HURRICANE HARVEY RECOVERY: STEPS TOWARDS IMPLEMENTATION

PROGRESS REPORT
2020
### ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CDBG-DR</td>
<td>Community Development Block Grant – Disaster Recovery</td>
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<td>CDBG-MIT</td>
<td>Community Development Block Grant – Mitigation</td>
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<td>DRRA</td>
<td>Disaster Recovery Reform Act</td>
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<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
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<td>FIF</td>
<td>Flood Infrastructure Fund</td>
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<tr>
<td>FIN</td>
<td>Finance Department – City of Houston</td>
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<td>GLO</td>
<td>General Land Office – State of Texas</td>
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<td>GSD</td>
<td>General Services Department – City of Houston</td>
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<td>HbAP</td>
<td>Homebuyer Assistance Program</td>
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<td>HCDD</td>
<td>Housing and Community Development Department – City of Houston</td>
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<td>HCFCFD</td>
<td>Harris County Flood Control District</td>
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<td>HELP Act</td>
<td>Hazard Eligibility and Local Projects</td>
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<td>HMGP</td>
<td>Hazard Mitigation Grant Program</td>
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<td>HoAP</td>
<td>Homeowner Assistance Program</td>
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<td>HPW</td>
<td>Houston Public Works – City of Houston</td>
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<tr>
<td>HRC</td>
<td>Housing Resource Centers</td>
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<td>HUD</td>
<td>United States Department of Housing and Urban Development</td>
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<td>Mfam</td>
<td>Multifamily Recovery Program</td>
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<td>NFIP</td>
<td>National Flood Insurance Program</td>
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<tr>
<td>NRC</td>
<td>Neighborhood Restoration Centers</td>
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<td>PA</td>
<td>Public Assistance</td>
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<td>HPARD</td>
<td>Parks and Recreation Department – City of Houston</td>
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<td>PS</td>
<td>Public Services</td>
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<td>SBA</td>
<td>Small Business Administration (Loan)</td>
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<td>Sfam</td>
<td>Single Family Recovery Program</td>
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<td>SR</td>
<td>Small Rental Recovery Program</td>
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<td>Supp</td>
<td>Federal Disaster Relief Supplemental Appropriations</td>
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<td>TDEM</td>
<td>Texas Division of Emergency Management</td>
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<td>TIRF</td>
<td>Texas Infrastructure Resiliency Fund</td>
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<td>TIRZ</td>
<td>Tax Increment Reinvestment Zone</td>
</tr>
<tr>
<td>TxDOT</td>
<td>Texas Department of Transportation</td>
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<tr>
<td>USACE</td>
<td>United States Army Corps of Engineers</td>
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HARVEY RECOVERY

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CITY OF HOUSTON
HARVEY RECOVERY UPDATE

Hurricane Harvey had a devastating impact on Houston, displacing many of its residents and destroying property and lives. But Houston’s commitment to recovery and resiliency is stronger than ever. One storm will not defeat this city or its people, and the City of Houston is prepared to fight to not only rebuild shattered homes, but more importantly, to protect its people. The diverse communities in Houston are what truly make this city one of the best in the nation, and our dedication to making sure Houstonians are protected is our foremost priority. By leveraging partnerships and additional funding opportunities, we have made great strides since 2017, initiating efforts to rebuild countless of homes and neighborhoods. But we still have a long way to go before we can consider our work complete; we will continue to work with local agencies and our state and federal partners to advance and expedite recovery.

Mayor Sylvester Turner’s goal is to build forward. It is to build upon and improve our designs for the future, so we don’t run into the same problems and can prepare for future disasters. The Mayor’s Recovery Office has been tasked with facilitating communication between City departments. This office acts as the microphone that allows conversation and collaboration to happen, as well as progress to be made. In terms of Harvey recovery, the Recovery team advocates for funding, oversees recovery spending, encourages cross-departmental collaboration, expedites project delivery, and provides timely release of recovery updates to the public.

