Houston Action Plan for Disaster Recovery – 2015 Flood Events

CITY OF HOUSTON HCDD

Originally Submitted: September 19, 2016; Amendment 9 (Non-Substantial)

Summary of Changes for Non-Substantial Amendment 9

Summary of Changes as of 6/10/2026

The City has made the following changes to the budget activity in the CDBG-DR15 Action Plan, as shown below:

- Added definition (footnote) to define activity and project
- Updated address and locations of the DR15 action plans and amendments
- Updated minor amendment section to non-substantial amendment
- Updated the definition of non-substantial amendment
- Added a transparency notice section
- Added a table to explain the difference between a substantial amendment, non-substantial amendment, and transparency notice

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Introduction

In 2015, the City of Houston, Texas (the City) experienced two major flooding events. As a result of these catastrophic flooding events, 9 lives were lost (7 in May event[1], 2 in October[2]), over 6,000 homes flooded (single family, multifamily, etc.) and critical public infrastructure suffered substantial damage or total destruction. Each event greatly impacted the Houston area, and many properties actually experienced damages from both events. Hereafter in this Action Plan, these two floods will be referred to collectively as the "2015 Disasters."

The first flood occurred during the month of May 2015 and continued into early June 2015 bringing record rainfall upon the City (the Memorial Day Flood). Heavy downfalls, reaching record levels, led to the devastation from the Memorial Day Flood totaling more than 14 inches, with 12 inches of rain falling on areas of the City in only ten hours[3]. Floodwaters inundated the City, bringing Houston to a standstill. The record-breaking rainfall closed portions of I-10 and I-45.[4] Approximately 800 cars were stranded on the highways surrounding Houston and more than 80,000 Houstonians were without power at one point during these storms[5]. On May 29, 2015, the Memorial Day Flood received a disaster declaration through FEMA identified as FEMA 4223 (DR-4223).[6]

A second catastrophic flooding event occurred over a three-day period from October 30, 2015 to November 1, 2015 (the Halloween Flood). For the second time in less than 6 months, a strong complex of storms moved through the Houston area leading to torrential rainfall resulting in as much as 12 inches of rainfall in some locations of Houston,[7] leaving 202 streets flooded[8] and 47,000 homes reporting power outages at some time during the storms.[9] On November 25, 2015, the October flooding event received a disaster declaration through FEMA identified as FEMA 4245 (DR-4245).[10]

The combined impacts of the 2015 disasters impacted at least 36,000 people in Harris and Fort Bend Counties alone.[11]

During the months following the 2015 Disasters, efforts made by the City as well as its numerous agencies and public offices have demonstrated Houston's commitment to recover, rebuild, and focus on resilience for its citizens. The Department of Housing and Urban Development's (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program provides additional resources for the City to address a variety of community development needs stemming from events such as those suffered by the City through the 2015 Disasters. On June 22, 2016, HUD released $299 million dollars in CDBG-DR funds for the specific purpose of assisting recovery in the most impacted and distressed areas receiving a major disaster declaration in 2015 under Title IV of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.). Based on HUD's analysis of unmet needs, Houston

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[1] CNN, "*Houston flooding: 8 dead*", http://www.cnn.com/2016/04/20/us/houston-texas-flooding/

[2] US News, "*The Latest on Texas storms*", http://www.usnews.com/news/us/articles/2015/10/31/the-latest-on-texas-storms-flooding-affects-houston-area

[3] *Houston Chronicle, "Remembering Houston's Memorial Day Floods", http://www.chron.com/houston/article/Remembering-Houston-s-Memorial-Day-floods-7944644.php by: Jessica Hamilton*

[4] *NBC News, Alexander Smith, Shamar Walters, & Henry Austin, "Houston, Texas, hit by Unprecedented Flooding; Seven States At Risk", http://www.nbcnews.com/news/weather/houston-texas-hit-unprecedented-flooding-seven-states-risk-n364456*

[5] http://www.nytimes.com/2015/05/27/us/texas-rains-bring-flooding-to-houston-area.html?_r=0

[6] 80 FR 32581

[7] *Houston Chronicle, Harvey Rice, Fauzeya Rahman, & Daniel Perez, "Storms subside but rescues continue; 2 dead", http://www.chron.com/houston/article/Overnight-rain-leaves-cars-stranded-kids-worried-6602509.php*

[8] *Houston Chronicle, Jaimy Jones, "Map shows flood damage in Houston", http://www.chron.com/news/article/Map-shows-flood-damage-in-Houston-6606313.php*

[9] *Houston Chronicle, Harvey Rice, Fauzeya Rahman, & Daniel Perez, "Storms subside but rescues continue; 2 dead", http://www.chron.com/houston/article/Overnight-rain-leaves-cars-stranded-kids-worried-6602509.php*

[10] 80 FR 77648

[11] Greater Houston Storm Recovery Network, "Quick Facts", www.houstonfloodrecovery.org

was initially allocated $66,560,000 and then an additional $20,532,000 in 2017 to assist in the recovery from the 2015 Disasters. (This specific allocation will be referred to throughout the Action Plan as CDBG-DR15 or the CDBG-DR15 Program.)

In order to receive the CDBG-DR funds, the City is required to publish an Action Plan for Disaster Recovery (Action Plan) that describes the proposed use of the funds associated with recovery from the 2015 Disasters. HUD regulations require Houston to determine unmet needs in the areas of housing, infrastructure, and the economy.

The programs outlined in this Action Plan describe how Houston will use its allocation to support recovery from the 2015 Disasters in the most impacted and distressed areas as resilience is built protecting its citizens against the certainty of future flooding events. The programs and projects detailed in this Action Plan include those, which will address impacts to the housing sectors, build and support housing through infrastructure resiliency improvements, as well as other city planning services. In order to ensure consistency with the City's current community development priorities, the Mayor of Houston has designated the Houston Housing and Community Development Department (HCDD) as the responsible entity for administering the CDBG-DR15 funds. HCDD will serve as the administrative and fiscal agent, responsible to HUD for the CDBG-DR15 Program oversight, reporting, and compliance under the general guidance of the Office of the Mayor.

To ensure that fraud, waste, and misuse of funds does not occur, effective controls must be in place and monitored for compliance. Accordingly, on July 22, 2016, the City submitted Risk Analysis Documentation and an Implementation Plan to HUD. This plan demonstrates that the City can effectively manage these funds, ensure timely expenditure of these funds, maintain a comprehensive website regarding all activities assisted with these funds, and ensure timely communication of application status to applicants for disaster recovery assistance.

This Action Plan was developed with the help of many state and local stakeholders. The results of this collaboration will best direct the portion of the unmet need that can be addressed by this limited federal assistance. Accordingly, the City, by and through HCDD, submits this Action Plan to HUD outlining its unmet needs, as well as detailing how the City will allocate its funds through its CDBG-DR15 Program.

Action Plan Updates Pursuant to Public Comment and Stakeholder Input

Since beginning the planning process for the Action Plan for Disaster Recovery – 2015 Flooding Events (Action Plan), this final Action Plan has evolved into a more detailed document based primarily on three factors. First, additional data has been obtained since publishing the initial draft. This data includes, but is not limited to, FEMA Individual Assistance data on the October 2015 Floods, data from the City of Houston's Office of Emergency Management on recipients of substantially damaged property letters, and data from infrastructure inspections performed by Housing and Community Development Department consultants, Tetra Tech. Second, comments and letters received during the public comment period, as well as those received during the public hearing of August 18, 2016, along with feedback received during resource meetings with community leaders and others that took place following the August 18, 2016 public hearing, have been included as part of a comprehensive public engagement assessment contained in the appendix of this Action Plan. Third, the programs have been more fully defined; and all of this additional data and information has been analyzed and used to inform the further development of this plan. Moreover, this data and these conversations have resulted in the updated budget allocation, including the addition of the Single Family Housing Program and the carve-out of the Strategic Buyout budget line item from the original Infrastructure line item.

The City published an initial draft Action Plan on August 9, 2016 for the public's review and input. A 14-day public comment period was open from August 9-August 23, 2016. During this time period, citizens were afforded the opportunity to submit comments, questions and suggestions regarding the initial program design set forth in the published draft Action Plan. A total of 27 submissions containing citizen input were received by the City during this time. Each submission was considered in detail and taken under advisement. In addition to the consideration of the comments received, various meetings were held between the City's agencies and council members to seek feedback

input regarding the needs of the communities most impacted by the 2015 Disasters and whether the draft Action Plan addressed the most critical needs given the limited funding. City officials also met with local non-profit organizations and representatives from housing advocacy groups to discuss their observations regarding the initial program design and collaborated with these groups regarding the best program design to address some of the concerns raised by these communities.

Based upon the additional input received by the public and the additional collaboration with various stakeholder groups, the City has updated its initial program design. These updates were included to answer questions, address concerns and incorporate input voiced by the public. The majority of the public's feedback pertained to the need for adequate drainage and other measures to strengthen the existing infrastructure within the affected communities to reduce flooding. Through this valuable process, a shared goal was realized amongst all stakeholders: all residents, should have the benefit of adequate drainage and other detention measures in order to stop their homes and communities from flooding. Accordingly, the City updated the program design originally contained in the draft Action Plan to accommodate these priorities.

Heeding the input from the public and additional data received subsequent to the initial publication of the Action Plan, the City updated the CDBG-DR15 program design and budget to include a Single Family Housing Program and to adjust the initial line items of the budget to separate the Strategic Buyout program, which was initially included with the Infrastructure Program. The Strategic Buyout Program is now only a separate line item still intended to support infrastructure activities. The updated CDBG-DR15 Program Budget is as follows:

Table 1: CDBG-DR15 Program Budget

Activity	Amount
Public Facilities and Improvements (Infrastructure)	$67,678,488.67
Housing (Single Family Home Repair)	$5,600,418.54
Property Buyout	$10,660,000.00
Planning	$98,492.79
Administration	$3,054,600.00
Total	**$87,092,000.00**

The Single Family Housing Program will focus on meeting the needs of Houston's LMI households. One priority of this housing program will be to address the needs of those LMI households located in higher-income areas. The goal of this focus is to allow these residents to remain in their current neighborhoods while meeting any remaining unmet need stemming from the 2015 Disasters. As detailed further in this Action Plan, eligible activities will include the provision of assistance to help applicants with improvements to their homes in order to address remaining needs and further resiliency such as elevation, hardening, repairs, or assist with remaining gap after insurance, FEMA, or any other assistance has been exhausted.

