

**Written Testimony of Harris County Commissioner Rodney Ellis**

**U.S. House of Representatives  
Committee on Financial Services,  
Subcommittee on Housing, Community Development and Insurance  
May 4, 2021**

Chairman Cleaver, Ranking Member Stivers, and distinguished members of the Subcommittee on Housing, Community Development, and Insurance, thank you for providing the opportunity to testify today at the Housing, Community Development and Insurance Subcommittee hearing entitled “Built to Last: Examining Housing Resilience in the Face of Climate Change.

Harris County is the third largest county in the United States, by population, and home to over 4.6 million residents. I represent Precinct 1 which is located within Harris County and contains most of the City of Houston, as well some unincorporated areas within the county.

**The Challenges of Housing Resilience in Harris County**

Harris County is prone to flooding due to a flat topography that barely rises above sea-level and frequent high intensity rain events. Our region is also growing rapidly, and in the last quarter-century, the greater Houston area has added a million people and its commercial development has removed wetlands that could soak up storm water runoff.<sup>1</sup> In addition to population growth, we are also dealing with the reality of climate change.

In 2017, Hurricane Harvey devastated our region. Harvey dropped more than 50 inches of rain on some sections of the Houston area. Nationally, Harvey resulted in \$125 billion in damage and more than 100 deaths, directly or indirectly.<sup>2</sup> In the Texas Gulf Coast area, more than four in ten residents in the area reported that their home was damaged.<sup>3</sup> In Harris County alone, more than 120,000 structures were flooded by unprecedented rainfall.<sup>4</sup>

Residents in Houston and Harris County have yet to fully recover from Hurricane Harvey. According to a University of Houston study, nearly 20% of the survey respondents who were displaced by the storm are still in temporary housing.<sup>5</sup> The same survey found that only one-fifth (20.7%) of the respondents whose properties suffered damage due to Harvey Hurricane

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<sup>1</sup> NBC News. Why Does Houston Flood So Often and Heavily?

<sup>2</sup> University of Houston. Hurricane Harvey, Three Years Later. Summer 2020.  
[https://uh.edu/hobby/harvey/docs/hobby\\_school\\_harvey\\_survey\\_report\\_3.pdf](https://uh.edu/hobby/harvey/docs/hobby_school_harvey_survey_report_3.pdf)

<sup>3</sup> Kaiser Foundation. An Early Assessment of Hurricane Harvey’s Impact on Vulnerable Texans in the Gulf Coast Region. December 2017. <https://files.kff.org/attachment/Report-An-Early-Assessment-of-Hurricane-Harveys-Impact-on-Vulnerable-Texans-in-the-Gulf>

<sup>4</sup>Harris County Flood Control District. Harris County Has Never Seen a Storm Like Harvey  
<https://www.hcfd.org/About/Harris-Countys-Flooding-History/Hurricane-Harvey>.

<sup>5</sup> *Ibid.*

received and accepted a buyout offer from the government. Over 10% of respondents received an offer but did not take it, and 69.2% did not receive a buyout offer.<sup>6</sup>

Absent leadership and decisive action, climate change will put our people, and especially our most vulnerable people, at higher risk. Data published in the Proceedings of the National Academy of Sciences suggest that in areas such as Houston, storms previously considered to have a 500-year recurrence frequency (0.2% risk) are now considered to be 5-year (20% risk) storms.<sup>7</sup> This means that we can anticipate more frequent and more severe storms and flooding to devastate Harris County.

### **Disparate Impact on Low-Income Communities of Color**

Low-income and communities of color bear the greatest burden from our unsafe infrastructure. Natural disasters such as Hurricane Harvey compound the burden of structural racial inequity. Black and Hispanic residents and those with lower incomes are more likely to report being negatively affected by disasters and less able to recover. These disasters are making existing inequities worse—a study by Rice University and the University of Pittsburgh found that between 1999 and 2013, natural disasters increased Houston’s racial wealth gap by \$87,000.

