



BIBLIOGRAPHY OF REPORTS AND RESOURCES FOR CDBG-MIT ACTION PLAN (as of 9/17/2020)

Advisory Committee for Energy Transformation. *Development of the Regulatory Framework and Public Policy for the Puerto Rico Energy Transformation, Report for the Senate of Puerto Rico*. Senate Advisory Committee, October 2018.

The report provides a summary of discussions of the Senate Advisory Committee for Energy Transformation as a conceptual framework for the recommendations made. The discussion is reinforced with technical information gathered from various sources, including the Department of Energy, and initiatives from many stakeholder groups participating in public and private forums to provide ideas and vision for the transformation goals. The report also incorporates comments and concerns presented by participants of Senate public hearings in advance of the legislation bill (PS 860).

Alcorn, Ted. *Puerto Rico's Health System after Hurricane María*. www.thelancet.com, Vol 390, October 7, 2017.

An article describing the pressures on Puerto Rico's health system caused by the Hurricane María, its aftermath, and decreasing federal funding.

Amador, Mara; Baker, Paige; Barrett, Greg; Fericelli, Paul. *Watershed Solutions Strategy Meeting: Rio Grande de Arecibo and Rio Vivi Case Study*. July 31, 2019.

The presentation provides a case study for Integrated Flood Risk Management.

Bestgen, Laurie. *Mitigation Overview*. 2019 CDBG-DR Problem Solving Clinic. FEMA, July 2019.

The presentation provides an overview of mitigation planning, risk assessment methodologies, mitigation solutions, and mitigation cost-effectiveness.

Borrero, Ernesto E. "Big Data Analytic, Big Step for Patient Management and Care in Puerto Rico." *PRHSJ* Vol. 37 No. 1 3(2018): 62-63.

The author discusses how health-care systems have the potential to improve quality of care and patient outcomes through the use of big data analytics and how this approach might be implemented in Puerto Rico.

Bras, R.L.; Lepore, Chiara; Shanahan, Peter. *Rainfall-induced Landslide Susceptibility Zonation of Puerto Rico. Environmental Earth Sciences*, July 2012.

The authors utilize the bivariate frequency ratio (FR) method and the logistic regression (LR) method to determine landslide susceptibility zones (LSZ) for the island of Puerto Rico.

Cabrera, Jose. Status of Solid Waste Management in Puerto Rico after Hurricanes Irma and Maria. EPA, draft.

The presentation provides a summary of the results of a survey of the seventy-eight municipios regarding issues of solid waste.

California Department of Housing and Community Development. *Community Development Block Grant – Mitigation Action Plan (Public Comment DRAFT)*, California Department of Housing and Community Development. February 2020.

The Action Plan covers the \$88 million in Community Development Block Grant Mitigation (CDBG-MIT) funds appropriated in Public Law 115-123, and the document follows requirements outlined in the Federal Register Notice published on August 23, 2019 for CDBG-MIT funding. Included are the methodologies and the results of the mitigation needs assessment, as well as proposed programs based on the needs assessment.

Center for Emergency Management and Homeland Security at ASU, IIHR—Hydroscience & Engineering University of Iowa, Louisiana State University, RAND Corporation, University of Central Florida. *Awarded Proposal, HUD Resilience Grant*. IIHR—Hydroscience & Engineering University of Iowa, May 2019.

The HUD Resilience grant, for which this proposal was created, examines cost effectiveness of CDBG-DR projects implemented in Louisiana since 2005 along with two NDRC projects, the Iowa Watershed Approach and LA SAFE.

Centers for Medicare & Medicaid Services, Office of Minority Health. *Data Highlight No. 13, Comparing Puerto Rican's Health Status, Access to Care, and Satisfaction with Care to Their Mainland Counterparts Prior to Hurricane María*. CMS Office of Minority Health, October 2018.