Finally, the updated draft Action Plan provides data-supported identification of disaster related housing needs within specific LMI communities. Additional data was received after the initial posting of the draft Action Plan and this data was a driving factor of the inclusion of the Single Family Housing Program. Pursuant to the data evaluated and comments received, targeted outreach will be conducted upon program implementation as the City's goal is for the Single Family Housing Program to benefit 100% LMI households.

Considering the valuable input provided by the public, non-profit organizations, city officials and other community stakeholders, the City has reevaluated and updated the CDBG-DR15 Program to better evidence the shared goal of all of the City's communities to improve the resiliency of its housing sector while simultaneously strengthening its infrastructure.

Allocation

HUD's Community Development Block Grant Disaster Recovery (CDBG-DR) program provides impacted states and cities with additional resources to address a wide range of community needs stemming from the impacts of Presidentially declared disasters. Through the CDBG-DR program, funds are to be used in order to satisfy a portion of unmet need that still remains after other federal assistance, such as the Federal Emergency Management Agency (FEMA), Small Business Administration (SBA), or private insurance, has been allocated.

The Disaster Relief Appropriations Acts (Pub. L. 114-113, approved December 18, 2015 and Pub. L. 115-31 approved May 5, 2017) (Appropriations Acts) were enacted to appropriate federal funds for disaster relief. The Appropriations Acts provide monies to States or units of general local government (UGLGs) for disaster recovery efforts in the affected areas. In total, $641.2 million was appropriated by the Federal government in CDBG-DR funds to be made available to certain communities declared to have suffered a major disaster by the President of the United States in 2015 and 2016.

Using the best data currently available to identify and calculate unmet needs for disaster relief, long-term recovery, restoration of infrastructure, and housing and economic revitalization, HUD has made the following specific allocations (Table 2) to Texas communities impacted by federal disasters DR-4223 and DR-4245. Based on this assessment, HUD notified the City that it will receive an allocation of $87,092,000 in CDBG-DR funds to assist in recovery from the 2015 Disasters.

Table 2: CDBG-DR15 Funding Breakdown for Texas

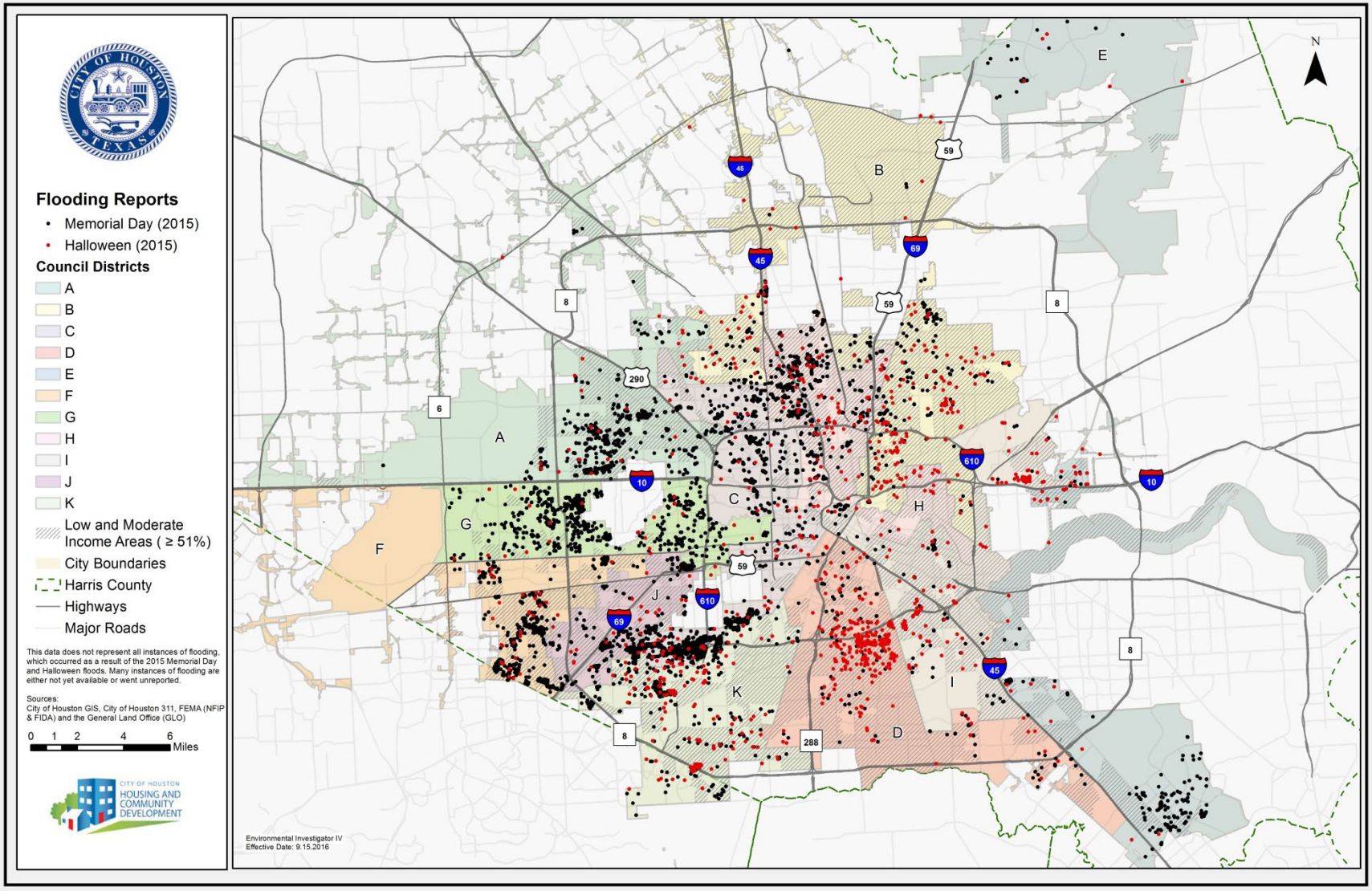
Grantee	Amount	Minimum amount that must be expended in HUD identified "most impacted" areas identified
Houston	$87,092,000	City of Houston (1st $66,560,000; 2nd $20,532,000)
San Marcos	$33,794,000	City of San Marcos (1st $25,080,000; 2nd $8,714,000)
State of Texas	$63,207,200	Harris, Hays, Hidalgo, and Travis Counties (1st $50,696,000; 2nd $12,511,200)

The allocation for the City shown above provides funds for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from the 2015 Disasters. The Appropriations Act requires that the City expend the funds within six years of the date the agreement between HUD and the City is signed, unless an extension is granted by HUD.

Most Impacted and Distressed Areas

The City anticipates a substantial amount of the CDBG-DR15 Program will fund activities to provide recovery in the districts most distressed; however, the City will not exclude other districts impacted by the 2015 Disasters, but rather will ensure the allocation is targeted to the most impacted and distressed communities. Figure 1 on the following page illustrates the 2015 Memorial Day and Halloween flooding reports within LMI areas and council districts.

Figure 1: 2015 Memorial Day & Halloween Flooding Reports within LMI Areas & Council Districts



Planning, Coordination, & Consultation

Houston has always recognized the value a collaborative spirit carries for the entire community. Partnerships between the public and private entities within the greater Houston community are vital to the continued recovery of the City. Each activity detailed herein and prioritized is only accomplished through effective collaborations with all of the stakeholders within the community. These partners provided valued expertise needed to ensure sound restoration and resiliency strategies were developed for the most impacted communities.

Alongside local elected officials, the Houston Housing and Community Development Department (HCDD) led a cooperative effort to involve the City's Office of Emergency Management, the Public Works and Engineering Department, the Texas General Land Office, Harris County, the Houston Housing Authority, various other city departments, jurisdictions, and other governmental and non-governmental entities when developing this Action Plan. Through this coordinated approach, the City gathered information and data about the impacts of the 2015 Disasters to each of the 3 sectors: housing, infrastructure, and economy. Along with specific data sought, Houston requested and received feedback from its local experts within each city agency. Thus, the projects and programs in the City's Action Plan are the product of significant stakeholder consultation conducted to ensure that CDBG-DR15 Program activities meet the City's most crucial needs and reflect the characteristics of neighborhoods and businesses.

Specifically, during the summer of 2016, the City conducted targeted outreach to gather information and data, inform stakeholders about the post-storm efforts, and collect feedback from impacted households and community partners. Numerous meetings, interviews, and consultations occurred between the HCDD team and these various stakeholders (as mentioned in the paragraph above) generating data, which was used to inform the development of the Unmet Needs Assessment (needs assessment) portion of the Action Plan. A complete list of the local, state, and federal agencies consulted as well as the multiple planning documents reviewed is listed in Appendix A[12] of the Action Plan. All of this information and various planning documents were reviewed to ensure CDBG-DR15 activities are planned consistently with other local and regional planning efforts.

Feedback was specifically sought from the general public and all stakeholders through a 14-day public comment period as well as public hearings. Comments and questions were sought and citizens were invited to comment on the proposed Action Plan during the public comment period of August 9 – August 23, 2016. The City and HCDD hosted a public hearing on August 18, 2016, and a public meeting on September 8, 2016 to which all interested parties were invited and encouraged to provide feedback on the proposed Action Plan. Feedback from the comment period and the public hearing was used to inform and finalize this Action Plan. All public comments and responses can be viewed in Appendix D.

Sound, Sustainable, Long-Term Recovery Planning

In line with HUD's CDBG-DR program, the City is taking intentional steps to further sound, sustainable, long-term planning informed by its post-disaster evaluation of hazard risk, especially land-use decisions that reflect irresponsible floodplain management. For many years, the City has coordinated with local and regional planning experts to consider the best solutions to address long-term recovery from the routine flooding in Houston. The objective for the long-term recovery planning was and remains to create mitigation strategies, support the revitalization of disaster-impacted communities, and strengthen the City infrastructure to support housing and economic stability in Houston.

In 2010, the City demonstrated its commitment to the long-term planning by amending its charter to create ReBuild Houston. The initiative has the mission to improve the quality of life and mobility for Houstonians by rebuilding the City's infrastructure systems focusing on drainage and streets. ReBuild Houston operates on a 10-year planning

[12] Planning documents included in AP-10 Consultation of the City and HCDD's 2016 Annual Action Plan

cycle to identify new projects. The program prioritizes the most critical needs first to help reduce street flooding, improve mobility, and reduce structural flooding. Ultimately, as the motto of ReBuild Houston proclaims, it aims to create "Better Streets, Better Drainage."[13]

ReBuild Houston maintains a strong public outreach campaign as a key component of its comprehensive approach to long-term planning. Thus, the City solicits feedback from governmental entities, individuals, and groups through meetings held across the City as it considers infrastructure projects. ReBuild Houston allows the City to pro-actively mitigate the degradation of city infrastructure and focus on the areas of highest need. Through ReBuild Houston, the City will continue to promote sound and sustainable long-term recovery.