The purpose of this report is to provide a snapshot on the progress of Harvey recovery efforts and the transition towards the implementation phase kicked off in November of 2018. The November 2018 report, prepared by former Chief Recovery Officer, Marvin Odum, provided a comprehensive look at the key steps taken to establish successful recovery programs. This report provides an update on implementation and highlights the successes, challenges, and lessons learned.

HURRICANE HARVEY IMPACTS

150,000+ Homes Damaged*

*FEMA reported Individual Assistance Claims. Recent data models estimate the total number of homes damaged at 209,000

37,000 Houstonians in Shelters

The Recovery team continues to focus on 4 strategic priorities

- Restoring and strengthening Houston’s Housing
- Repairing city-owned assets and protecting them from future risk
- Enhancing and accelerating the City’s work on flood mitigation
- Helping people and their neighborhoods recover
In November 2018, Marvin Odum's leadership as Chief Recovery Officer came to a close after serving the City for 14 months. Mayor Turner then appointed Stephen Costello to the position to lead the recovery efforts into the next phase. While the first 14 months of recovery provided many lessons in terms of advocacy and the structuring of recovery programs, the subsequent phase has presented a unique set of opportunities and challenges. With a focus on advancing recovery programs and expediting project delivery, the Recovery team has focused on addressing the challenges and taking recovery one step further, to ultimately transform Houston and to repair and rebuild our communities with resiliency in mind.
RESTORING AND REPAIRING HOUSTON’S HOUSING

Launched 4 housing programs, including the Homeowner Assistance Program, to help impacted Houstonians repair, reconstruct, or relocate their homes.

Selected 15 multifamily developments to receive $163 million in funding through the Harvey Multifamily Program, which will create more than 1,600 rental homes. 1,348 units are guaranteed affordable for income-qualified renters.

Conducted Housing Seminar for emergency managers in the Houston urban area to increase knowledge of private and public recovery programs.

REPAIRING CITY-OWNED ASSETS AND PROTECTING THEM FROM FUTURE RISK

#1 recipient of Harvey reimbursements over the last 12 months for the entire State of Texas.

Identified 553 permanent repair projects and implemented “ball in court” program to fast track 87 projects totaling over $169 million.

Successfully advocated for funding for disaster recovery management and administrative costs, and received $11 million to help replenish the City’s Rainy Day Fund.

ENHANCING AND ACCELERATING THE CITY’S FLOOD MITIGATION

Submitted 5 applications for FEMA’s Hazard Mitigation Grant Program and received award for three projects: Inwood Forest Golf Course, Houston Dam, and North Canal totaling almost $230 million.

Advanced the passage of one of the most important bills in the 86th Texas Legislative Session (Senate Bill 7), which will allow the City of Houston to pull down over $200 million for local match flood for mitigation projects and repair work.

Launched new platform for emergency alerting and improved mobility map to identify flood prone roadways in 5 different languages.

HELPING RESTORE PEOPLE AND THEIR NEIGHBORHOODS RECOVER

8 million cubic yards of debris have been collected including material from ongoing dredging of the West Fork San Jacinto River and Lake Houston.

Selected to receive $18 million from FEMA, more than twice the amount received in 2015 and 2016, to help 85 Houstonians elevate their homes.

Developed, in coordination with the Regional Recovery Workgroup, a recovery plan template and pre-disaster recovery planning tools.

Developed draft Local Action Plan for implementation of $61.8 million CDBG-Mit funding.
LAUNCHED BUILD IT FORWARD HOUSING PROGRAM IN JANUARY 2019

20 THOUSAND SURVEYS COMPLETED BY HOUSTONIANS FOR HOUSING ASSISTANCE

5 THOUSAND HOMEOWNERS MOVING THROUGH THE HOUSING APPLICATION PROCESS
As of the February Situation and Pipeline Report, 5,624 Homeowners have completed an application and are being moved through the process. The Situation and Pipeline Report can be found at https://recovery.houstontx.gov/transparency/

163 MILLION DOLLARS MADE AVAILABLE FOR 15 MULTIFAMILY PROJECTS
Additional Notice of Funding Availability (NOFA) issued January 14, 2020. Second NOFA expected to allocate between $75 million and $100 million. HCDD - working with the Chief Resilience Officer - has added requirements that encourage more resilient design in order to compete for CDBG-DR dollars.