In an effort to understand the Medicare beneficiaries' health prior to Hurricane María, the Centers for Medicare & Medicaid Services' Office of Minority Health utilized survey data collected prior to the hurricane to analyze how health status, access to care, and satisfaction with care differed between Medicare beneficiaries residing in Puerto Rico and the U.S. mainland.

Corporación del Proyecto ENLACE Caño Martín Peña. *Fact Sheet: Maximizing CDBG-DR and CDBG-MIT Funds* and *Fact Sheet: Proposed Amendments to the Action Plan*. Corporación del Proyecto ENLACE Caño Martín Peña, March 2020.

These documents provide a summary and specifics regarding the ENLACE project, recommendations for implementation of CDBG-DR and other recovery funds, and proposed amendments to the action plan.

COR3/Government of Puerto Rico. *Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico*. Office of the Governor of Puerto Rico, August 2018.

This economic and disaster recovery plan lays out the Government of Puerto Rico's strategic vision and goals and provides a detailed framework for achieving them.

Department of the Interior, United States Geological Survey. *Landslides in Puerto Rico and Map Showing Landslides and Areas of Susceptibility to Landsliding in Puerto Rico* (Watson H. Monroe, 1979). Department of the Interior, United States Geological Survey, Date unavailable.

The document provides a description and map of incidence of landslides in Puerto Rico and areas susceptible to landslides. It also includes additional maps and references.

DHS 2017 Hurricane Season FEMA After-Action Report. FEMA. Jul 2018.

The report focuses on the tested the capabilities FEMA and the federal response and initial recovery efforts from August 25 to November 30, 2017 for 2017 disasters and the unprecedented scale, scope, and impacts of the complex combination of hurricanes Harvey, Irma, and Maria and the California Wildfires. The report analyzed FEMA's response, identifies key areas needing improvement, and provides recommendations for scaling response for concurrent, complex disaster incidents.

DHS 2019 National Mitigation Investment Strategy. DHS. Aug 2019.

The report summarizes the most recent findings of the Mitigation Framework Leadership Group (MitFLG) regarding the National Mitigation Investment Strategy ("NMIS" or Investment Strategy, a single national strategy for advancing mitigation investment to reduce risks posed by natural hazards and increasing the nation's resilience to natural hazards. The Investment Strategy's objective is to identify and

measure the effectiveness of mitigation investments and inform decisions on when and where to make investments.

DHS-IP. *Infrastructure Interdependency Assessment: Puerto Rico*. Department of Homeland Security, 2018.

The report summarizes a focused interdependency assessment of key industrial sectors in Puerto Rico. The results were used to, develop comprehensive solutions that address interdependencies and enhance resilience, and identifying and resolving cross-sector issues. Department of Homeland Security-Infrastructure Protection's (DHS-IP) interdependency assessment provides specific insights into asset, regional, industrial sector, and system-level issues and potential resilience solutions that will directly inform sector solutions and plans.

EPA. Solutions Team Review, Levittown Area of Toa Baja, PR. Flood Control and Drainage Solutions Team. December 4, 2018.

The report provides conceptual solutions for drainage and flood control for the Levittown area of Toa Baja.

EPA. Flood Control and Drainage Solutions for Comerío. Flood Control and Drainage Solutions Team, May 28, 2019.

The presentation provides conceptual solutions for drainage and flood control for Comerío.

FEMA. *Mitigation Assessment Team Report: Hurricanes Irma and María in Puerto Rico; Building Performance, Observations, Recommendations, and Technical Assistance Guide*. FEMA P-2020, 2018.

The conclusions and recommendations in this report are intended to provide decision makers, designers, contractors, planners, code officials, industry groups, government officials, academia, homeowners, and business owners and operators with information and technical guidance that can be used to reduce future hurricane damage.

FEMA-COR3. Unified Recovery Planning Proposal for Puerto Rico. FEMA-COR3, October 2019.

The presentation inventories the various local, regional, and island-wide recovery planning efforts and presents the benefits of a more unified approach.