Another example of Houston's promotion of long-term recovery is the regional recovery plan generated by the Houston-Galveston Area Council (H-GAC). "*Our Great Region 2040 Plan,"* outlines a number of ways in which the City and surrounding areas are addressing resiliency and will continue to further resiliency strategies. This regional plan identifies specific areas of focus for the H-GAC region including, but not limited to:

- Developing regional disaster defense systems, both structural and non-structural
- Developing better evacuation planning
- Developing rapid recovery plans for homes and businesses
- Creating education programs on natural disasters that could impact the area[14]

By combining the City's intentional actions to strengthen its resiliency efforts with the broader approach led by the H-GAC, a regional and comprehensive approach to resiliency is achieved.

Thus, in the aftermath of the 2015 Disasters, the City's team of experts met to examine the most impacted and distressed areas of Houston. A guiding principle of the analysis of impact was to ensure final priorities were consistent with both the City's existing plans as well as the regional approach defined by H-GAC. Feedback from these experts was a key element during the preparation of this Action Plan. Necessary next steps were contemplated to address the reoccurring flooding impacts. Specific planning processes, an examination of flood plain codes, community redevelopment strategies, and existing City improvement plans were thoroughly considered.

Mitigation and resiliency emerged as core principles to Houston's overall long-term recovery process following the 2015 Disasters. The CDBG-DR15 Program will play a crucial role in Houston's comprehensive strategy to reduce the risk to lives, property, and infrastructure in the future so that communities throughout the City will now be more resilient to future floods. Mitigation and resiliency will be achieved through a number of methods, including but not limited to, ReBuild Houston's public outreach campaigns focusing on dissemination of information, public education, and construction projects that protect improved property and strengthen infrastructure against potential disaster events.

Household Resilience

Specifically targeting the households of Houston, the City's Office of Emergency Management (OEM) has taken an active role in educating residents about the risks the City faces, as well as how to ensure individual preparedness, at the household level.

This includes providing the following information to households:

- Personal or household emergency plans, including being aware of evacuation zones and preparing for impacts on any special needs, such as medical or mobility-related assistance
- The importance of emergency supply kits, including food, water, and medications

[13] https://www.rebuildhouston.org/index.php/about-rebuild-houston/facts-history/m-rebuild-houston-facts
[14] H-GAC Our Great Region 2040

- How and where to access information about disaster warnings and updates
- The importance of pre-planning and building a social network at the neighborhood level[15]

This household-level outreach is one component of the City's multifaceted and ongoing approach to building local resilience. The City also conducts regular *Hurricane & Emergency Preparedness Summits* in conjunction with regional response agencies, planners, healthcare providers, and other civic stakeholders to maintain a constant orientation around opportunities to reduce risk and vulnerability.[16] These areas of focus will help the Houstonians recover, prepare for the next disaster, and become less susceptible to damages from similar disaster events in the future.

Throughout the duration of the CDBG-DR15 Program, the City will continue its efforts to coordinate through ReBuild Houston as well as other local and regional planning efforts. City officials will continuously review updates to the various plans from local organizations and governmental entities such as any Harris County Flood Control District plans, the City's Storm Water Management Plan, the City's Capital Improvement Plan, the City's Hazard Mitigation Action Plan, and H-GAC's Regional Mitigation Plan, to ensure all CDBG-DR15 activities remain consistent with all local and regional planning efforts.

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[15] Office of Emergency Management, http://www.houstongovnewsroom.org/go/doc/2155/2822106/
[16] Office of Emergency Management, http://www.houstongovnewsroom.org/go/doc/2155/2839278/

Impact and Unmet Needs Assessment

Purpose of the Impact and Unmet Needs Assessment

The Memorial Day Flood event was a result of more than 14 inches of rain falling on the City of Houston, making that month the 5th wettest May documented in the City's history[17]. For October, over 12 inches of rain fell in Houston from the 24th to 31st alone, and two daily records for rainfall were set in that same timeframe[18]. The 2015 disasters impacted many aspects of life for Houstonians. Accordingly, the City developed the following needs assessment to best understand the type and location of its community's needs stemming from the 2015 Disasters. This analysis enables Houston to steer the limited resources to the areas with the greatest need. Taking into account the various forms of assistance available to affected communities and individuals, the assessment evaluates the housing, infrastructure, and economic impact realized from the 2015 Disasters and calculates the estimated remaining unmet need. Specifically, unmet need is calculated by estimating total impact and subtracting any funds made available for assistance or recovery thus far. The calculations used in reaching the conclusions detailed in the needs assessment are based upon the most recent data available. Additionally, the needs assessment accounts for costs associated with the incorporation of mitigation and resiliency measures. It is understood, that the lack of resilience in Houston is due to inadequate infrastructure within the City.

As with any natural disaster of significant magnitude, compiling and accessing up-to-date data on financial and social indicators is one of the greatest challenges of recovery. Affected residents may not yet have made their way to providers of social services. Tax rolls may not fully reflect local losses due to the lag in reporting time caused by quarterly reporting schedules. Business and job losses and their corresponding economic ripple effects often take time to fully manifest themselves as owners use savings to stay operational. Because of the fluidity of these factors, this needs assessment is very much an organic document and may be updated as additional information becomes available.

Summary of Impact and Unmet Need

This needs assessment represents Houston's preliminary calculation of financial impact to the City and its residents, caused by the 2015 Disasters. The Assessment will explore in detail the components of the $87,092,000 HUD estimate. In accordance with HUD requirements in determining unmet need, recovery resources already received will be accounted for and subtracted from the estimate of impact.

The City's examination of impact and unmet need is organized into three major categories: housing, infrastructure, and economic recovery. In order to calculate these sums, the City compiled and analyzed data provided by state, federal, and local stakeholders. Data includes reports from FEMA, SBA, local public agencies and reports from civic organizations. These figures will be updated as new data become available. The total impact to the City, as outlined in Table 3, is approximately $549,912,899.58. Of this amount, approximately $491,154,880.92 in resources allocated to assist recovery have been identified, yielding an unmet need of $58,758,018.66.

Table 3: Impact & Unmet Need Summary

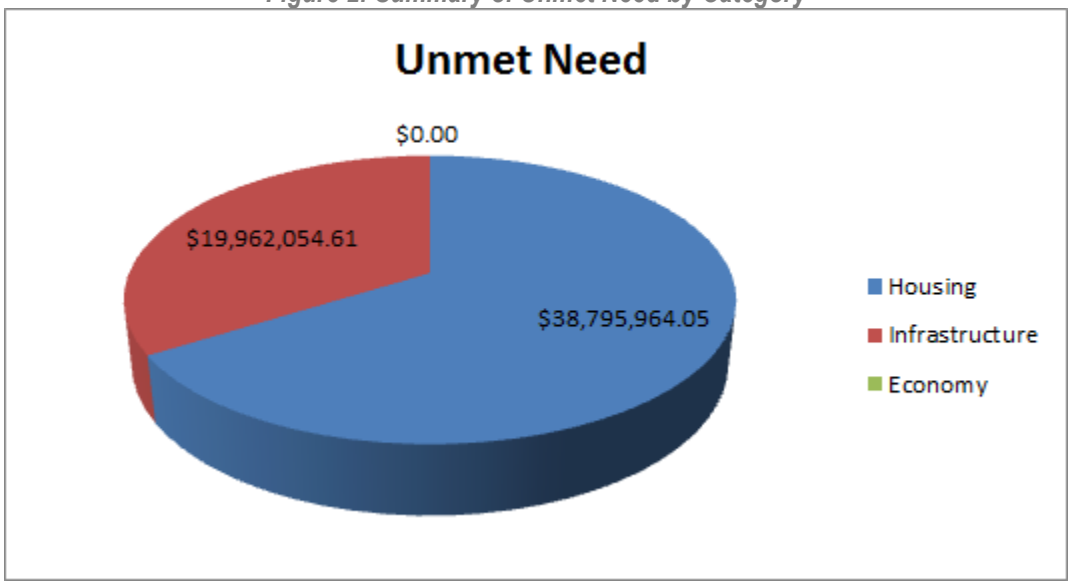
Type	Impact	Resources	Unmet Need
Housing	$524,689,073.17	$485,893,109.12	$38,795,964.05
Infrastructure	$21,201,826.41	$1,239,771.80	$19,962,054.61
Economic Recovery	$4,022,000.00	$4,022,000.00	$0.00
Total	**$549,912,899.58**	**$491,154,880.92**	**$58,758,018.66**

[17] Weather Channel: https://weather.com/forecast/regional/news/plains-rain-flood-threat-wettest-may-ranking

[18] *National Weather Service, "Houston Intercontinental Temperature and Precipitation Climate Graphs": http://www.srh.noaa.gov/hgx/?n=climate_graphs_iah*

The housing category yielded the largest amount of financial impact, with the most recovery resources allocated, and the largest amount of remaining unmet need with more than $38 million in impact remaining to be addressed. This was followed by impact to the infrastructure sector at approximately $19.9 million remaining in unmet need and lastly, impact to the economic sector at $4,022,000.00 with $0.00 remaining in unmet need. These categories will be discussed in detail in the following sections of the needs assessment.

Figure 2: Summary of Unmet Need by Category



Connection between Identified Needs and Use of CDBG-DR15 Funding

The City is ever-mindful that the need for safe, decent, and affordable housing is always a top priority. Approximately 6,621 homes in the City of Houston alone were impacted by the 2015 Disasters. Of these homes, 1,596 were extensively damaged and 2 were damaged beyond repair[19]. Recent data provided for the development of this Action Plan concluded that 391 single-family homes were deemed to have suffered substantial damage from the 2015 Disasters[20]. The City provided substantial damage letters to these residents notifying them of their responsibility to perform any repairs in full compliance with the City's flood plain ordinance[21]. Many recipients of these letters are without the resources necessary to perform these repairs as required. This additional consideration was evaluated in the further development of the comprehensive CDBG-DR15 Program design ultimately resulting in the inclusion of a Single Family Housing Program alongside the Infrastructure Program to assist with such on-going needs as further detailed herein.

