delays in recovery thus having an increased need to mitigate their water and energy vulnerabilities.

Need for Energy Resilience. Energy is the one lifeline upon which all others depend; yet it is primarily dependent on imported fossil fuel sources. Ninety-eight percent (98%) of the power grid functions on gasoline, coal, and natural gas, while only two percent (2%) functions on renewable sources. A continuation of this dependence, coupled with a centralized system of fragile infrastructure, could likely be the single most significant obstacle to resilience for Puerto Rico. Furthermore, emergency generators are a prevalent solution for backup energy in the event the power grid becomes unstable, but they also depend on imported fuels and a functioning complex supply chain. This fragility in the Energy lifeline and backup energy sources leaves households vulnerable to health and safety risks. This is especially true for those residents, such as the elderly or infirm, whose life expectancy is directly affected by the loss of power required to refrigerate medications such as insulin and run medical equipment such as oxygen machines and nebulizers.

At this pivotal point in time when Puerto Rico is expecting billions of dollars⁴⁴ for energy grid repair and improvements, PRDOH is focusing critical mitigation funds on the resilience of communities and individual households by furthering the goals set by the Puerto Rico Energy Public Policy Act, Law 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. Projects should focus on clean energy technology and can employ

⁴⁴ As a result of Hurricanes Irma and María, HUD has acknowledged an almost \$2 billion unmet need to the energy grid, while the Government of Puerto Rico in consultation with PREPA originally estimated \$17 billion need to overhaul its outdated power plants and reduce its reliance on imported oil. Billions in federal funding have been expended on repairs yet Island-wide power outages continue to contribute to an unmet need for reliable power.

wind, solar, storage hybrids, or other technology appropriate to the environmental attributes of the project location and cost and/or performance advantages.

Transportation Natural Gas Petroleum **Systems** Power for Fuel for generators Power for Power for pumping stations, Fuel transport. Fuel for and maintenance, signaling, compressor, storage, storage. shipping generators **lubricants** switches control systems control systems ELECTRICITY Power for pumps, SCADA. Power for Cooling, lift stations Communications switches emissions reduction control system Water & Communications & Wastewater System Information Technology

ELECTRIC POWER INTERDEPENDECY EXAMPLES

Figure 9: Illustration of how the power grid dependence on fossil fuel creates an interwoven vulnerability for other lifelines that depend on the power grid to function. Source: U.S. Department of Energy, "Energy Resilience Solutions for the Puerto Rico Grid".

The necessity for redundant, alternative, and independent power systems; remains an unmet need today; and may even continue to represent an unmet need after Puerto Rico can implement the forthcoming \$2 billion energy system allocation from HUD.

Need for resilience and increased access to Water & Wastewater services.

There is a direct correlation between energy and water vulnerability in remote rural communities across Puerto Rico, therefore, the need to store water during service disruptions plays a significant role in helping many homes in far-to-reach communities.

PROGRAM DESCRIPTION: There are three (3) subprograms within the Community Energy and Water Resilience Installations Program; Home Energy Resilience Improvements, Incentive Program, and Community Installations. Household assistance through the Home Energy Resilience Improvements Program and the Incentive Program will be administered under one (1) unified structure referred to in

the Program Guidelines as the Community Energy and Water Resilience Installations – Household (**CEWRI – HH**) Program:

I. HOME ENERGY RESILIENCE IMPROVEMENTS. Max Award: \$30,000. The maximum award can be raised for households in Vieques and Culebra in tandem with the islands' market conditions. Homes unprepared for the natural threats on the power grid were left vulnerable in the aftermath of Hurricanes Irma and María. Rebuilding to protect federal investment and to sustain recovery efforts requires resilient design and improvements that incorporate modern technology for life-sustaining purposes during off-grid events. Energy resilience efforts may include conducting a home energy evaluation and the promotion of energy efficiency and stability. Resilient design and improvements include things measures such as the installation of photovoltaic systems; and battery storage at capacities aligned with household needs, including the consideration of critical medical needs.

Eligible applicants to this Program must own or have a proprietary interest in the single-family home structure and it must be their primary residence. Assistance will be provided directly to property owners as the eligible applicant. Households' income must also be below eighty percent (80%) AMFI.

PRDOH will further target the most vulnerable within the LMI population, starting with very low-income households. As "HUD regulations and guidance for CDBG generally do not define vulnerable populations, and definitions may vary", ⁴⁵ PRDOH has identified income as a key vulnerability indicator based on historical data from CDBG-DR R3 Program applicants. Very low-income applicants made up 86% of total applications and within that group, 56% were elderly residents. Furthermore, income is directly related to a household's ability to address high-risk energy security due to the high cost of systems. ⁴⁶

Applicants will be evaluated on a rolling basis to facilitate steady flow of assistance to eligible households. Within each round of applicant evaluations, priority will be given to households with high-risk energy security need.⁴⁷ The Program will provide make assistance available through rounds. Each round will have a maximum eligible AMFI category.