Historic discrimination and residential segregation have led low-income communities to live in flood-prone areas.<sup>8</sup> Many of the houses that flooded during Harvey were located in flood prone areas and were located in underserved communities. Houston’s historically Black neighborhoods, such as Fifth Ward, which is near Buffalo Bayou and two major freeways, saw severe damage due to the storm, including damage to hundreds of homes and apartments. According to Census data, this neighborhood is also one of the regions poorest. The median household income was \$20,326 in 2017—roughly half the statewide median.<sup>9</sup> Beyond the physical danger, living in flood-prone areas obstructs residents’ access to affordable flood insurance and loans to rebuild<sup>10</sup> which leads to deferred maintenance practices, further diminishing area homes from successfully emerging from future storms. Our most vulnerable residents are the first to suffer and the last to recover from the ever increasing disasters brought on by climate change.

While the situation is dire, there are two concrete steps that can start to reverse the cycle of discrimination and devastation. First, the federal government can reverse the cost-benefit analysis that determines where much of the federal funding for flood control is spent in localities.

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<sup>6</sup> *Ibid.*

<sup>7</sup> Jim Blackburn, Rice University’s Baker Institute for Public Policy, Living with Houston Flooding (December 2017), [https://www.bakerinstitute.org/media/files/files/68acbe10/bi-pub-livingfloodinghouston-120617\\_kF7klri.pdf](https://www.bakerinstitute.org/media/files/files/68acbe10/bi-pub-livingfloodinghouston-120617_kF7klri.pdf)

<sup>8</sup> Mustafa Santiago Ali, Environmental Racism is Killing Communities of Color. Climate Change Will Make it Worse (July 28, 2020), <https://www.theguardian.com/commentisfree/2020/jul/28/climate-change-environmental-racism-america>.

<sup>9</sup> Texas Observer. In Houston’s Fifth Ward...” July 2020. [www.texasobserver.org/in-houstons-fifth-ward-the-storm-never-stops/](http://www.texasobserver.org/in-houstons-fifth-ward-the-storm-never-stops/)

<sup>10</sup> Mustafa Santiago Ali, Environmental Racism is Killing Communities of Color. Climate Change Will Make it Worse (July 28, 2020), <https://www.theguardian.com/commentisfree/2020/jul/28/climate-change-environmental-racism-america>.

Second, the federal government can increase oversight of recovery funds authorized after Hurricane Harvey to assure that they do not perpetuate past inequities.

### **Cost-Benefit Analysis**

In Harris County, we have seen how systems and policies can have an adverse impact on our most vulnerable residents. After decades of neglect, lower-income areas and communities of color in flood-prone areas still experience home and street flooding with nearly every hard rain. These Harris County communities have been passed over for years due to an inequitable federal cost-benefit-ratio that prioritizes flood mitigation projects based on property value, which serves those who live in higher-income neighborhoods, rather than those with the most need. Under this formula, areas with higher property values and fewer residents are prioritized over areas with larger populations living in less expensive homes, even when danger and risk of floods are higher. Cost-benefit analysis unfairly prioritizes property over people.

Families living in the Halls and Greens Bayou watersheds, which includes northeast neighborhoods in Harris County that are primary Latino and Black around Aldine, East Little York/Homestead, Mesa/Tidwell, Eastex-Jensen and others, deserve answers. The Harris County Flood Control District has identified flooding as a “persistent hazard” for people along Halls Bayou; it can flood with just six inches of rain. This persistent, chronic flooding has left thousands families locked in a cycle of vulnerability, struggling to recover from one flood while bracing for the next. But the watershed has never qualified for desperately needed federal dollars because of the discriminatory effect of the federal formula; it will receive funding for projects now only because of a Harris County Flood Bond that local voters passed overwhelmingly in August 2018. The Water Resources Development Act (WRDA) of 2020 included a directive to the United States Army Corps of Engineers to increase the emphasis of “other social effects in project evaluation,” and that is an important first step. These other social effects can and should include consideration of economically disadvantaged communities’ need for flood risk reduction projects, the number people’s lives that could be protected, and the number of structures protected with a project--instead of the value of structures protected, in order to incorporate equity into the federal decision making process.