It is evident that the 2015 Disasters impacted the City's quality, quantity, and affordability of the housing stock and its ability to meet post-disaster needs and population demands. Houston's ability to provide safe, decent, and affordable housing requires adequate flood mitigation infrastructure. Continuous impacts are felt by Houston's housing sector as a result of these weaknesses. **The City identified that many of the impacts to the housing sector were due to repeat flooding and were rooted in infrastructure inadequacies.** The same communities, consisting of both

[19] Per OEM Disaster Summary Outlines
[20] Data provided to HCD by PWE summarizing the substantial damage letters sent to residents impacted by the 2015 Disasters.
[21] Rules and Regulations for Chapter 19, Guidelines – Houston City Code – Floodplain, effective date February 1, 2009.

renter and homeowner occupied units, are routinely affected by Houston's flooding; thus, a more permanent solution is deserved to best assist these communities benefitting renters and homeowners. Accordingly, a long-term solution for these communities has been prioritized by the City. Adequate housing infrastructure includes water and sewer services, streets and roads, fire protection, and emergency services. Therefore, a long-term recovery solution for impacted housing residents is impossible without first creating additional capacity within the City's flood mitigation with a focus on detention, which the City will address by using the majority of CDBG-DR15 funding for Public Facilities/Infrastructure and Buyout activities. As identified in the unmet needs assessment, the greatest number of damaged housing was owner occupied homes (excluding units that were only cosmetically damaged). Therefore, the City has not elected to provide direct assistance to single family or multifamily renters. However, renters may benefit from the Public Facilities/Infrastructure and Buyout activities intended to prevent future flooding in neighborhoods where these activities take place.

Similarly, a strong infrastructure system promotes economic growth. Inadequate supply of infrastructure or unreliability in services deters critical investment of capital in these communities. Thus, the ability of the City to retain current businesses, as well as develop new businesses, is dependent upon a strong infrastructure system supporting these businesses.

Based upon its review of additional data received from the initial publication of the draft Action Plan and its consideration of public comments submitted, the City will fund a housing program to address identified unmet needs within the housing sector. The City has recognized the need to prioritize its most vulnerable citizens and will do so through the allocation of $12 million to a Single Family Housing Program, funded under the CDBG-DR15 Program. These funds seek to further decent, safe, and sanitary housing in flood-impacted areas by providing assistance through multiple housing activities, such as the rehabilitation, reconstruction, and assistance with property elevation of impacted housing units, as well as assistance for homeowners that have completed rehabilitation work in relation to the 2015 Disasters with personal resources.

This interdependent relationship between housing, infrastructure, and economic development and revitalization, is the foundation of the City's allocation of its CDBG-DR15 Program. Houston is directing its CDBG-DR15 allocation toward projects that support the comprehensive strategy of the City to recover from the 2015 Disasters. The City plans to leverage additional Tax Increment Reinvestment Zones (TIRZ) funding to maximize the CDBG-DR15 funds.

Until the City commits to strengthen its infrastructure system, it will be difficult to support and further develop the housing sector. Based on the interdependent relationship between housing and a strong infrastructure system, the City is allocating more than $29 million of its CDBG-DR15 funds for infrastructure activities to repair, replace, or relocate infrastructure including, but not limited to bridges, water treatment facilities, roads, ditches, drainage systems, and sewer and water lines.

Use of CDBG-DR15 Program Funds

Table 4: CDBG-DR15 Program Budget

Activity	Amount
Public Facilities and Improvements (Infrastructure)	$67,678,488.67
Housing (Single Family Home Repair)	$5,600,418.54
Property Buyout	$10,660,000.00
Planning	$98,492.79
Administration	$3,054,600.00
Total	**$87,092,000.00**

Houston's allocation of $87,092,000 will be leveraged with other sources of funding to deliver a comprehensive recovery plan. The combination of the CDBG-DR15 funds with other federal and local funds will result in a strategic and effective recovery effort by: 1) ensuring that a range of recovery needs are met; 2) assuring flexibility to address

short-term and long-term recovery needs; 3) enabling communities to meet needs that would not likely be addressed by other funding sources; and 4) strengthening communities' resilience to yield better protection against future flooding events.

The CDBG-DR15 Program allocation will be leveraged against other federal and private sources of funding, including proceeds from FEMA (Individual Assistance, Hazard Mitigation Grant Program, and Public Assistance), SBA Disaster Loans, National Flood Insurance Program payouts, and private insurance disbursements. In compliance with program guidelines and regulations, the CDBG-DR15 funding has been allocated toward recovery efforts in the most impacted and distressed areas of Houston to support unmet needs not funded by these sources.

The City is aggressively planning a minimum $100,000,000 bond issuance through its Tax Increment Reinvestment Zones (TIRZ) program. A TIRZ is known as a tax increment financing (TIF) zone throughout the rest of the country. A portion of the tax increment from some of these zones is committed to provide affordable housing throughout the City. These zones help finance the costs of redevelopment and promote development in areas that may not otherwise attract market development. Houston anticipates using this TIRZ bond issuance to address remaining housing needs, thereby creating a comprehensive recovery package when leveraged with the CDBG-DR15 allocation.

Given the limited amount of the CDBG-DR15 allocation, and the eligibility of critical infrastructure projects under the HUD's CBDG-DR program, the City plans to address the majority of the affordable home ownership housing needs through the TIRZ bond issuance and the infrastructure needs through the CDBG-DR15 allocation. Specifically, the Mayor's Office and HCDD are collaborating to create a housing program that will provide various forms of assistance to address the identified needs through the $100 million bond issuance. By leveraging the two funding streams, the flexible capital provided through the TIRZ bond issuance can begin to immediately address the unmet housing needs, while the CDBG-DR infrastructure projects are put in place. Once the TIRZ bond issuance is finalized, a full recovery plan, including resiliency measures, will be implemented by the City, ensuring a comprehensive recovery strategy for Houstonians.

Impact on Low-and Moderate-Income Populations

A household is defined as low- and moderate-income (LMI) when the combined income of the household is at or below 80 percent of the Area Median Family Income (AMFI) for the county.

Table 5: 2016 Area Median Income Limits by Family Size and County[22]

Harris County	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
30% Limits	14,550	16,600	20,160	**24,300**	28,440	32,580	36,730	40,890
50% Limits	24,250	27,700	31,150	**34,600**	37,400	40,150	42,950	45,700
80% Limits	38,750	44,300	49,850	**55,350**	59,800	64,250	68,650	73,100

Figure 3 on the following page illustrates the locations of LMI populations (areas with >51% residents of LMI) within the City.