5 SUBMITTED APPLICATIONS FOR FEMA HMGP
And received award for three projects: Inwood Forest Golf Course, North Canal and Lake Houston Dam, totaling almost $230 million.

7 ADVANCED SENATE BILL 7
The passage of one of the most important bills in the 86th Texas Legislative Session (Senate Bill 7), which will allow the City of Houston to pull down over $200 million for local match for flood mitigation projects and repair work.

18 MILLION DOLLARS RECEIVED IN 2018 FEMA HOME ELEVATION GRANTS

1 THE NUMBER 1 RECIPIENT OF HARVEY REIMBURSEMENT
$42 Million for Houston First permanent repair work

553 PERMANENT REPAIR PROJECTS IDENTIFIED

8 MILLION CUBIC YARDS OF DEBRIS REMOVED AND COUNTING...
There are four federally-funded recovery programs that are managed by the City. They include programs that support recovery, repair, and reconstruction, as well as programs that encourage long-term mitigation and risk reduction.
PUBLIC ASSISTANCE

The Public Assistance (PA) program provides reimbursement assistance for debris removal, life-saving emergency protective measures, and restoration of public infrastructure. More importantly, the funding will also cover mitigation strategies, such as redesigns that will avoid the cost of damage from future disasters. The application process is lengthy, requiring various steps including preliminary damage assessments, negotiation, and multiple rounds of review prior to approval.

THE CITY OF HOUSTON ESTIMATED DAMAGES VS ACTUALS SUBMITTED TO FEMA AS OF MARCH 1, 2020

<table>
<thead>
<tr>
<th>DAMAGES</th>
<th>EXAMPLES</th>
<th>COST ESTIMATES</th>
<th>SUBMITTED TO FEMA</th>
<th>OBLIGATED</th>
<th>FUNDING RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A - Debris Management</td>
<td>Citywide debris removal, Lake Houston debris</td>
<td>$259M</td>
<td>$100M</td>
<td>$129.7M</td>
<td>$77.6M</td>
</tr>
<tr>
<td>Category B - Emergency Repairs</td>
<td>Facility clean up, police and fire overtime</td>
<td>$190M</td>
<td>$163.7M</td>
<td>$132.9M</td>
<td>$120.3M</td>
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<tr>
<td>Category C - Roads &amp; Bridges Repair</td>
<td>West Lake Houston Pkwy bridge</td>
<td>$65M</td>
<td>$2.8M</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Category D - Stormwater</td>
<td>Drainage channels</td>
<td>$10M</td>
<td>$96,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Category E - Buildings</td>
<td>City assets - City Hall, fire stations, libraries, etc.</td>
<td>$625M</td>
<td>$129.5M</td>
<td>$46.7M</td>
<td>$27.5M</td>
</tr>
<tr>
<td>Category F - Water/Wastewater Utility</td>
<td>Pump Stations and drinking water facilities</td>
<td>$1.1B</td>
<td>$51.9M</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Category G - Other</td>
<td>Parks, flooded vehicles</td>
<td>$40M</td>
<td>$32M</td>
<td>$29.8M</td>
<td>$16M</td>
</tr>
<tr>
<td>Category Z - Management Costs</td>
<td></td>
<td>$ - -</td>
<td>$16M</td>
<td>$16M</td>
<td>$16M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$2.2B</strong></td>
<td><strong>$496.86M</strong></td>
<td><strong>$335.1M</strong></td>
<td><strong>$257.4M</strong></td>
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For information on the steps involved with the PA process, please see appendix 1.
**PUBLIC ASSISTANCE IMPLEMENTATION WITHIN THE CITY**