⁴⁵ U.S Government Accountability Office (2021). *Better Data Are Needed to Ensure HUD Block Grant Funds Reach Vulnerable Populations*. Accessed at: https://www.gao.gov/assets/720/717468.pdf.

⁴⁶ National Renewable Energy Laboratory (NREL). *Puerto Rico Low-to-Moderate Income Rooftop PV and Solar Savings Potential* (2020). Accessed at: https://www.nrel.gov/docs/fy21osti/78756.pdf.

⁴⁷ High risk considers residents whose life expectancy is directly affected by the loss of power. (i.e., Residents with a need to refrigerate medications such as insulin and run medical equipment such as oxygen machine and nebulizers, would be considered high-risk energy security). This will be further defined in the Program Guidelines.

II. INCENTIVE PROGRAM. Max Award: \$15,000 per household. An incentive program covering up to \$15,000, or up to thirty percent (30%) of household project costs, whichever is less, will be offered to enable the installation of renewable energy systems, including storage, which provide electricity to the property during times of electric grid failure. The maximum award can be raised for households in Vieques and Culebra in tandem with the islands' market conditions.

Eligible applicants must own or have a proprietary interest in the single-family residential structure, and it must be their primary residence. Eligible households are those with a household income of up to 200% AMFI.

Applicants will be evaluated on a rolling basis to facilitate steady flow of assistance to eligible households under the urgent need mitigation national objective. Within each round of applicant evaluations, priority will be given to households with high-risk energy security need. The Program will make assistance available through rounds.

III. COMMUNITY INSTALLATIONS. Max Award: \$40,000 per household. Exceptions to the maximum award will be evaluated on a case-by-case basis taking into consideration unforeseen site conditions or incidental improvements required to meet the program's intent of community resilience. Community installations of energy production and storage systems solutions may be offered alongside home-based improvements or to reduce household barriers to mitigation. Community scale projects may include individual household renewable energy and water storage systems in targeted communities as part of a collective.

Energy-related institutions, agencies, and utility providers developed relevant data on the communities that long suffered power outages after recent disasters. For example, on August 14th, 2018, Bo. Real Anón, Raíces sector, a rural community in Ponce, was declared the last community to have power restored by PREPA, after 328 days after Hurricane María hit Puerto Rico. Communities that suffered a prolonged period of power outages dealt with catastrophic outcomes, including death, emigration, health distress, and economic instability, among other issues.

Data collected from PREPA, LUMA, as the Transmission and Distribution Operator for the Grid, the University of Puerto Rico and the Department of Energy and its Labs, among others, will be used to identify the most vulnerable communities due to the lack of

⁴⁸ Sullivan, E. (2018, August 15). *Nearly A Year After Maria, Puerto Rico Officials Claim Power Is Totally Restored*. Npr.org. Retrieved January 24, 2023, from https://www.npr.org/2018/08/15/638739819/nearly-a-year-after-maria-puerto-rico-officials-claim-power-totally-restored.

energy during extended periods of time. Through this data, the Subprogram shall directly select these vulnerable communities through a targeted outreach strategy to offer the opportunity to collectively secure their well-being through resiliency improvements that may include installing water storage and photovoltaic systems with battery storage, at capacities aligned with household needs.

Eligible applicants to this Program must occupy a single-family home structure serving as their primary residence. Assistance will be provided directly to eligible occupants within targeted communities.

ELIGIBLE ACTIVITIES:

Pursuant to the HCDA, the following are eligible activities:

- Section 105(a)(2) Public Works facilities and Improvements
- Section 105(a)(4) Clearance, demolition, removal, reconstruction, and rehabilitation (including rehabilitation which promotes energy efficiency) of buildings and improvements,
- Section 105 (a) (26) Lead-based paint hazard evaluation and reduction

INELIGIBLE ACTIVITIES:

- Activities that directly improve the power grid infrastructure not to be confused with local renewable system tie-ins.
- Installation of equipment that is not permanent and integral to the structure as defined by the Puerto Rico Civil Code in Article 250 and Article 252.
- Communal energy or water systems that include shared ownership of assets.
- Activities in the floodway.

METHOD OF DISTRIBUTION: Direct Distribution Model

NATIONAL OBJECTIVE: UNM; LMI

MIN AWARD: Based on cost reasonableness analysis.

MAX AWARD: Variable (see above). Policy exceptions for a max award will be considered by PRDOH and shall not exceed ten percent (10%) of the project value. Exceptions will be evaluated based on need which may include the number of beneficiaries, the profile of historical losses from past disaster events, operations and maintenance plan, and long-term mitigation potential. Policies and procedures governing maximum award amounts shall be communicated through Program Guidelines.