### **CDBG-MIT Funding from Hurricane Harvey**

The State of Texas received \$4.2B from U.S. Department of Housing and Urban Development’ (HUD) Community Development Block Grant Mitigation (CDBG-MIT) funds to address infrastructure, build and implement structural and non-structural projects, and to implement programs to reduce the risks and impacts of future natural disasters.<sup>11</sup> These HUD funds, administered by the Texas General Land Office, specifically target assistance to neighborhoods that have at least 50% Low and Moderate Income (LMI), with a preference for 70% LMI neighborhoods. A significant portion of our LMI communities reside within the Greens and Halls watersheds in Harris County, which have substantial drainage infrastructure needs and make

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<sup>11</sup> Texas General Land Office. State of Texas CDBG Mitigation Action Plan: Building Stronger for a Resilient Future. January 2020.

them a perfect match for HUD funds. These funds would assist Harris County with hundreds of millions of dollars of infrastructure improvements slated for these areas.<sup>12</sup>

In the months following Hurricane Harvey, FEMA awarded the State of Texas approximately \$820 million for the Hazard Mitigation Grant Program (HMGP). This program provides 75% future risk to lives and property from natural hazards. The amount of funding available is allocated using a sliding scale formula based on the percentage of funds spent on Public (PA) and Individual (IA) Assistance for a presidentially declared disaster. Counties and cities impacted by Hurricane Harvey were able to apply for these funds, which are managed by the Texas Division of Emergency Management (TDEM). In total, Harris County and the City of Houston received approximately 40% of total HMGP funds available. Unfortunately, the same approach was not followed for the CDBG-MIT funds. CDBG-MIT allocations were not given directly to impacted entities like Harris County, but rather to the states.

To date, four years after Hurricane Harvey, the Texas GLO has not disbursed any of the CDBG-MIT funds. Moreover, the GLO's funding competition guidelines and the State CDBG-MIT Action Plan cap any one entity at a total grant of \$100 million for the first round of Hurricane Harvey funds.<sup>13</sup> Instead of allocating based on estimated need, as was done with the HMGP funds, the Texas GLO appears on track to arbitrarily cap awards. This has an adverse effect on Harris County, which likely has the highest population of any applicant and whose residents suffered the most from Hurricane Harvey. We stand ready to work with the Texas GLO and hope there is time to address this inequity in the GLO's formula.

### **Shortcomings of the Federal CDBG-DR Program and State Response**

While sizable federal investments have been made, there are significant shortcomings in the administration of the Community Development Block Grant-Disaster Recovery, both at the state and federal level. The slow response from the State to allocate and disperse the funds has had an adverse impact on communities who were—and in some cases still are—desperately waiting for assistance to rebuild their homes and lives. An Urban Institute report found implementation challenges within the CDBG-DR program's timelines; on average it took 4.7 years to complete across all program activities and 3.8 years to complete across housing activities.<sup>14</sup> This is reflected in the State's delay to disburse funds to Harris County, through the GLO.

Furthermore, HUD includes a narrow focus on “pre-storm” conditions for rebuilding homes, which ignores the fact that many families have suffered damage from previous storms.<sup>15</sup> In

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<sup>12</sup> When adding the four HMGP projects, the City of Houston was awarded and the buyout funds awarded to County totals approximately 40% of the program. Once TDEM approved the projects/buyout the projects had to have a favorable benefit to cost B/C ratio to qualify.

<sup>13</sup> Texas General Land Office. GLO Mitigation Funding Competitions.  
<https://recovery.texas.gov/mitigation/competitions.html>

<sup>14</sup> Office of Policy Development and Research. United States of Housing and Urban Development (HUD). Housing Recovery and CDBG-DR: A Review of the Timing and Factors Associated with Housing Activities in HUD's Community Development Block Grant for Disaster Recovery Program. January 2021.