Fericelli, Paul; Gonzales, Eduardo; Guerrero, Carmen; Reyes, Brenda; Velez, Hector. Recovery of Solid Waste Management in Puerto Rico. US EPA Region 2, 2020.

The presentation summarizes the current status of solid waste management and solid waste planning, and provides the benefits of regional and inter-agency approaches for the future.

Fericelli, Paul. Municipal Drainage Infrastructure: Needs and Impacts after Hurricanes Irma and María. EPA, Summer 2019 (multiple presentations).

The presentation summarizes the results of interviews of all seventy-eight municipios regarding infrastructure damages, contingency and emergency measures, and programmatic capacity. Interviews were conducted with municipal staff in charge of operation and maintenance stormwater drainage infrastructure.

Florida Department of Economic Opportunity. *Mitigation Action Plan*. State of Florida, February 2020.

The purpose of this mitigation action plan is to detail a strategy that: reduces risks and vulnerabilities of people in hazard-prone areas; reduces the potential impact of natural disasters; promotes education, outreach and research and development programs to improve awareness; strengthens communication and coordination; and emphasizes long-term, maximum benefits to the public.

Government Accountability Office (GAO) Report to Congressional Addressees 2017 HURRICANES AND WILDFIRES - Initial Observations on the Federal Response and Key Recovery Challenges. GAO. Sep 2018.

The report provides GAO's observations on federal and state preparedness and response coordination for hurricanes Harvey and Irma in Texas and Florida, the California wildfires, hurricanes Irma and María in Puerto Rico and the U.S. Virgin Islands and existing and emerging disaster recovery challenges highlighted by these disasters. GAO analyzed FEMA policies, procedures, guidance, and data specific to disaster response and recovery programs.

Government of Puerto Rico. *Puerto Rico Disaster Recovery Action Plan for the Use of CDBG Funds in Response to 2017 Hurricanes Irma and María*. Government of Puerto Rico, February 2020 (Amendment Three).

Prepared in compliance with Federal Register Vol. 83, No. 28 (02/09/2018) the action plan provides an assessment of unmet need, budget allocations among eligible activities, and descriptions of disaster recovery programs being implemented with the support of CDBG-DR.

JM Professional Planning Consultants, P.C. *Puerto Rico Hazard Mitigation Plan*. Government of Puerto Rico. Revision 2016.

The purpose of the Hazard Mitigation Plan (HMP) is to reduce vulnerability and the loss of life and property that are generated by the impact of natural and unnatural hazards through the development and implementation of a coordinated mitigation strategy between the central government, municipalities and the citizens. The HMP also seeks to develop a short- and long-term mitigation government policy that meets the requirements established by FEMA. It is a requirement of CDBG-MIT to consult the state and local HMPs. The HMP is also a requirement to obtain federal funding to support mitigation efforts and in the event of a natural disaster. It integrates municipal HMPs, and provides a summary of risks, strategies, and other aspects of local plans in *Appendix 5-C*.

Kaiser Family Foundation Issue Brief "Public Health in Puerto Rico after Hurricane Maria (Report)". Kaiser Family Foundation Issue Brief. Nov. 2017.

The report summarizes impacts on public health and key public health challenges in Puerto Rico caused by high winds and flooding associated with Hurricane Maria within the context of pre-existing fiscal, societal and health challenges.

Lallemant, Nicole; Perreira, Krista; Peters, Nicole; Zuckerman, Stephen. *Puerto Rico Health Care Infrastructure Assessment, Site Visit Report*. Urban Institute, January 2017.

Initiated by the US Department of Health and Human Services the report documents a study of Puerto Rico's health care infrastructure including Puerto Ricans' access to health care, the quality of the care received, and patient satisfaction with that care. The study aimed to identify and explore potential barriers to accessing high quality care in Puerto Rico, including but not limited to deficiencies in provider supply, building infrastructure, the cost and payment environment, and the ability to provide basic diagnostic and preventive care and treatment.