[22] HUD Income Limits, FY 2016

Figure 3: LMI Populations: City of Houston

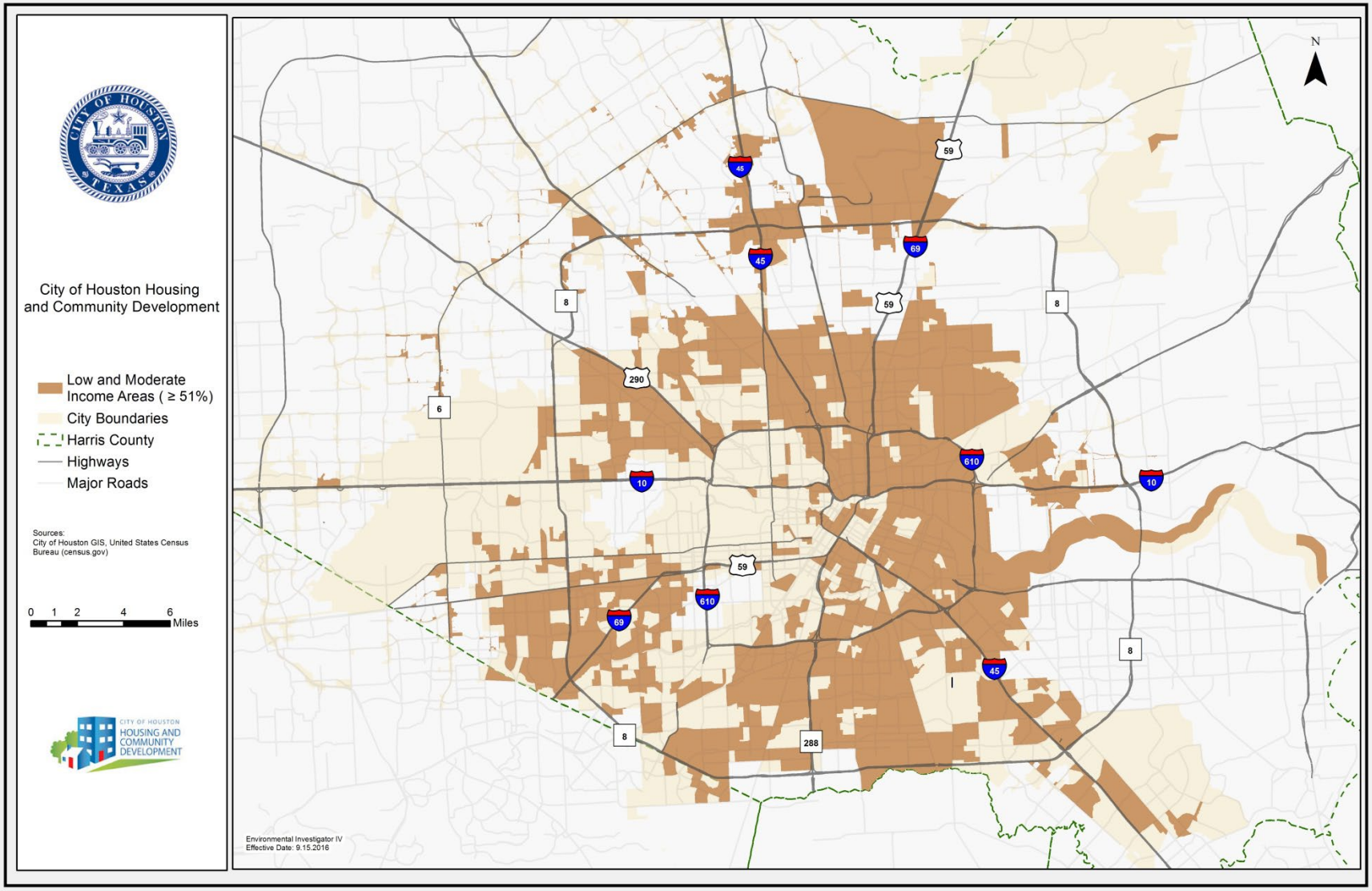


Figure 4: 2015: Memorial and Halloween Flooding Reports

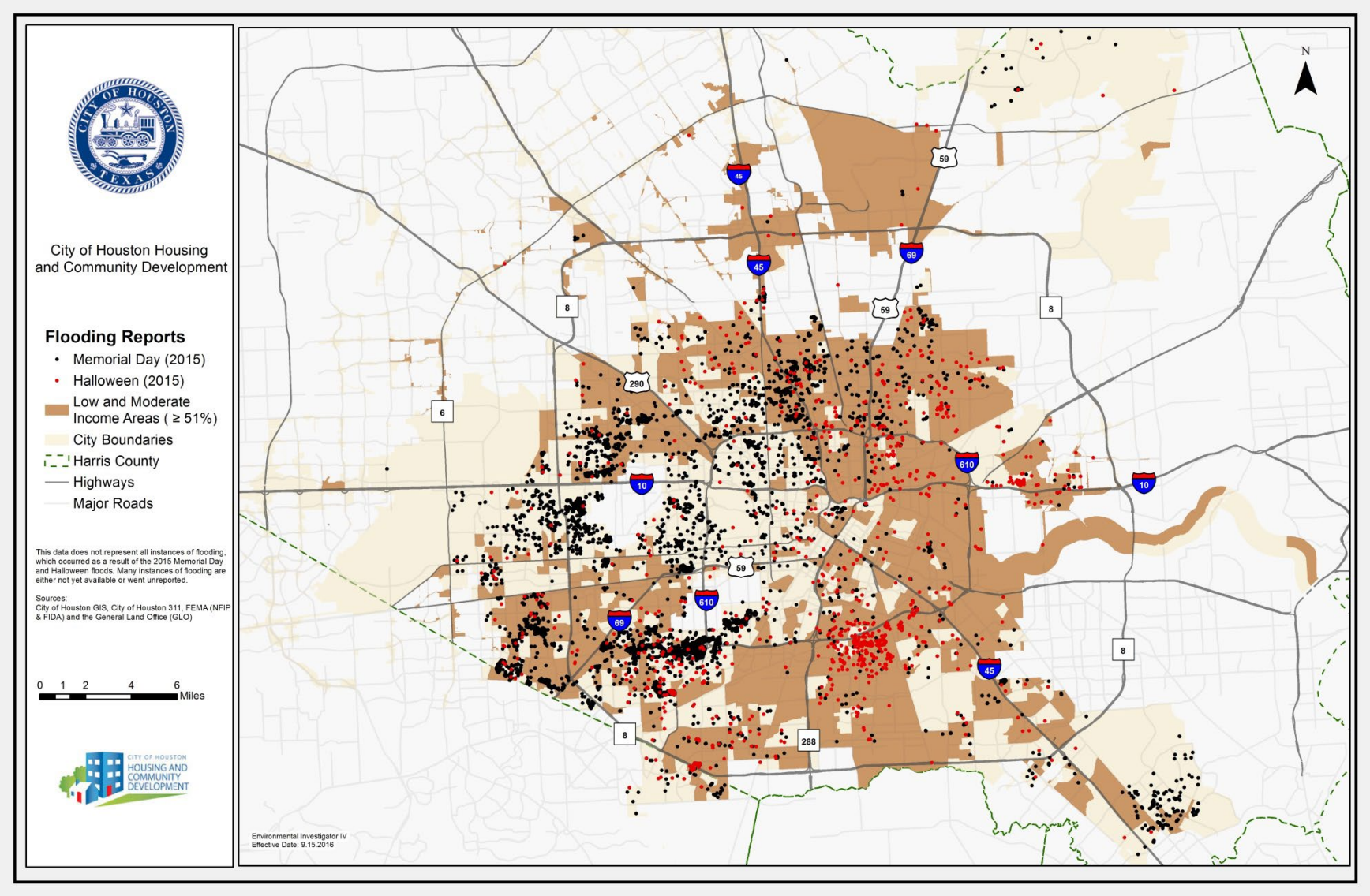


Figure 4 on the previous page illustrates flooding reports in areas where more than 51% of the residents are LMI. This graphic illustrates LMI areas in Houston which experienced the most significant flooding reports associated with the Memorial and Halloween flooding events.

Impact on Special Needs Populations

Special needs populations and those with functional needs may require special attention and help in receiving assistance and disaster resources. These special needs populations may consist of children, the elderly, pregnant women, those from diverse cultures, individuals lacking transportation means, individuals with chronic disorders or pharmacological dependencies, those with disabilities, individuals living in institutions, unable to speak English, and the homeless[23]. Regardless of the functional need, it is vital that all efforts possible are made to ensure these individuals have the ability to access any available disaster recovery resources.

According to a 2016 Point-in-Time report from the Houston Coalition for the Homeless (and federally mandated by HUD), on any given night of January 2016 there were 3,626 homeless people in the Houston area, of which 3,559 were in Harris County and 67 were in Fort Bend County. Of these, approximately 29% are considered unsheltered[24]. These individuals are at an increased risk due to lack of resources and shelter prior to the event.

According to HCDD program managers, no existing HUD-assisted housing received documented damages from the 2015 Disasters, although the construction of some new HUD-assisted units may have been delayed several days due to the extensive rainfall. Additionally, in regard to the population served through the City of Houston's Housing Opportunities for Persons with HIV/AIDS (HOPWA) Program, program managers confirmed that at this time no HOPWA sites were specifically impacted by the May or October flood events[25].

Demographic Profile of Houston, Texas

The table on the following page includes census data from the *2015 American Community Survey* (ACS) detailing demographic information specific to Houston. Several factors accounted for in the ACS table (Table 6) provide insight into Houston's vulnerable populations. Particularly, 9% of citizens are over the age of 65, 30.9% of citizens are without health insurance, 22.9% of citizens live under the poverty level, and 46.9% of citizens speak a language other than English at home. While 46.9% of individuals speak languages other than English at home, approximately 23.4% speak English less than "very well", otherwise referred to as Limited English Proficiency (LEP). The most common languages other than English in the City are Spanish, Vietnamese, Chinese, French, and Urdu. The City has a much higher LEP percentage than the State of Texas overall (14.2%) and the United States (8.6%)[26]. The LEP populations of Houston may be more vulnerable than others due to their language deficiencies. For this reason, it is vital to craft a plan that addresses individuals of all backgrounds and languages and to make any plans related to recovery available for any language as needed.

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[23] US Dept. of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response "Public Health Emergency"-http://www.phe.gov/preparedness/planning/abc/pages/atrisk.aspx

[24] Coalition for the Homeless, "Houston/Harris County/Fort Bend County Point-in-Time Count 2015 Executive Summary", http://www.homelesshouston.org/wp-content/uploads/2016/06/2016-PIT-Executive-summary-v4.pdf

[25] Confirmed with Houston Community Development Department,8/3/16

[26] US Census Bureau, 2015 ACS Survey

Table 6: Demographic Profile of Houston, TX[27]

People	Houston, Texas
Population	
Population estimates, July 1, 2015,	2,167,988
Age and Sex	
Persons under 5 years, percent	7.80%
Persons under 18 years, percent	25.90%
Persons 65 years and over, percent	9.47%
Race and Hispanic Origin	
White alone, percent	57.80%
Black or African American alone, percent	23.30%
American Indian and Alaska Native alone, percent,	0.40%
Asian alone, percent	6.30%
Native Hawaiian and Other Pacific Islander alone, percent	0.00%
Two or More Races, percent	1.9%
Some Other Race	10.30%
Hispanic or Latino, percent	43.90%
White alone, not Hispanic or Latino, percent	25.50%
Population Characteristics	
Foreign born persons, percent	28.40%
Housing	
Owner-occupied housing unit rate	44.50%
Median value of owner-occupied housing units	$125,400
Median gross rent	$862
Families and Living Arrangements	
Persons per household	2.69
Language other than English spoken at home, percent of persons age 5 years+	46.90%
Education	
High school graduate or higher, percent of persons age 25 years+	75.90%
Bachelor's degree or higher, percent of persons age 25 years+	29.80%
Health	
With a disability, under age 65 years, percent	7.00%
Persons without health insurance, under age 65 years, percent	28.00%
Economy	
In civilian labor force, total, percent of population age 16 years+	68.10%
Income and Poverty	
Median household income (in 2014 dollars)	$45,728
Per capita income in past 12 months (in 2014 dollars)	$27,938
Persons in poverty, percent	22.90%

[27] 2010-2014 American Community Survey 5-Year Estimates (US Census)

Housing

Housing Unmet Need & Methodology

In calculating the housing unmet need, it is required to take the total housing impact and subtract the funds made available thus far. **The total housing impact for the City of Houston is estimated at $524,689,073.17**.

Based on the best data currently available, at this time **the total funds made available for housing recovery for both the May and October events is estimated at $485,893,109.12.**

Thus, when the estimated funds made available (SBA Home Loans May and October $44,177,900.00 and FEMA Estimates from May $81,996,750.00 and October $9,483,441.21) are subtracted from the estimated housing impact, **the remaining unmet housing need is calculated as $38,795,964.05**.

The table below outlines the numbers used to make these calculations and is followed by a description of the specific methodology.

Table 7: Housing Impact

	Total	Units	Average (IHP Max**)
FEMA Full Verified Loss Estimate (May only)	$109,329,000.00	3313	$33,000.00
Discount for Non-Max Payouts	0.75		
Estimated May Individual Assistance Impact	$81,996,750.00		
Estimated October Individual Assistance Damage*	$9,483,441.21		
SBA Home Loans (used for multiplier only, not added to impact)	$44,177,900	702	$62,931.48
May & Oct. Estimate	$91,480,191.21		
Multiplier	1.90701		
Impact via FEMA & Multiplier	$174,454,055.26		
National Flood Insurance Program Claims	$350,235,017.91		
Housing Impact	$524,689,073.17		

***Note**: for October Estimate, Citywide Units (789) was divided by Statewide Units (3,286) to calculate percentage of damaged units in Houston, and multiplied by Statewide Individual Assistance Cost Estimate to estimate Oct Individual Assistance Cost in Houston: See Table 8 on the following page for details.*
***Note**: the FVL **(Full Verified Loss)** Estimate (May units only) is calculated by multiplying the total units from May that received FEMA assistance, by the Individuals and Households Program (IHP) Max.*

The estimated impact was calculated using a housing multiplier. This number is used due to current data limitations which indicate the average FEMA Full Verified Loss (FVL) from the May event to be higher than the Individuals and Households Program (IHP) maximum. A multiplier is used because it paints a more accurate picture of the damages received due to the fact that SBA loans are more-so intended to cover full damages, as opposed to just getting resident's homes to safe and sanitary living conditions (which is what FEMA aims to do) and accounts for those who

may have been deemed ineligible for FEMA assistance but still received damage**.** This multiplier was calculated by dividing the average SBA home loans from May and October by the FEMA IHP maximum amount of $33,000. **For this assessment, the multiplier is 1.90701.**

To estimate total housing impact, the FEMA FVL units from May only, 3,313, was multiplied by the FEMA IHP and reduced by 25% to account for those not receiving maximum assistance. This resulted in a May estimate of $81,996,750 which was then added to an October Individual Assistance Damage estimate. The City Damage Estimate (Oct.) comes from the City/State ratio (.2401) multiplied by the Statewide Damage Estimate: $39,496,309 (based on the Statewide FEMA Damage Assessment). This City/State comes from Statewide Units (3,286) divided by City Units (789). The City Units number comes from the Houston Office of Emergency Management's Disaster Summary Outline for the City of Houston, based on the October flooding. When the Statewide Damage Estimate is multiplied by the City to State ratio, the estimated October impact for Houston comes out to $9,483,441.21. The following table outlines the October estimate calculation used in Housing Impact and Assistance estimates above, based on the best currently available information.