<sup>15</sup> HUD. Docket No. FR-5696-N-06. Second Allocation, Waivers, and Alternative Requirements for Grantees Receiving Community Development Block Grant (CDBG) Disaster Recovery Funds in Response to Hurricane Sandy. [https://www.hud.gov/sites/documents/5696-N-06\\_CDBG-FRNOTICE.PDF](https://www.hud.gov/sites/documents/5696-N-06_CDBG-FRNOTICE.PDF)

addition, the GLO's State Action Plan states that the rebuilding of homes is based on the number of people living in the home at the time of the flood. The GLO has a practice of reimbursing higher income families for the full amount of out of pocket expenses without comparing household size to bedroom count, but imposing the household size versus bedroom comparison on mostly low-income, minority and elderly populations that qualify for a full rebuild. For example, if a homeowner has a 4 bedroom/3 bath at the time of application of assistance, but only has a 2 person household, Harris County can only reconstruct a 2 bedroom house for the homeowner according to the GLO's policy. I, along with the Harris County Community Services Department, worked on a waiver request regarding this issue, but it was denied by the GLO. Many of the homes that suffered damage in flood prone areas are owned by seniors, and these homes are often their single most important financial asset. This is a social equity issue that causes a decrease in the home value and equity in the home thus impacting intergenerational wealth when elders pass down smaller and lesser value homes to the next generation.

Also, certain duplication of benefits policies at the federal level places our most vulnerable residents at a disadvantage. Numerous nonprofit, private, and governmental agencies provide a wide range of assistance after a disaster strikes. Section 312 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288) requires federal agencies providing disaster assistance to ensure that individuals and businesses do not receive disaster assistance for losses for which they have already been compensated.<sup>16</sup> The combination of any type of disaster assistance can cause duplication, thus prohibiting residents from receiving more than one form of public assistance regardless of their need. This is an issue that we hope HUD can address.

## **Harris County's Response**

### 2018 Flood Bond and CDBG-MIT Applications

Reducing the risk of future floods requires new flood control infrastructure, as well as new policies and regulation. Following Hurricane Harvey, I along with my colleagues, successfully advocated for equitable investment in flood control infrastructure and disaster recovery in vulnerable communities through a \$2.5B bond approved by voters in 2018. This gave underserved communities their first opportunity to receive real flood mitigation. The Bond Order, approved by our Commissioners Court, explicitly required a process for the equitable apportionment of the \$2.5B Flood Bond to reduce flood risk.

Under the new equitable guidelines, which were also approved by Harris County Commissioners Court, flood projects are to prioritize the following for implementation:

1. The number of structures that will benefit from the project, not the value of the structures.
2. The probability that the community will flood again.
3. Using the Social Vulnerability Index from the Centers for Disease Control, each community will be assessed risk for loss of life during the disaster and slower recovery time after a disaster.
4. The efficiency of the project will be calculated by the number of structures that will receive a flood damage reduction compared to the project costs.
5. Projects that are partially funded by outside sources.

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<sup>16</sup> Congressional Research Service. Lindsay, Bruce. SBA and CDBG-DR Duplication of Benefits in the Administration of Disaster Assistance: Background, Policy Issues, and Options for Congress. July 2016.

6. Projects that will be the most cost effective to maintain.
7. Projects with minimal environmental impact.
8. Projects with the most recreational and environmental enhancement benefit.

The 2018 Bond program commits Harris County to do its part in providing flood protection to its residents. Harris County and the Flood Control District submitted a total of just over \$900M in CDBG-MIT grant applications to the GLO. The projects in these applications would bring benefits to some of the most vulnerable LMI areas in the County, which have also historically experienced some of the worst flooding.