**GENERAL SERVICES DEPARTMENT (GSD)**

Moving forward with repairs, reconstruction, and mitigation plans for our city facilities - libraries, police and fire stations, and other civic buildings

**HOUSTON PUBLIC WORKS (HPW)**

Leading recovery of city infrastructure including roads, bridges, stormwater assets, and water and wastewater facilities

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**MILESTONES**

69 Projects submitted to FEMA for review

5 Priority projects advancing

Identified 11 additional priority projects

Hazard Mitigation Plans have been submitted to FEMA and are awaiting approval

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**MILESTONES**

No observable pavement damages as a result of Hurricane Harvey

132 facilities and sites have been reviewed, totaling an estimated $1.1 billion in damages

Agreement is in progress with U.S. DoT to finalize details of economic recovery grant that will implement new technology in 27 flood-prone underpasses.

Successfully completed detailed damage assessment for all facilities, consolidating projects in FEMA Grants Portal

Hazard Mitigation Plans for each facility are in progress coordinating with Waste Water consolidation efforts.
"It is the City’s hope that after reading this report, our most important focus, Houstonians, will have a better understanding of the current progress of Harvey recovery, the role that various City agencies take in the process, and the steps needed to accomplish the goal of a stronger, safer, and smarter Houston."

Mayor Sylvester Turner
The City of Houston is committed to building a resilient and equitable city after Hurricane Harvey. Our housing recovery programs seek to build safe and affordable homes across our city, in communities where people can thrive. Through the Housing and Community Development Department (HCDD), we administer approximately $1.3 billion through 7 housing recovery programs. The 4 programs outlined here - Homeowner Assistance, Homebuyer Assistance, Multifamily and Public Services - will be joined in 2020 by Singlefamily Development, Small Rental, Economic Development, and Buyout programs. Funds for Harvey Recovery Programs are provided by the City of Houston and the Texas General Land Office through the U.S. Department of Housing and Urban Development’s Community Development Block Grant Disaster Recovery Program (CDBG-DR).

HOMEOWNER ASSISTANCE PROGRAM

Repairs and rebuilds Harvey-damaged homes and provides reimbursement for work already completed for homeowners

KEY FACTS

$440 M total funding available

2024 GOAL

4,000-5,000 homeowners receive assistance

MILESTONES

Program launched in January 2019

Priority 1

Elderly, With Disability, and Less Than 80% AMI

Priority 2

Elderly, With Disability, and Children

Priority 3

Elderly, With Disability, and Less Than 80% AMI

Priority 4

Children, and Less Than 80% AMI

Priority 5

Any Household, Below $55,000

Priority 6

All Other Households

As of March 1st, 20,700 Surveys have been completed and of those more than 5,000 are progressing through the application process

HOMEBUYER ASSISTANCE PROGRAM

Helps Houstonians realize the dream of homeownership by providing up to $30,000 to buy a home

KEY FACTS

$21 M total funding available

2024 GOAL

700 homebuyers receive down payment and closing cost assistance

MILESTONES

Increased the number of homebuyers who can participate in the program by raising the income cap from 80% Area Median Income (AMI) to 120% AMI

61 applicants have closed on new homes in Feb. 2020

For information on Housing programs, please see HCDD one-page documents provided in the appendix.

*all numbers are approximate
**MULTIFAMILY PROGRAM**

Creates high quality rental homes that Houstonians can afford in transit-oriented, resilient developments across the city

**KEY FACTS**

- **$350 M** total funding available

**2024 GOAL**

- **1,600** affordable rental units created or repaired

**MILESTONES**

- 1,348 guaranteed affordable units awarded funding
- $163 Million awarded for 15 new developments in July 2019
- Workforce Protection Measures adopted in April 2019
- Next round of funding for $75-$100 Million posted in January 2020
- Next round of funding to require resilient design, March 2020

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**PUBLIC SERVICES**

Provides services to underserved Houstonians to help them overcome social and economic barriers

**KEY FACTS**

- **$60 M** total funding available

**MILESTONES**

- First of three rounds of funding announced in a $15 Million request for proposals
- Includes $4 Million for services for people experiencing homelessness
- 33 proposals are being evaluated, with awards to be announced in October 2019
HAZARD MITIGATION GRANT PROGRAM (HMGP)

Supports recovery efforts by providing assistance to enact mitigation measures to reduce the risk of loss of life and to property.