National Institute of Building Sciences, *Natural Hazard Mitigation Saves: 2018 Interim Report*, Dec. 2018

The report summarizes and quantifies the benefit to cost ratios for structural and non-structural mitigation strategies.

New York Power Authority, Puerto Rico Electric Power Authority, Puerto Rico Energy Commission, Consolidated Edison Company of New York, Inc., Edison International, Electric Power Research Institute, Long Island Power Authority, Smart Electric Power Alliance, US Department of Energy, Brookhaven National Laboratory, National Renewable Energy Laboratory, Pacific Northwest National Laboratory, Grid Modernization Lab Consortium, and PSEG Long Island, an agent for and on behalf of the Long Island Lighting Company d/b/a LIPA, and Navigant Consulting, Inc. *Build Back Better: Reimagining and Strengthening the Power Grid of Puerto Rico*. Puerto Rico Energy Resiliency Working Group, December 2017.

The purpose of this report is to provide an assessment of the electric power system storm damage, describe a new system design basis, and propose rebuild recommendations for the Puerto Rico Power and Grid Resiliency rebuild initiative.

Milken Institute School of Public Health, University of Puerto Rico Graduate School of Public Health. *Project Report, Ascertainment of the Estimated Excess Mortality from Hurricane María in Puerto Rico*. Milken Institute School of Public Health, The George Washington University, August 2018.

In order to accurately estimate the excess number of deaths due to Hurricane María, the Governor of Puerto Rico sought an independent assessment of mortality and commissioned The George Washington University Milken Institute School of Public Health (GW SPH) to complete the assessment. This report provides the methodologies and results of the study.

Nishant Kishore, M.P.H., Domingo Marqués, Psy.D., Ayesha Mahmud, Ph.D., Mathew V. Kiang, M.P.H., Irmay Rodriguez, B.A., Arlan Fuller, J.D., M.A., Peggy Ebner, B.A., Cecilia Sorensen, M.D., Fabio Racy, M.D., Jay Lemery, M.D., Leslie Maas, M.H.S., Jennifer Leaning, M.D., S.M.H., Rafael A. Irizarry, Ph.D., Satchit Balsari, M.D., M.P.H., and Caroline O. Buckee, D.Ph., "Mortality in Puerto Rico after Hurricane Maria." *New England Journal of Medicine* 379;27(2018): 162-70.

The article describes the methodology and results for estimating the mortality in Puerto Rico after Hurricane María.

North Carolina Emergency Management, North Carolina Office of Recovery and Resiliency. *ReBUILD NC, CDBG-MIT Action Plan, V 1.0*. State of North Carolina, November 2019.

The action plan is the State of North Carolina's plan to use the \$168 million allocation of CDBG-MIT funds in accordance with the Federal Register Notice, 84 FR 45838. The Action Plan consists primarily of the Mitigation Needs Assessment, an analysis of the specific conditions present in the State which present as a weakness in the disaster recovery cycle, followed by a review of the long-term planning and risk mitigation considerations, a summary of public engagement, and a determination of appropriate funding program(s).

Perreira, Krista, Peters, Rebecca, Lallemand, Nicole, and Zuckerman, Stephen, "Puerto Rico Healthcare Infrastructure Assessment, Urban Institute, Jan. 2017

The summarizes the economic and societal forces driving the emigration of health care professional from Puerto Rico in terms of access to health care, quality of care and patient satisfaction.

Portell, Maria; Sommers, Benjamin D. "Original Investigation, On the Outskirts of National Health Reform: A Comparative Assessment of Health Insurance and Access to Care in Puerto Rico and the United States." *The Milbank Quarterly* Vol. 93, No. 3, (2015): 584-608.