It is relevant to note that Harris County has funding in its 2018 Bond program to advance projects in these areas by engaging with the public, performing preliminary engineering, and making some right-of-way acquisitions so that once GLO awards are made, the County is much closer to 'shovel ready' status and can quickly progress to construction. This is an important strategy as there are timelines to spend these funds; for example, half of the \$4.2B in the CDBG-MIT program must be spent in 6 years. Harris County wants to do our part to not only meet this timeline, but also to bring much needed relief to our residents as quickly as possible. Our efforts are at risk if the State of Texas does not administer the CDBG-MIT funding efficiently and equitably.

#### CDBG-DR Housing Program

Harris County's CDBG-DR Housing program is underway, and in the second year of a five year contract. Harris County has provided 251 households with homeowner reimbursements, expending its original \$15 million allocation. Other notable updates from Harris County are:

- The Texas General Land Office has increased the reimbursement program by an additional \$25 million and \$10 million in future amendments to serve an additional 949 households who are on the County's waiting list.
- 184 households are in the construction phase for home repair and reconstruction and all homes are expected to complete by December 2021. The total allocation is \$30 million for the Homeowner Assistance Program, a rehabilitation and reconstruction program.
- Harris County has nine of eleven housing developments underway to construct new and improved rental units for a total of over \$180 million, with a goal is to add 1,660 affordable renter units to Harris County.

#### **Improving Drainage and Building Standards**

As a nation, we are currently underinvesting to prepare for the impacts of extreme weather events, even though these federal investments have proven to be a wise use of taxpayer dollars. In fact, the nation can save \$6 in future disaster costs for every \$1 spent on pre-hazard mitigation.<sup>17</sup> Pre-disaster mitigation can include elevating homes and roads in flood-prone areas, making structures wildfire resistant, or supporting nature-based defenses like living shorelines. In recent decades, Harris County and the City of Houston have focused on improving drainage and building thousands of detention ponds and increasing flood mitigation detention

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<sup>17</sup> Pew Trust. Every \$1 Invested in Disaster Mitigation Saves \$6. January 2018.  
[https://www.pewtrusts.org/en/research-and-analysis/articles/2018/01/11/every-\\$1-invested-in-disaster-mitigation-saves-\\$6](https://www.pewtrusts.org/en/research-and-analysis/articles/2018/01/11/every-$1-invested-in-disaster-mitigation-saves-$6)

requirements. Post Hurricane Harvey, Harris County modified the requirement for home construction to be elevated one to two feet above the 500 year floodplain. This is greater than the minimum standard of one foot above the 100 year floodplain established by FEMA as part on the National Flood Insurance Program. This provision accounts for mapping uncertainties and future climate change.

**Harris County’s Home Buyout program**

In the mid 1980’s the Harris County Flood Control District (HCFCD) created the Home Buyout program. The program is a key part of Harris County’s plan to increase the County’s overall resilience to future flooding by buying out properties in areas that have previously flooded. Following Hurricane Harvey, the Home Buyout program saw more than 4,000 volunteers; 1,600 homes approved at more than \$516 million through multiple grant programs; 645 homes purchased; and another 667 homes in the buyout process.

CDBG-DR Relocation & Buyout Program Outcomes	\$194,010,829 – housing \$13,297,872 - Commercial	395 owners and 450 tenants	395 owners and 450 tenants are in process	Program has 156 owner files submitted to GLO
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*Source: Harris County Community Services, Administrative Data*

While we are making progress on equitable flood protection at Harris County, it is vital that federal government funding be available to complement our efforts.

**Call to Action**

As this testimony has outlined, there are many challenges on the road to providing resilient housing and flood protections to our most vulnerable communities. However, there are important steps this subcommittee and HUD can take to support Harris County and other similar communities along the Gulf Coast that are prone to major rain events.

Most importantly, I urge this subcommittee to provide oversight of the State of Texas’s General Land Office (GLO) to make sure that federal disaster recovery funds are used as they were originally intended by Congress.