<table>
<thead>
<tr>
<th>STATE</th>
<th>$1 B*</th>
<th>Available for Texas</th>
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<tbody>
<tr>
<td>LOCAL</td>
<td>$300 M*</td>
<td>Available for Houston, including local match</td>
</tr>
<tr>
<td>MATCH</td>
<td>25%</td>
<td>This program requires local governments to match 25% of the total funding.</td>
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The application process is lengthy, requiring various steps of review.

For additional information about HMGP projects, please see HPW one-page documents provided in the appendix.

*all numbers are approximate
COMMUNITY DEVELOPMENT BLOCK GRANT - MITIGATION

The City is expected to receive funding explicitly for rebuilding infrastructure and flood mitigation projects.

MILESTONES

HUD Rules for Mitigation program published August 23, 2019

GLO released draft State Action Plan for $4.3 Billion on November 21, 2019

The City of Houston released a CDBG-MIT Action Plan on December 13, 2019.

NEXT STEPS

Internal collaboration between key City departments and coordination with HCFCD to identify joint mitigation project opportunities

Advocate for additional funding opportunities through the Texas GLO

DEBRIS REMOVAL - WEST FORK SAN JACINTO RIVER AND LAKE HOUSTON

Deposition of sediment due to Harvey has exacerbated flood risk in Lake Houston and West Fork San Jacinto River areas.

FEMA

2.25M cubic yards

Removed via dredging by USACE between U.S. 59 and Lake Houston

MILESTONES

Completed field assessment for determination of material deposited at mouth bar

NEXT STEPS

Continue negotiations with FEMA for PA funding for additional dredging and/or mission assignment extension

Coordinate with local agencies and Texas Water Development Board for dredging of beyond the mouthbar, including East and West Fork San Jacinto and Lake Houston

After securing alternative dredge material disposal site, we continue to identify opportunities and develop a long-term dredging plan

ADDITIONAL EFFORTS
GOVERNMENT RELATIONS
POLICY UPDATES

Our Government Relations team has worked to push policies that will help expedite recovery and make Houston more resilient.

LOCAL MATCH

In the aftermath of Hurricane Harvey, the City has stretched its budgets to the limit. Access to the State’s Economic Stabilization Fund, more commonly known as the “Rainy Day Fund”, to cover local match for both the Public Assistance and Hazard Mitigation Grant FEMA programs can maximize recovery efforts.

There are two critical pieces of state legislation that ensure grant dollars help finance the projects: Senate Bill 7 and Senate Bill 500. While Senate Bill 7 provided the structure of the local match funding program, Senate Bill 500 appropriated over $630 million in funding to distribute to affected cities and counties across Texas.

The legislation limits the amount of funding from the State to be no more than 75% of the cost of the local match for each PA or HMGP project. Houston is expected to receive over $200 million.

FLOOD RESILIENCE: STATE SB 7 FUNDING ACCOUNTS

Senate Bill 7 is the mechanism for more than $2 Billion in flood recovery and resilience funding appropriated by the supplemental appropriations bill - Senate Bill 500. SB 7 creates two funds - the Texas Infrastructure Resiliency Fund (TIRF) and the Flood Infrastructure Fund (FIF) - administered by the Texas Water Development Board, to address both immediate recovery needs and the future of mitigation.

