



Below is a comprehensive list of all planning studies funded with planning study dollars allocated from U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) funds for the following disasters:

- Hurricane Ike
- 2016 Floods
- Hurricane Harvey
- CDBG-MIT
- 2019 Floods

COMPLETED STUDIES

- ***Disaster Economic Impact Study*** – The GLO contracted with The University of Texas’ McCombs School of Business to run analysis for the Hurricane Harvey Action Plan’s Needs Assessment. This led to further analysis regarding the common effects of disasters and the ability to standardize the economic impact of disasters at a national level.
- ***Disaster Impact Visualization Study*** – This study built real-time visualizations of critical disaster data, which display historical satellite imagery from Hurricane Harvey and other disaster events. The visualizations give communities the ability to observe events and make informed planning decisions.
- ***Evaluating the Effects of a Coastal Spine: National Level Economic Ripple Effects of Storm Surge Events*** – This study assessed the economic effects of the coastal spine barrier proposal. The findings show the nationwide economic impacts from major storm events in the Galveston Bay.
- ***Gulf Coast Community Protection and Recovery District (GCCPRD)*** – The GCCPRD developed a storm surge suppression study to investigate potential coastal projects that could reduce the impact of future storms. The study area consisted of the coastal areas around Brazoria, Chambers, Galveston, Harris, Jefferson, and Orange counties. The results can be found at GCCPRD.com.
- ***Hurricane Harvey Housing Impacts: 49-County Survey Top-Line Findings*** – This study surveyed the general population to determine housing needs among residents affected by Hurricane Harvey. The results helped determine the most appropriate housing programs, allocation amounts, and methods of communication based on regional need.
- ***Regional Drainage Data Collection and Oversight*** – This study gathered and organized data focusing on regional oversight and the coordination of the drainage infrastructure in Hardin, Jasper, Jefferson, Newton, Orange, Tyler, Polk, Liberty, and Chambers counties. After the data was analyzed, recommendations were made to local community leaders.
- ***Texas Coastal Resiliency Study*** – The Texas Coast Resiliency Study worked with the 22 coastal counties to determine the effectiveness of past recovery projects along the Texas coast and assessed vulnerability of existing infrastructure. The study also recommends projects that would improve overall resiliency of the Texas coast.

	Hurricane Ike	2016 Floods	Hurricane Harvey
Disaster Economic Impact Study	X	X	X
Disaster Impact Visualization Study	X	X	X
Evaluating the Effects of a Coastal Spine: National-Level Economic Ripple Effects of Storm Surge Events	X		
Gulf Coast Community Protection and Recovery District (GCCPRD)	X		
Hurricane Harvey Housing Impacts: 49-County Survey Top-line Findings			X
Regional Drainage Data Collection and Oversight	X		
Texas Coastal Resiliency Study	X		

Updated May 17, 2021



ONGOING STUDIES

- **CHARM Platform Development** (Start date: August 2020) – The CHARM software is currently bolstering local planning efforts by running scenario planning workshops with local communities. When integrated with the disaster database project, this enhancement would provide local communities with the information, tools, and technical expertise to make informed planning decisions.
- **Developing Environmental Responses and Models for Catastrophic Flooding Events** (Start date: June 2020) – This is an environmental study to monitor the impact of flooding on the environment through the analysis of soil samples.
- **Disaster Recovery Alternative Housing Study** (Start date: January 2020) – This is an effort to analyze and evaluate alternative housing options to determine if innovative solutions exist for accommodating disaster survivors, including those with low to moderate incomes, that are cost-effective, prudent, secure, and allow for faster construction. After research, this study will proceed with the development of prototypes.
- **Economic Development Strategy and Diversification Study** (Start date: November 2019) – This study is developing strategies to expand the economy of nine coastal counties impacted by Hurricane Harvey to make them more resilient to future economic impacts while recovering.
- **Flood Plain Management Services** (Start date: July 2020) – U.S. Army Corps of Engineers (USACE) shall perform the necessary flood plain management services necessary to assist the GLO in fulfilling its duty to administer the four Flood Studies within Combined River Basins studies as well as other interagency projects.
- **Flood Studies within Combined River Basins** (Start date: September 2020) – Three regionalized studies, based on Texas' major river basins covering the Harvey-impacted area, will evaluate mitigation and abatement strategies to reduce disaster impacts and increase community resiliency. TWDB, TDEM, USACE, and USGS are a few of the stakeholders that helped GLO design the scope of the study and will continue to benefit from the study as the results become publicly available. For example, GLO is coordinating with TWDB to ensure the project assessments will be included in the State Flood Plan.
- **Lower Rio Grande Valley (LRGV) Flood Study** (Start date: May 2021) – A regional flood study, encompassing Hidalgo, Willacy, Cameron, and Starr Counties, that mirrors the ongoing *Flood Studies within Combined River Basins* study.
- **Measuring, Mapping, and Managing Flood Risk in Texas** (Start date: January 2019) – Partnering with Texas A&M University System (TAMUS) to measure, map, model, and visually present data recorded during historical flood events across Texas and recommend techniques to mitigate future hazards and risks.
- **Project Management Services** (Start date: February 2021) – Provider shall perform the comprehensive project management services necessary to assist the GLO in fulfilling its duty to administer the four Flood Studies within Combined River Basins studies.
- **Texas Disaster Information System (TDIS)** (Start date: June 2019 - UT; October 2020 - TAMUS) – The GLO, UT, and A&M are working to create and oversee a system capable of securing the state's disaster data needs, which will ultimately serve as a critical tool assisting Texas communities develop better disaster recovery and mitigation plans.
- **Texas Integrated Flood Framework (TIFF)** (Start date: November 2020) – The GLO is actively coordinating with USACE/USGS/TWDB to ensure flood planning efforts are not duplicated. Through the establishment of intergovernmental workgroups, this grant seeks to standardize data sharing, flood modeling, and planning activities. TWDB is the grant recipient and the lead agency for completing this work.