Overall, there is a need to restructure infrastructure programs to direct resources to historically under-invested areas. The National Economic Development (NED) plan, which requires a high Benefit to Cost Ratio (BCR) analysis to justify federal investment in flood risk reduction projects, ultimately ignores the more economically distressed and rural communities across the United States. This results in projects prioritized in high-income areas simply because home values are higher. The administration should develop a new formula that directs resources towards urgent infrastructure needs in low-income communities.<sup>18</sup>

I support additional federal investments in flood and other disaster relief with adequate oversight to ensure that communities hit the hardest by natural disasters receive their fair share. Legislation

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<sup>18</sup> <https://www.houstonchronicle.com/opinion/outlook/article/Opinion-4-ways-Biden-can-address-racial-inequity-15982052.php>

such as the Chairwoman's Housing is Infrastructure bill would provide additional funding for the Community Development Block Grant-DR program. Representative's Al Green's legislation, the "*Reforming Disaster Recovery Act of 2019*" (H.R. 3702), includes important measures to improve the program and establishes safeguards and tools to ensure that federal recovery efforts reach all impacted households, including those with the lowest incomes who often suffer the worst during disasters and have the fewest resources to recover afterward.<sup>19</sup>

### **Conclusion**

Natural disasters, paired with historical inequality, have produced a disaster recovery system that often excludes low-income communities and communities of color, while offering an advantage to property owners in wealthier communities. In our community, there are already discriminatory efforts underway to strip people's voting rights, and the health care safety net for uninsured residents through the Texas' 1115 Medicaid waiver. We have an opportunity to address the natural disasters that we know will only become a greater challenge for our residents, and I urge this Committee to support policies that increase transparency, efficacy, and accountability in our federal disaster recovery programs.

I want to thank Chairwoman Waters, Chairman Emmanuel Cleaver, Members McHenry and Stivers, and my friend and colleague, Congressman Green for inviting me to testify today.

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<sup>19</sup> National Low Income Housing Coalition. *Reforming Disaster Recovery Act* Passes House of Representatives with Bipartisan Vote. November 2021.



## Appendix

### **State of Floodplain Regulatory Resilience for Harris County as of May, 2021:**

Over the last two years, Harris County has adopted the strictest floodplain regulations in the country, with the goal of protecting both current and future residents of the County alike.

#### Internal Actions Taken By Harris County

After Hurricane Harvey, Harris County recognized that immediate action was needed for new land development in Harris County to mitigate the effects of higher rainfall rates. As a result, Harris County has instituted the following changes:

- Greater volumes of detention are provided by land developers to offset their new development's impact on other, existing development.
- New structures are constructed to a higher elevation than before to lessen their risk of flooding (e.g. floor elevations constructed 36" above the mapped 500-year elevation for critical facilities, compared to previous elevations constructed 36" above the mapped 100-year elevation).
- Structures in the 500-year floodplain are considered in need of elevation, not just structures in the 100-year floodplain.
- Homes and other structures are required to be at a higher elevation if they are being substantially improved.
- Stronger, more resilient foundations are required for elevated homes in areas of higher risk.
- Warnings are provided on official platting documents when homes are being constructed in floodplain areas.

If not for the unprecedented rate and severity of storms hitting Harris County, measures such as these would only be undertaken when new floodplain maps are adopted. However, Harris County could not wait until that time. To wait would mean even more damage to the County's most vulnerable populations. Thus, Harris County took immediate action to become more flood resilient now.

#### Necessary Regional Effort

The rules above apply for Harris County's regulatory jurisdiction, which is over the approximately 2 million residents of unincorporated Harris County. However, Harris County knows that flooding and flood impacts do not respect political boundaries. Therefore, on May 19, 2020, Harris County Commissioners Court adopted a policy stating that any political entity draining to Harris County that did not adopt ordinances or regulations to protect others from flooding prior to December 2020 would become ineligible for new partnership projects with Harris County. Harris County further provided assistance to any local government that wished to update their regulations or ordinances to become more flood resilient. As of May 1, 2021, fourteen such local governments updated their regulations/ordinances to become a more flood resilient. Harris County continues to work with many other jurisdictions to encourage regional flood protections for our greater region.