- **TIRF**: $857 Million
  - $638 Million: Harvey Recovery Local Match
  - $127 Million: For future appropriations or to implement initial State Flood Plan
  - $365 Million: FEMA Public Assistance* Total cost over $3.5B Local Share 10%
  - $273 Million: FEMA Hazard Grant Mitigation Program* $3.8B Requested Federal Share capped at $4.2B

- **FIF**: $793 Million
  - $47 Million: Update Flood Risk Maps throughout the State
  - $700 Million: Future Infrastructure Projects

- **OTHER FIF**: $350 Million
  - $150 Million: Soil and Water Conservation Board Dam Infrastructure Projects
  - $200 Million: General Land Office US Army Corps of Engineers Projects

*as of February 2019 limited to states and counties affected by Harvey
The local match will cover the 25% needed for the HMGP program and the 10% for the PA program which amount to approximately $200 million.

For HMGP, this means that the federal share will be 75%, the state share will be 18.75%, and the remaining 6.25% of the costs would be covered by the other local partners including the City.

For PA, this means that the federal share will be 90%, the state share will be 7.5%, and the remaining 2.5% of the costs would be covered by the other local partners including the City.
Critical for ensuring that individuals and families are given the proper information concerning the flood risk of what is often the largest investment of their lifetime—their

FLOOD DISCLOSURE - SB 339

Currently, sellers of residential property are required to disclose whether the property is located in a 100-year floodplain, has current flood insurance, or has experienced previous flooding or water penetration. Hurricane Harvey clearly demonstrated that many homeowners were not given proper notice of the potential flood risk associated with their property. Senate Bill 339 by Senator Joan Huffman addresses this issue by significantly improving the flooding information provided to prospective homebuyers. The bill requires that sellers of residential property must give enhanced notice about the flood-prone status of the property.

REDUCED VALUATION - SB 812

Amends the current law and places a limit on the appraised value of a home for ad valorem tax purposes to an improvement related to storm damage.

Texans who receive help after a natural disaster through various federal programs should not have to consider refusing assistance due to concerns about a higher tax bill. If home rebuilds are considered the same as new improvements, low- to moderate-income residents who lost their homes in Hurricane Harvey could face the possibility of additional strain in the form of higher taxes. Through Senate Bill 812 by Senator Eddie Lucio, the Legislature recognized that homes which are rebuilt via recovery programs should not to be treated as new improvements by appraisal districts. The bill places a limit on the appraised value of a residence for ad valorem tax purposes to improvements that are related to replacement of wind or water damaged structures, rendered unsafe or uninhabitable.
The Hazard Eligibility and Local Projects (HELP) Act was introduced to address post-Harvey recovery projects and aims to speed up the start of recovery projects after natural disasters, even while waiting for federal assistance through FEMA's mitigation grant program. Under current law, local and state agencies applying for federal money to begin recovery projects must wait until they receive approval from FEMA before purchasing land or starting construction. The Mayor’s Office of Government Relations and the Chief Recovery Officer will continue to advocate for more flexible program requirements that expedite project delivery though pre-award activity authorization.

The bill, House Resolution 2548, was passed by the House of Representatives on December 17, 2019 by a vote of 409 to 7. It was referred to the Senate Committee on Homeland Security and Governmental Affairs. US Senator John Cornyn plans on introducing the HELP Act on the Senate along with his cosponsors Sen. Ted Cruz, Sen. Tom Tillis, and Sen. Doug Jones.

The lack of standardization and codification with the Community Development Block Grant-Disaster Recovery (CDBG-DR) program has led to recovery inefficiencies and delays in the delivery of programs to communities in need following a disaster. The Green-Wagner bill was introduced to ensure the efficient and equitable distribution of disaster relief funds for vulnerable communities. The bill codifies in federal law the fundamental requirements and policy objectives of the CDBG-DR program administered by HUD. The bipartisan reform is supported by a full spectrum of stakeholders including low income housing advocates and grantees responsible for delivering funds to individuals.