Updated May 17, 2021



	2015 Floods	2016 Floods	Hurricane Harvey	MIT
CHARM Platform Development			X	X
Developing Environmental Responses and Models for Catastrophic Flooding Events			X	
Disaster Recovery Alternative Housing Study			X	
Economic Development Strategy and Diversification Study			X	
Flood Plain Management Services			X	
Flood Studies within Combined River Basins			X	
Lower Rio Grande Valley (LRGV) Flood Study	X			X
Measuring, Mapping, and Managing Flood Risk in Texas		X		
Project Management Services			X	
Texas Disaster Information System (TDIS)			X	X
Texas Integrated Flood Framework (TIFF)			X	X

Updated May 17, 2021



PROPOSED/APPROVED STUDIES

- **Lower Rio Grande Valley Economic Development Study** (Start date: TBD) - This study will develop strategies to expand the economy of three counties in the Valley impacted by 2019 Floods to make them more resilient to future economic impacts while recovering.
- **Lower Rio Grande Valley Transportation Study** (Start date: TBD) - This study will evaluate how city populations located in low tide sections of towns in three counties in the Valley can evacuate on foot to shelters during high rainfall events so that first responders can focus on other issues.
- **An Analysis of CDBG-DR Beneficiaries** (Start date: TBD) – This study will review the GLO Community Development and Revitalization (GLO-CDR) Program's efforts as they relate to serving beneficiaries.
- **Resilient Housing Study** (Start date: TBD) – This study will evaluate the resilience of HAP homes that have been subjected to multiple disasters through a random sampling and analysis. The study will have three phases: first establish a statewide zoning resource, second capture the long-term beneficiary experience, and finally develop educational materials on the recovery process and resilient home maintenance.
- **2023 Texas Coastal Resiliency Master Plan** (Start date: TBD) – This funding will support the 2023 installment of the Texas Coastal Resiliency Master Plan, and will provide a vision to protect coastal communities, infrastructure, and ecological assets from coastal hazards.

	2015 Floods	Hurricane Harvey	MIT	2019 Floods
LRGV Economic Development Study				X
LRGV Transportation Study				X
Overview of Program Requirements to Assist CDBG-DR Beneficiaries		X	X	
Resilient Housing Study		X	X	
2023 Texas Coastal Resiliency Master Plan			X	

PROPOSED FUTURE STUDIES

The following is a list of proposed future studies:

- CHARM Enhancements and other community engagement
- Continue development of TDIS (Phase 2)
- Develop a Community Capacity Building/Outreach Program
- Enhanced mapping and flood risk models, such as BuyersBeWhere.com
- Expand regional flood studies
- Expand TIAER Environmental Study (Phase 2)
- Support TDEM’s effort for a FEMA-certified enhanced State Hazard Mitigation Plan
- Work with USGS/USACE/TWDB on compound flooding models (Phase 2)

Updated May 17, 2021