For properties located in a Special Flood Hazard Area, homeowners must obtain and maintain flood insurance in the amount and duration prescribed by FEMA's National Flood Insurance Program, as required in 84 FR 45838, 45867. The purchase of flood insurance for beneficiaries will be determined by the Program on a case-by-case basis and shall be considered as an exception to the max award amount. PRDOH will cover the cost of flood insurance for the first year.

ALIGNMENT WITH CDBG-DR FUNDS FOR ELECTRICAL SYSTEM ENHANCEMENTS:

- Projects that directly improve the electrical power grid should be funded through PRDOH Energy programs described in the CDBG-DR Action Plan for the Electrical Systems Enhancements and Improvements⁴⁹, prior to being considered for CDBG-MIT.
- The Electrical Systems Enhancements and Improvements Programs consist of two (2) lines of effort as follows:
 - The Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program is designed to meet the non-federal cost-share need of FEMA's unprecedented PA allocation for PREPA's Island-wide FEMA Accelerated Award Strategy (FAASt) Project.⁵⁰
 - o The **Electrical Power Reliability and Resilience Program (ER2)** will serve the needs of communities by funding projects that are not currently anticipated to be funded from other federal or local sources.
- Any projects funded under the CDBG-MIT allocation shall be limited to activities
 that meet the requirements for CDBG-MIT funds and that are not inconsistent
 with the requirements of HUD's electrical power systems notice and any
 additional requirements on the use of CDBG-MIT funds published in that notice.

ALIGNMENT WITH CDBG-DR PROGRAMS:

- Increases the reach of resilience improvements initiated under the CEWRI Program.
- Provides community-based solutions for needs identified through the MRP Program.

ALIGNMENT WITH HUD POLICY OBJECTIVES:

⁴⁹ The Action Plan for Electrical Power System Enhancements and Improvements is available in English and Spanish on the PRDOH website at https://recuperacion.pr.gov/en/action-plans/action-plan-electrical-system-enhancements/ and https://recuperacion.pr.gov/planes-de-accion/plan-de-accion-optimizacion-del-sistema-electrico/.

⁵⁰ ERI pending approval of HUD.

- Support data-informed investments in high-impact projects that will reduce risks attributable to natural disasters, with particular focus on repetitive loss of property and critical infrastructure.
- **Support the adoption of policies** that reflect local_51 and regional priorities that will have long-lasting effects on community risk reduction, to include the risk reduction to community lifelines such as Safety and Security, Communications, Food, Water, Sheltering, Transportation, Health and Medical, Hazardous Material (management) and Energy (Power & Fuel).
- Maximize the impact of available funds by encouraging leverage, publicprivate partnerships, and coordination with other Federal programs.

ALIGNMENT WITH ECONOMIC RECOVERY PLAN:

- **CPCB 4** Resilience Building in Collaboration with High-Risk Communities
- WTR 3 Enhance the Efficiency and Resilience of PRASA Electricity Services
- WTR 12 Enhance Electricity Reliability and Redundancy for Non-PRASA and Nonregulated Systems
- WTR 14 Improve Equity in Drinking Water Provision for Nonregulated Systems
- WTR 15 Improve Reliability and Safety of Non-PRASA Systems
- WTR 16 Build Capacity of Non-PRASA Systems
- **HSS 1** Increased Use of Solar Backup Power Sources

⁵¹ PRDOH interprets the word local to mean municipal in this context.

APPENDICES

Appendices to the Action Plan can be found on the PRDOH website at: https://recuperacion.pr.gov/en/action-plans/action-plan-cdbg-mit/ in English; and at https://recuperacion.pr.gov/planes-de-accion/plan-de-accion-cdbg-mit/ in Spanish. Appendices include:

- Appendix A Puerto Rico's Hazard Risk Assessment Report
- Appendix B Research and Reports Bibliography
- Appendix C GIS Bibliography
- Appendix D Proposed Mitigation Project Log (Proyectos Propuestos de Mitigación)
- Appendix E Stakeholder Engagement Report
- Appendix F Financial and Outcome Projections HUD Template
- Appendix G Public comments and PRDOH responses
- Appendix G.1 Consolidated Public Comments
- Appendix H Projects from the Governor's Office
- Appendix I Table of Beneficiaries from the PR-10 Covered Project
- Appendix J PR-10 Segments II, III, IV & V. Benefit/Cost Analysis (BCA)
- Appendix K Covered Projects Narrative
- Appendix L PR-10 Benefit-Cost Analysis (Cal-B/C Corridor)
- Appendix M South Region Water Supply System Improvements (Bauta)
- Appendix N Patillas Dam Seismic Retrofit
- Appendix O New Trauma Center Hospital of Puerto Rico at Centro Médico
- Appendix P San Juan Bay Pier 1 & Walkway Project
- Appendix Q Improvements and Rehabilitation of the Rafael Hernandez Airport in Aguadilla