The study, from 2015, found that at the time Puerto Rico outperformed the mainland United States on several measures of coverage and access. Congressional policies capping federal Medicaid funds to the territory, however, contributed to major budgetary challenges. While the Affordable Care Act significantly increased federal resources in Puerto Rico, ongoing restrictions on Medicaid funding and premium tax credits continued to pose substantial health policy challenges.

Homeland Security Operational Analysis Center, Preston, Benjamin L. et al., "Beyond Recovery – Transforming Puerto Rico's Water Sector in the Wake of Hurricanes Irma and Maria." Apr. 2019.

The report summarizes existing water resource infrastructure and management framework with respect to flood management, water supply and treatment, and wastewater collection, treatment, and disposal in Puerto Rico and recommends potential pathways to transforming the water sector post disaster.

Relmagina Puerto Rico. *Specific Recommendations for the Reconstruction Process of Puerto Rico*. Relmagina Puerto Rico, December 2018.

This document was prepared by Relmagina Puerto Rico, "to start a conversation about recommendations that serve as a guide for entities and organizations

making decisions on the reconstruction of Puerto Rico, particularly the Puerto Rico Central Office of Recovery, Reconstruction and Resilience (COR3) and the Puerto Rico Department of Housing.” Recommendations in the document are derived from a working group convened by Relmagina Puerto Rico, which included representatives of the private sector and non-governmental organizations (NGOs) they deemed to have experience, applicable knowledge, and diverse perspectives and backgrounds.

Resilient Puerto Rico Advisory Committee. *Relmagina Puerto Rico Report*. Relmagina Puerto Rico, March 2019 (revised).

A report by Relmagina Puerto Rico, based on a planning process from February to May 2018, which “aimed at producing an actionable and timely set of recommendations for how to maximize philanthropic, local government, and federal recovery funds.” The report includes ninety-seven (97) recommendations focused in housing, energy, physical infrastructure, health, education and social services, economic development, and natural infrastructure.

Rodríguez de Arzola, Olga. *Plan para El Desarrollo de Especialidades Medical en PR*. Centro Médico Academico Regional del Sur Oeste, October 2018.

A proposal presented during the public input process for the CDBG-DR action plan to fund development and augmentation of medical educational programs.

Southern States Energy Board. *Blue Ribbon Task Force Report, Strategizing an Electric Energy Policy & Regulatory Framework in Puerto Rico*. Southern States Energy Board, November 2018 (preliminary draft report).

This preliminary draft report presents an account of work performed at the date of its publishing by the Southern States Energy Board, its partners, and members of the Blue Ribbon Task Force. The goals of the project are: 1) to work with the Governor and Legislature of Puerto Rico to establish a reliable, affordable, and sustainable electric grid system for the Commonwealth, and for other purposes; and 2) to develop a policy and legal framework to provide a regulatory regime for a privatized electric energy grid system in Puerto Rico. A final report was anticipated in June 2019.

Schoeman, Laurie. *Conducting a Mitigation Needs Assessment*. 2019 CDBG-DR Problem Solving Clinic. Enterprise Community Partners, July 2019.

The presentation provides approaches for quantitatively assessing mitigation needs and where to find more detailed information and resources for conducting a needs assessment.

Texas General Land Office. *State of Texas CDBG-Mitigation (CDBG-MIT) Action Plan: Building Stronger for a Resilient Future*. State of Texas, November 2019.

The State of Texas CDBG Mitigation Action Plan was developed to meet the HUD requirements outlined in the Federal Register Notice, 84 FR 45838. The action plan consists of a Mitigation Needs Assessment, a detailed use of funds, and an allocation budget.

Wilkinson, Elizabeth, BA; Killeen, David MD; Pérez-López, Gabriel José MD; and Jabbarpour, Yalda MD. *A Shrinking Primary Care Workforce in Puerto Rico*. Robert Graham Center Report. December 13. 2019.

The report summarizes the affects and causes of the ongoing loss of primary care medical professionals in Puerto Rico.