The bill, HR 3702, was passed by the House of Representatives on November 18, 2019 by a vote of 290 to 118. It was referred to the Senate Committee on Banking, Housing, and Urban Affairs.
HELPING RESTORE
PEOPLE AND NEIGHBORHOODS

NRC TO HRC
The NRCs provided public and private disaster recovery services to Houstonians and established public-private partnerships to support communities in need.

TYPES OF SERVICES OFFERED:
Housing | Transportation | Food Supply | Home Repair | Case Management | Legal Assistance

MILESTONES
The program has been institutionalized for future disasters

The Housing Recovery Centers (HRCs) opened in January 2019

PREPARING FOR RECOVERY
Additional efforts to prepare and improve the recovery process for future disasters have taken place

PRE POSITIONED CONTRACTS
Implemented across all departments for immediate activation of services following a disaster.
Types include: debris management | damage assessments | materials and resources

INSURANCE
Changed our insurance program to provide a higher limit to flood claims and give Houston First access to funding immediately

TRAINING
Completion of annual inter-departmental disaster cost recovery training which includes:
Contracts and Procurement | Insurance | Timekeeping | Project Formulation

OFFICE OF EMERGENCY MANAGEMENT
Launched a new emergency alert system, improved communication for local hazards in various languages, and engaged in regional collaboration for preparation of disaster recovery planning tools
"One storm will not defeat this city or its people, and the City of Houston is prepared to fight to not only rebuild shattered homes, but more importantly, to protect its people through partnerships and investment in infrastructure."

Mayor Sylvester Turner
While strides have been taken to resolve many challenges, others remain and must still be addressed.

**CONTINUING COLLABORATION**

**WEEKLY LEADERSHIP MEETINGS**
To advance housing and infrastructure projects and expedite receipt of funds

**COORDINATION WITH**
LOCAL | STATE | FEDERAL PARTNERS
Harris County (Local)
HCFCD (Local)
TxDOT (State)
TDEM (State)
GLO (State)
FEMA (Federal)
HUD (Federal)
USACE (Federal)

**NEXT STEPS**
Opportunity to leverage recovery with private, non-profit, and academic sectors to provide a variety of technical, personnel, and financial resources to help drive recovery projects

**BUILDING CAPACITY WITHIN CITY TEAMS**

**TRAINING**
Annual City of Houston disaster recovery trainings

**LETTERS OF AGREEMENT**
Between HPW, HCDD, Legal, and Controller Office to support the Housing program’s resource and staffing needs

**MAYOR’S OFFICE**
Expansion of the Mayor’s Office of Recovery to provide additional technical assistance to HCDD, HPW, and GSD recovery process

**DRRA 2018**
Provide reimbursement assistance for indirect project administrative and management costs related to HMGP or PA processes.
Recovery is a long-term process that will take years to fully execute.

**REVIEW**
- Applications for HUD and FEMA programs require multiple audits at the state and federal levels.

**DELAYS**
- The slow release of HUD rules for mitigation funding has halted the pace for mitigation projects.

Efforts to streamline have taken place.

**REVIEW**
- Quarterly meetings with FEMA Region VI leadership and staff have been instituted.
- Coordination with State of Texas General Land Office to expedite intake, eligibility and approval of HoAP applications.
- Infrastructure projects have been identified in advance of application period for different sources of funding.

**NEW CHALLENGES**
- Reimbursement for recovery programs are constraining the City’s budget and creating potential delays in programmed departmental work.

CASE FOR ADDITIONAL FUNDING

No additional funding has come, but the City continues to advocate at state and federal levels for continuous support of recovery.

$19 Billion for Recovery and Resilience... But More Still Needed

16B Residential Damage

13B Residential Damage

3.13B

1.3B

unmet need for seriously damaged homes*

1.96B

remaining unmet need for seriously damaged homes

Funding from HUD does not cover all of the unmet need for seriously damaged homes.
In August 2018, on the one-year anniversary of Hurricane Harvey, Mayor Turner, 100 Resilient Cities – Pioneered by the Rockefeller Foundation, and the Shell Corporation joined forces to name Houston as the 101st member of 100 Resilient Cities. Shell provided a $1.8 Million sponsorship that enabled Houston to join the network, hire a Chief Resilience Officer for two years, and develop and begin implementing the Resilience Houston strategy.