Table 8: October Individual Assistance Estimation

October Individual Assistance Damage Estimate: Supplemental to Housing Impact Calculation		
	Total	**Units**
Statewide Damage Estimate (FEMA Report)	$39,496,309.00	3,286
City Damage Estimate	**$9,483,441.21**	789
City/State Ratio:	0.240109556	

When added to the estimated impact from May, the estimated total impact before applying the multiplier is $91,480,191.21. When applying the multiplier, the estimated impact as mentioned previously is $174,454,055.26. Additionally, impact includes National Flood Insurance Program Claims related to the May and October events of $350,235,017.91, **for a total housing impact of $524,689,073.17.** No additional increases for resiliency were included in this calculation due to a higher than average assumption towards maximum IHP payout.

While GLO FEMA data supplied to the City did not include specific impacts and funds made available, their unmet need calculation was roughly $35 million dollars, which is consistent with and thus validates the City's calculation of unmet housing need as $38,795,964.05. As previously noted, the estimated Housing Unmet Need is as follows:

Table 9: Remaining Housing Unmet Need

Remaining Housing Unmet Need	
Estimated Housing Impact	$524,689,073.17
Funds Made Available	($485,893,109.12)
Remaining Housing Unmet Need	**$38,795,964.05**

Housing Types Impacted

The following table, from the Houston *Office of Emergency Management's Disaster Summary Outline* for the Memorial Day flooding, shows that while a large number of multifamily units were affected, a much smaller portion received major damage. On the contrary, large numbers of single family homes experienced minor or major damage, while 2 were destroyed entirely. This information concludes that the total for homes affected, with minor or major damage, or totals 5,832 units for the Memorial Day flooding alone. This number is higher than the total that received FEMA Full Verified Loss (FVL), 3,313; however, these types of discrepancies are accounted for in the housing impact calculation by using a housing multiplier[28].

Table 10: Residential Losses May

Residential Losses: Memorial Day Flood, City of Houston (Per OEM Disaster Summary Outline 6/17/15)					
Type of Homes	**Affected**	**Minor Damage**	**Major Damage**	**Destroyed**	**% Covered by Insurance**
Single Family Homes	309	827	930	2	60%
Mobile Homes	0	0	0	0	NA
Multifamily Units	3,526	14	224	0	20%
Totals	*3,835*	*841*	*1,154*	*2*	*40%*

Significantly different from the Memorial Day Flood was the impact to the housing sector during the Halloween Flood. Houston OEM's Disaster Summary Outline for the Halloween flooding outlined below, shows that a much smaller number of multifamily homes were affected in general as compared to the Memorial Day Flood, but that many (318 units) experienced major damage. There were 56 single family homes affected (impacted, but damage was not deemed minor or major), with 291 receiving minor damage, and 124 receiving major damage, while none were completely destroyed. The table below also shows that the total for homes affected, with minor or major damage, or destroyed totals 789 for the Halloween flooding event. While FEMA FVL data is currently unavailable for the Halloween flooding event, this smaller number corroborates with the smaller number and amount of SBA Disaster Home Loans sought following this event, as opposed to the Memorial Day Flood.

Table 11: Residential Losses October

Residential Losses: Halloween Flood, City of Houston (Per OEM Disaster Summary Outline 11/2/15)					
Type of Homes	**Affected**	**Minor Damage**	**Major Damage**	**Destroyed**	**% Covered by Insurance**
Single Family Homes	56	291	124	0	40%
Mobile Homes	0	0	0	0	NA
Multifamily Units	0	0	318	0	40%
Totals	*56*	*291*	*442*	*0*	*40%*

[28] *Houston OEM Disaster Summary Outline*
[29] *Houston OEM Disaster Summary Outline*
[30] Houston OEM

According to the *2015 American Housing Survey* from the US Census Bureau, the City has 913,006 housing units. Of these, 353,069 are occupied by owners (44.5%), 439,694 are occupied by renters (55.5%), and 120,243 units are vacant or seasonal.[31]

FEMA residential losses from both 2015 flood events include 2,539 single family homes and 4,082 multifamily homes. To determine the approximate number of renters and homeowners that had a residential loss, 2010-2014 American Community Survey data is used. In the City of Houston, approximately 22% of single family units (attached and detached) are renter occupied and 6% of multifamily units are owner occupied. Using this citywide data, it is estimated that approximately 4,396 renter units had residential losses and 2,225 owner occupied units had residential losses in the 2015 flood events. This shows that significantly more residential renter households had some type of loss from these events.

However, most of the losses suffered by residential renter households are categorized as "Affected," which is only cosmetic damage, and does not alter the livability of the unit. Instead, a more representative number of residential losses that decrease the livability of a unit would consider only three categories, "Minor", "Major", and "Destroyed". Without considering cosmetic only damages and using the same methodology as above, there are an estimated 1,001 residential rental units that had losses and 1,729 residential owner occupied units that had losses.

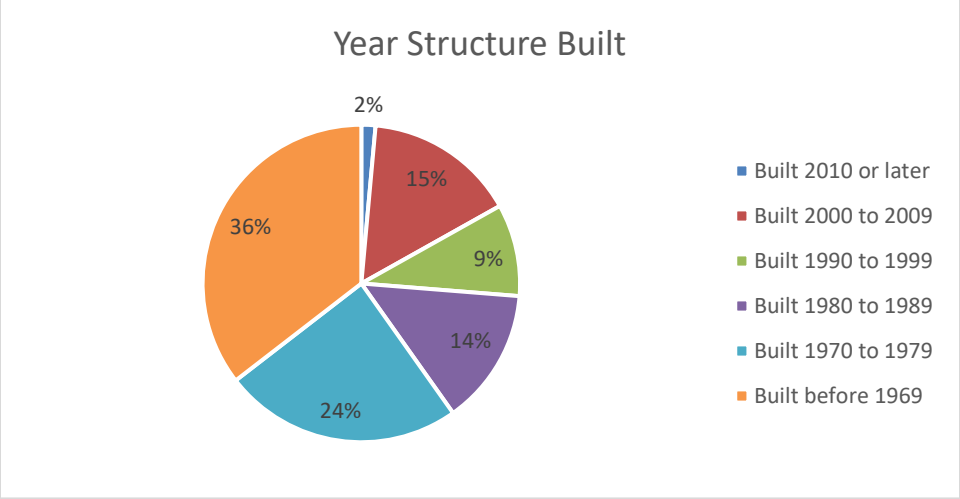
Clearly, the housing impact from the Memorial Day and Halloween flooding events in the City of Houston was widespread, but also unique in many ways. Both single family and multifamily residents, in various housing types, were affected. Additionally, many homes experienced damages due to these flooding events despite being located outside of the floodplain. The table below represents those receiving FEMA Individual Assistance for the Memorial Day and Halloween flooding events.

Table 12: FEMA FVL May

FEMA FVL for Memorial Day Flooding	
Housing Type	**Sum of Losses**
2-4 Family	42
Assmd. Condo	32
Non Resident	170
Other Resident	44
Single Family	3,025
Totals	3,313

[32] FEMA Individual Data from Houston Housing and Community Development Department

Figure 5: Year Structure Built



As noted in Figure 5 above, while there is a substantial percentage of new homes in the City of Houston (17% built after 2000), the largest percentage of homes (36%) were built prior to 1969. Thus, when serious weather events occur, such as flooding, older homes may have more substantial damages or require more significant repairs.

Public Housing

Public housing plays a vital role in the City's housing environment. The Houston Housing Authority (HHA) is the public housing authority that operates within, and directly outside, the City limits of Houston. HHA provides affordable homes and services to more than 60,000 low-income Houstonians, including over 17,000 families housed through the HHA. HHA also operates the country's 3rd largest voucher program exclusively serving homeless veterans in and around the Houston area. The City consulted with key officials with HHA to gather information and discuss flood related damages to both HHA owned properties, as well as landlord owned (voucher) properties. Minimal damage was reported with twelve residents reported as displaced. To date, five residents have relocated and the remaining residents are currently in the process of moving. While this process is never easy, arrangements have been made to ensure those moving are given adequate living arrangements until permanently relocating.