Over the past year, this partnership has advanced the Resilience Strategy development process for Houston by conducting research, developing a resilience assessment, and forming a 100+ representative interdisciplinary working group focused on five areas of resilience: Achieving Equity & Inclusion, Building Forward, Improving Health & Safety, Integrating Housing & Mobility and Living with & without Water.

All of these efforts have contributed to the drafting of the Resilient Houston Strategy.

Our work doesn't end there. The Climate Action Plan, led by Department of Administration and Regulatory Affairs, will identify strategies to demonstrate the capacity to reduce the severity of climate hazards in the future. Many departments have also started implementing more resilience-focused programs that will rebuild, transform, and protect communities which include:

The Planning Department is

- **Reviewing Off-Street parking requirements to encourage more density and productive use of land.**
- **Creating the Affordable Housing Conversation Strategy to restore and rehabilitate affordable housing stock.**
- **Incorporating a Pedestrian plan into the Complete Streets program to establish a more user-friendly pedestrian network.**
- **Aiming to meet Vision Zero goal by 2030 to improve safety for all road users.**

Houston Public Works is

- **Moving forward with Modeling, Assessment and Awareness Project (MAAPnext) to provide a better understanding of flood risks in Houston, including unmapped urban flooding by 2021.**
- **Proposing elevation of homes outside of the regulatory floodplain to 18 inches above crown of the road.**
- **Looking to adopt new rainfall data, commonly referred to as Atlas 14, for current and proposed Capital Improvement Projects.**

Various departments are working through a cross-departmental team to advance green infrastructure and integrate these systems through the implementation of the incentives for Green Development plan, incorporate green infrastructure within public right-of-way and assets, and encourage neighborhood demonstration projects.
**NEXT STEPS FOR RECOVERY**

Houston strives to be a city that listens to its people and continues to prioritize Houstonians' well-being and safety. *While recovery is a long-term process that will take multiple years to complete, we have taken great strides, shifting our focus towards implementation and expediting project delivery to provide relief to those in need.* Through Mayor Turner’s leadership, the City’s Recovery team will set the stage for building a post-Harvey legacy, working with all City departments and our various recovery partners to build forward towards a resilient, stronger, and more equitable Houston.

Looking ahead, we must continue to expedite the recovery process, engage with our partners, and integrate recovery into all City efforts to address the many challenges described. We will continue to explore opportunities to leverage existing programs across the City and region to protect Houstonians from future storms. Our next steps include:

<table>
<thead>
<tr>
<th>Continued interdepartmental and interagency collaboration to advance Housing, HMGP, and PA programs.</th>
<th>Expediting the release of funding assistance to individuals through the various Housing programs.</th>
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</thead>
<tbody>
<tr>
<td>Obtain approval for FEMA TIRZ 17 Underground Detention project and home mitigation applications.</td>
<td>Finalizing FEMA PA reviews for all Houston Public Works project submittals.</td>
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<tr>
<td>Moving forward with the recovery, repair, reconstruction, and mitigation of GSD facilities.</td>
<td>Programming the use of future HUD CDBG-MIT funding.</td>
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<td>Monitoring policy, like the HELP Act, to ensure rules are conducive for more efficient future recoveries that minimize bureaucratic delays.</td>
<td>Focusing on continuous improvement to expand our knowledge of disaster recovery.</td>
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<tr>
<td>Coordinating with local agencies for implementation of SB500 and HB1824 for debris and sediment removal of the West Fork San Jacinto River and Lake Houston.</td>
<td>Advancing the Donated Resources program.</td>
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<tr>
<td>Building new partnerships with the private sector to bridge our funding gap for resilience and recovery projects.</td>
<td>Implementing city-wide readiness initiatives, such as Alert Houston and Emergency Response Plan Actions.</td>
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