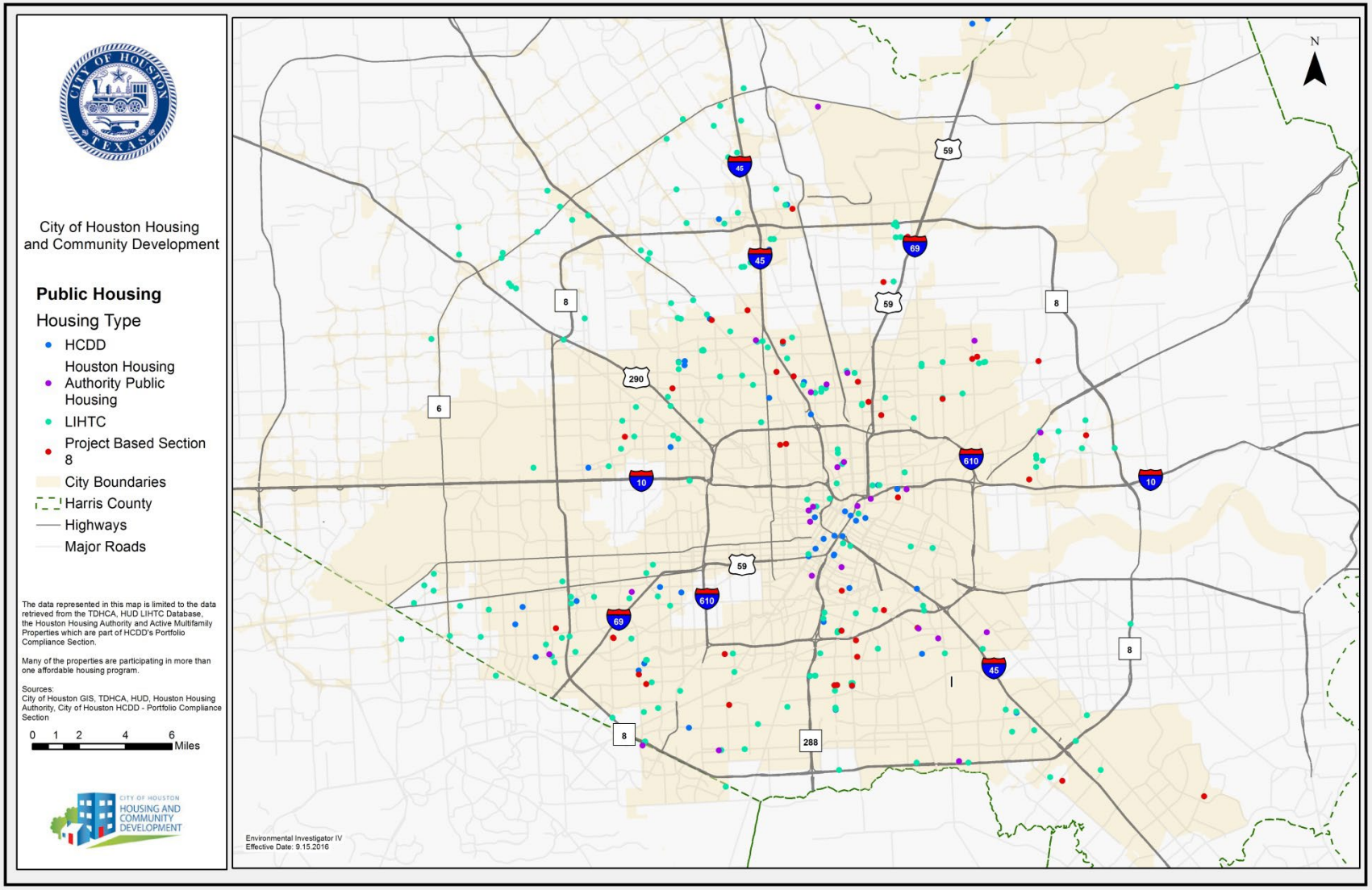
Overall, the Houston Housing Authority has roughly $50 million in pre-existing physical need, but has recently agreed upon a $25-million-dollar partnership with Siemens, for energy improvements, and a $4 million Capital Fund Program allocation (HCDD 2016 Annual Action Plan). In addition to this existing need, one of the properties under the jurisdiction of the HHA was impacted by both the Memorial Day and Halloween flooding events. The property, 2100 Memorial Senior Apartments, overlooks Buffalo Bayou and Memorial Drive. It has 197 apartment homes and had experienced some water damage previously, but nothing compared to these floods.

According to officials, no resident units were impacted. The damages from the May and October storms included the entire 1st floor of the building being flooded with 2-3" of water. The 1st floor area includes the office, dining area, pool table/game room, television room, fitness center, hair salon, and community store. The front doors were also affected. As a senior community, these first floor amenities are vital to the residents. As renovations began, mold was discovered and had to be remediated. Eventually, all floors needed to be tested and most remediated.

The total expenditures for renovations of the building from the flooding were $427,665.39. Insurance claims totaled $257,271.72, leaving a deficit of $170,393.67. HHA used excess capital, replacement reserves, and operating funds to address these issues. The remaining unmet need includes new pool furniture, fitness equipment, and a new roof for the building.

Based on this information, the remaining unmet need does not justify an allocation from the CDBG-DR15 Program or other unmet needs are of a more critical nature.

Figure 6: Public Housing Locations in Houston, TX



HUD-assisted Housing, Emergency Shelters and Housing for the Homeless

The City will continue to promote the availability of affordable housing in areas of opportunity where appropriate, and will support plans that are equitable to persons with disabilities, minority groups, and low-income people.

The City is mindful about the availability of shelters and transitional housing needed for its homeless population. For that reason, the homeless population will be considered as a part of the City's long-term recovery strategy. According to a 2016 Point-in-Time report from the Coalition for the Homeless Houston/Harris County (Coalition) (and federally mandated by HUD), conducted over a three day period from January 26-28, 2016, there were 3,626 homeless people in the Houston area, of which 3,559 were in Harris County and 67 were in Fort Bend County. Of these, approximately 30% are considered unsheltered[33]. Individuals such as these are at an increased risk due to lack of resources and shelter prior to the event. As a result of this, the City will ensure that affordable housing providers in the region with existing networks and knowledge of the needs of homeless, will continue to operate their housing programs. The City does not however, based upon the best available information at the time the of the publication of this Action Plan, find that there are critical unmet needs to be addressed by the CDBG-DR15 Program.

The City has made tremendous progress in reducing and ending homelessness throughout its neighborhoods. At the time of publication of this Action Plan, there has been a 71 percent reduction in chronic homelessness since 2011. [34] During the 2016 Homeless Count, there were no unsheltered families with minor children found.[35] Such remarkable reports are indicative of Houston's efforts in this area of housing needs. This data used is used by the City and its stakeholders to track the changing needs of the homeless population. Specifically, the City, through HCDD and Coalition for the Homeless Houston/Harris County (Coalition) collaborates with service agencies and others in the public sector to analyze existing needs to identify and address funding gaps. As specific impacts realized by the homeless population were not realized due to the 2015 Disasters, the City still will prioritize the needs of this population through programs administered by HCDD. Specifically, HCDD continues to support organizations that assess the needs of the homeless to create a more robust social service system to address unmet needs. HCDD provides ESG and CDBG funding to social service organizations to assess and address the needs of homeless persons and will do so again in program year 2016.

Critical in the temporary care of extremely impacted individuals is the use of emergency shelters. In the aftermath of the 2015 Disasters, emergency shelters offer temporary shelter and living arrangements for impacted citizens. The American Red Cross immediately opened multiple shelters throughout the Houston region, assisting impacted residents by quickly providing safe environments. Specific locations of these shelters include:

- Chinese Community Center, 9800 Town Park Drive, Houston, TX 77036
- Acres Homes Multi-Service Center, 6719 W. Montgomery Rd., Houston, TX 77091
- American Legion Hall,1630 Myer Rd., Sealy, TX 77474
- St. John Lutheran Church, 529 N. Holland, Bellville, TX 77418
- Woodville United Methodist Church, 508 West Bluff St., Woodville, TX 75979
- Liberty County Community Center, 318 San Jacinto St., Liberty, TX 77575
- Wharton Junior High School Gymnasium, 1120 North Rusk St., Wharton, TX, 77488[36]

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[33] Coalition for the Homeless, PIT Study, https://www.documentcloud.org/documents/2858319-2016-PIT-Executive-Summary-Final.html#document/p2

[34] http://www.homelesshouston.org/local-data-and-research/

[35] http://www.homelesshouston.org/local-data-and-research/

[36] Cooper, Nakia-Click2Houston News, 8 Confirmed Dead in Houston Area's Historic Flooding: http://www.click2houston.com/news/8-confirmed-deaths-in-houston-areas-historic-flooding

- Channelview High School, 1100 Sheldon Rd., Channelview, TX 77530[37]

The City sought information regarding damage suffered by these emergency shelters during the 2015 Disasters but received no such information as of the time of publication of this Action Plan. Accordingly, there are no disaster related impacts remaining to be addressed for the emergency shelters.

Another important component of the housing services available in the City is Houston's Housing Opportunities for Persons with HIV/AIDS (HOPWA) Program. Participants in the HOPWA program receive assistance to achieve and maintain housing stability so to avoid the risk of homelessness and improve their access to HIV treatment and care. Through this needs assessment, potential impacts to HOPWA sites were considered. It was confirmed through interviews with HOPWA program managers that the HOPWA sites were not impacted by the 2015 Disasters[38]. While there was no direct impact to HOPWA sites, road closures and damages due to the storm make access to these services more difficult.

In addition, the City sought available Public Housing Units to temporarily house impacted Houstonians. While there were no Public Housing Units available for shelter, the Houston Housing Authority utilized—in addition to the aforementioned shelters—hotels to house displaced Houstonians following the 2015 Disasters.[39]

Given that no unmet need for rehabilitation, reconstruction, or replacement has been reported by or identified for any of the above-referenced housing agencies, no CDBG-DR15 Program funds will be specifically set aside for housing needs in this category. Rather, the City will prioritize its disaster recovery allocation towards addressing the most critical unmet needs stemming from the 2015 Disasters while ensuring long-term recovery and resilience in the impacted areas.

Housing Funds Made Available

The major federal funding sources available for impacted citizens following a natural disaster are FEMA Individual Assistance (FEMA IA), low-interest home loans from the SBA, and insurance payments from the National Flood Insurance Program (NFIP). These are the funding sources which make up most of the housing recovery funding available prior to the administering of CDBG-DR funds.

FEMA Individual Assistance

FEMA Individual Assistance is comprised of various relief services for residents in disaster declared areas following a disaster event, such as the May 2015 and October 2015 flood events. These funds are used to help get individuals back into their homes by bringing them up to safe and sanitary living standards only. They are not intended to make homes "whole" again.

In Houston, 3,313 residents received FEMA Individual Assistance following the May 2015 flood event. The table below outlines the number of residents receiving assistance, and their housing type, related to the May 2015 floods.

[37] Your Houston News, Additional Red Cross Shelters Opened to Assist Storm-Flood Victims: http://www.yourhoustonnews.com/cleveland/news/additional-red-cross-shelters-opened-to-assist-storm-flood-victims/article_ac78c2c2-4215-5612-8291-0e7d7b47b177.html

[38] Confirmed with Houston Community Development Department,8/3/16

[39] Confirmed with HHA 8/16

Table 13: FEMA FVL for May 2015 (DR-4223)[40]

Housing Type	Sum of Losses
2-4 Family	42
Assmd Condo	32
Non Resident	170
Other Resident	44
Single Family	3,025
Totals	3,313

To estimate the FEMA Individual Assistance for May, the total applicants (33,000) were multiplied by the $33,000 FEMA Individual Assistance max, and discounted by 25% to account for individuals not likely receiving the maximum assistance. The FEMA Individual Assistance funds made available for the May event is estimated at $81,996,750.00. Further details into Housing Funds made available can be found in the Housing Unmet Need and Methodology section.

October FEMA Individual Assistance funds are estimated at $9,483,441.21. Again, a detailed breakdown of FEMA May and October estimates can be found in the Housing Unmet Need Methodology section.

At this time, the total funds made available for the City of Houston via FEMA Individual Assistance is estimated at $91,480,191.21.

Small Business Administration (SBA) Home Loans

The United States Small Business Administration offers low-interest disaster home loans to help residents repair their homes and recover personal property. Typically, far less SBA loans are awarded than FEMA Individual Assistance; however, the SBA individual loan amounts often paint a better picture of potential damages as they allow residents to recover beyond the point of merely safe and sanitary living standards.

For the May 2015 floods (DR-4223), 692 total disaster home loans were approved by the SBA for a total awarded amount of $43,912,200, which results in an average loan amount tied to the May 2015 flooding of $63,457.

Table 14: SBA Home Loans for May[41]

SBA Disaster Home Loans: City of Houston for DR-4223	
Total Loans	Grand Total Approved Loans
692	$43,912,200

For the October 2015 floods (DR-4245), only 10 disaster home loans were approved by the SBA for a total awarded amount of $265,700, which results in an average loan amount tied to the October 2015 flooding of $26,570.

Table 15: SBA Home Loans for October[42]

SBA Disaster Home Loans: City of Houston for DR-4245	
Total Loans	Grand Total Approved Loans
10	$265,700

[40] Data from Houston Housing and Community Development Dpt. For FEMA Individual Assistance
[41] SBA Office of Disaster Assistance
[42] SBA Office of Disaster Assistance

In total, for both events 702 loans were approved for $44,177,900, for an average loan amount of $62,931.48.

National Flood Insurance Program (NFIP) and Other Insurance Coverage

There was a total of 6,698 NFIP claims for a total amount of $449,873,481 and an average claim amount of $67,165.

Additionally, according to the Houston Office of Emergency Management's Disaster Summary Outline, roughly 40% of the City of Houston's estimated damaged residences were covered by insurance. This number is relatively low for various reasons. Perhaps most notable is the fact that many properties receiving damage were located outside of the floodplain. Again, note that this assessment is based on the best currently available data, and will be updated accordingly as complete data is made available for the City of Houston**. At this time, NFIP claim data shows $350,235,017.91 in claims paid to residents in the City of Houston**[43]. It should be noted that all NFIP claims in Houston, at this point, are tied to the May event. If claims are made and/or paid in relation to the October 2015 flood, that information will be added to this assessment as made available.

When adding the assistance from FEMA, SBA, and NFIP, the total Housing Funds Made available at this time are $485,893,109.12.

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[43] Confirmed via Texas Dept. of Insurance 8/5/16

Infrastructure

Many national communities are in fiscal crises due to compounding infrastructure and federal match costs, emergency response expenses, and faltering tax and employment bases. Infrastructure expenses can exceed local budget capacity by hundreds of thousands of dollars. The City's coastal location, low base elevations, flat topography, and high urban density create a unique confluence of factors that contribute to vulnerability for flooding and drainage issues. Those factors are difficult for any similarly-situated city to address under normal circumstances. However, when disaster-category storms and rainfall occur, these factors interact to create significant flooding issues that then impact housing developments that are critical to the affordability of the City. Funds typically available to assist with infrastructure recovery include FEMA, private insurance, and state and local assistance.

Of the total $21,201,826.41 impact, an estimated $1,239,771.80 in resources have been made available for Houston's infrastructure needs resulting in an estimated unmet need of $19,962,054.61 as outlined in Table 16 below.

Table 16: Infrastructure Unmet Need[44]

Unmet Needs Based on Damage Estimates Minus Assistance Received	
Infrastructure and Public Facility Damages[45]	$21,201,826.41
FEMA Public Assistance[46]	$1,239,771.80
State and Other Assistance	$0.00
Remaining Unmet Need	**$19,962,054.61**

The $19,962,054.61 in impact was calculated based on FEMA Public Assistance Project application information. Data from the Texas Department of Transportation (TxDOT) regarding state roads, impact to ditches and streams, utilities, railroads, schools, and neighborhood infrastructure will be factored in as it is made available. The impact costs are broken out in Table 17 below:

Table 17: Infrastructure Impact

Infrastructure Impact	Cost
Project Worksheets (FEMA PA)	$21,201,826.41
Texas Department of Transportation (state roads, bridges, etc.)	$0.00

The City's application for FEMA Public Assistance included damage categories of Debris Removal, Protective Measures, Public Buildings, Public Utilities, and Recreational or Other. Table 19 offers a more detailed description of these damage categories.

The City's survey of the damage inflicted on infrastructure and the restoration thereof is ongoing and involves the coordination of multiple City agencies. In conjunction with FEMA's Public Assistance Grant Program, the City is identifying and assessing damaged sites to develop cost estimates that quantify the scope of work and financial commitment required for the necessary infrastructure projects. The current data reveals that infrastructure systems affected by the 2015 Disasters included damage to roadways, bridges, wastewater treatment systems, drinking water treatment and collection systems. The immediate recovery efforts were documented by the initial estimates submitted for consideration for Public Assistance, through GIS mapping by city departments, such as the HCDD and the

[44] FEMA PA
[45] FEMA PA Projected Damages
[46] FEMA PA Federal Assistance Provided

Houston Office of Emergency Management. For reference in regards to the infrastructure section and items discussed in this section see Figure 1 on page 6.

The Memorial Day flooding event, which had substantially more flooding reports than the Halloween flooding event, had a concentrated impact on the western portion of the city, as shown in the map on page 6 in Figure 1. While there were some clusters of impact in Low-to-Moderate income (LMI) areas, there were also substantial clusters outside of LMI areas in the southwestern side of the city.

The concentration of impact in the southwest sector is further visualized in the Flooding Density map in Figure 7.

The Impact of Open Space & Elevation

The City's overall elevation and drainage orientation towards the Gulf of Mexico, further complicates the impact of neighborhood-level improvements, and amplifies the complexity and scale of Houston's long-term needs, within the context of its geography. Thus, the City has placed an increased focus on the importance of permeable and undeveloped space, open-ditch drainage, or park and open space, in relationship to flood impacts. The map on the following page in Figure 8 shows flooding reports in neighborhoods with open ditches during 2015. As indicated on the following page, much of the flooding has taken place in areas with existing open ditch drainage and in areas outside of the existing floodplain, indicating that existing drainage and permeability was insufficient to prevent flooding. Improvements to existing, insufficient open ditch drainage is vital to further resiliency and the City will be prioritizing consideration of such projects. Capitalizing on this opportunity to better its communities, the City plans to use this opportunity to invest in green infrastructure projects which will provide an economic uplift to communities by improving water quality, reducing the number of costly floods, and neighborhood beautification.Examples of such projects are further discussed in the CDBG-DR15 Infrastructure Program details below, but could include bioswales, and green streets while ensuring that downstream flooding does not occur.

Specifically, the City will look to fund projects through the CDBG-DR15 Program which will provide support to the communities and neighborhoods including those with the most severe unmet needs – low-income historically minority neighborhoods with inadequate open ditch drainage infrastructure. Through its needs assessment and public comment period, the City focused on these areas mindful that these communities are more likely to be located in disaster-vulnerable areas, and to suffer disproportionately severe housing and infrastructure damage because of a disaster. Accordingly, the City will prioritize assistance through its CDBG-DR15 Program to its low-income and historically disinvested minority communities.

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Figure 7: Flooding Density in Houston, TX

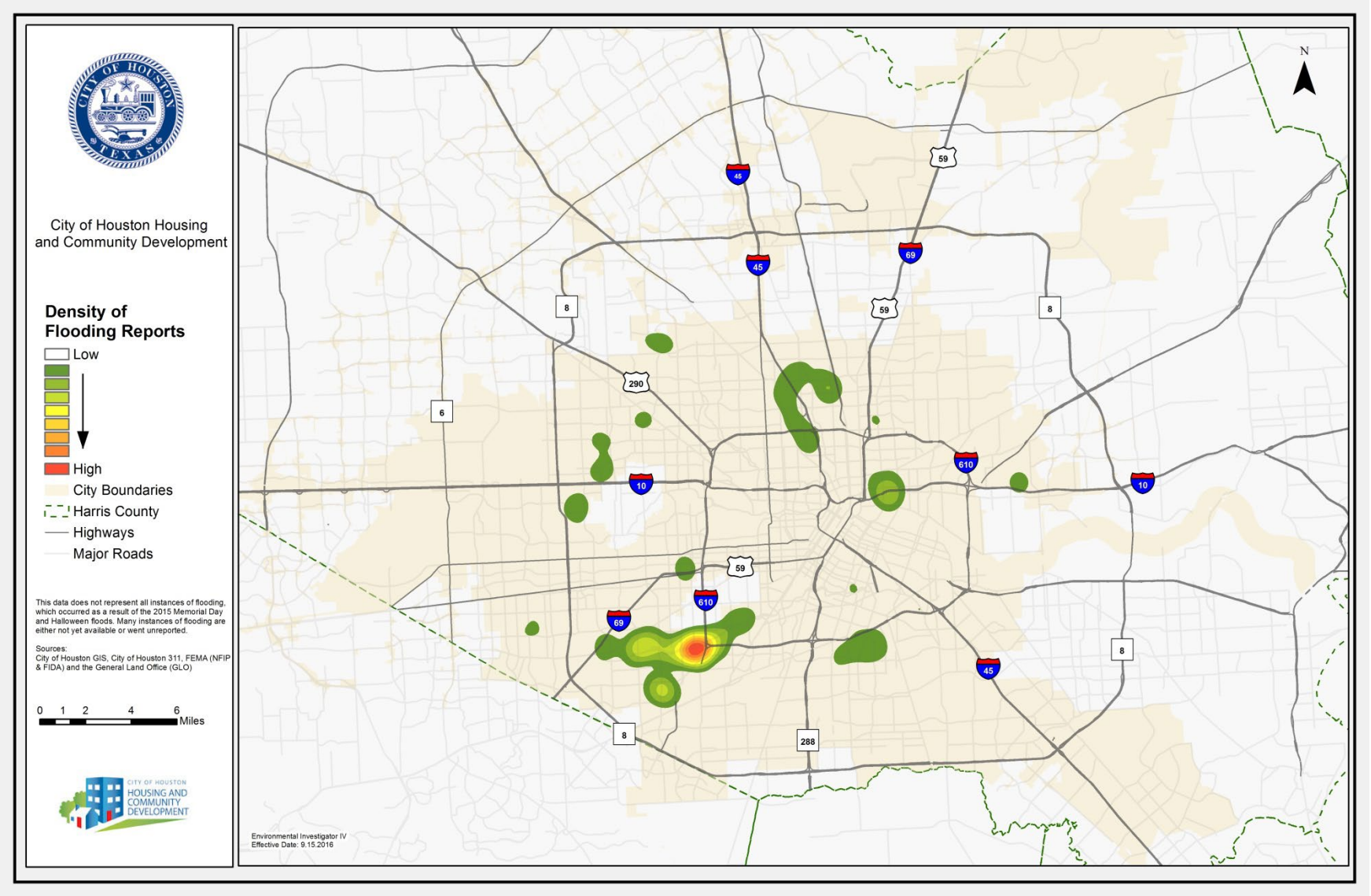
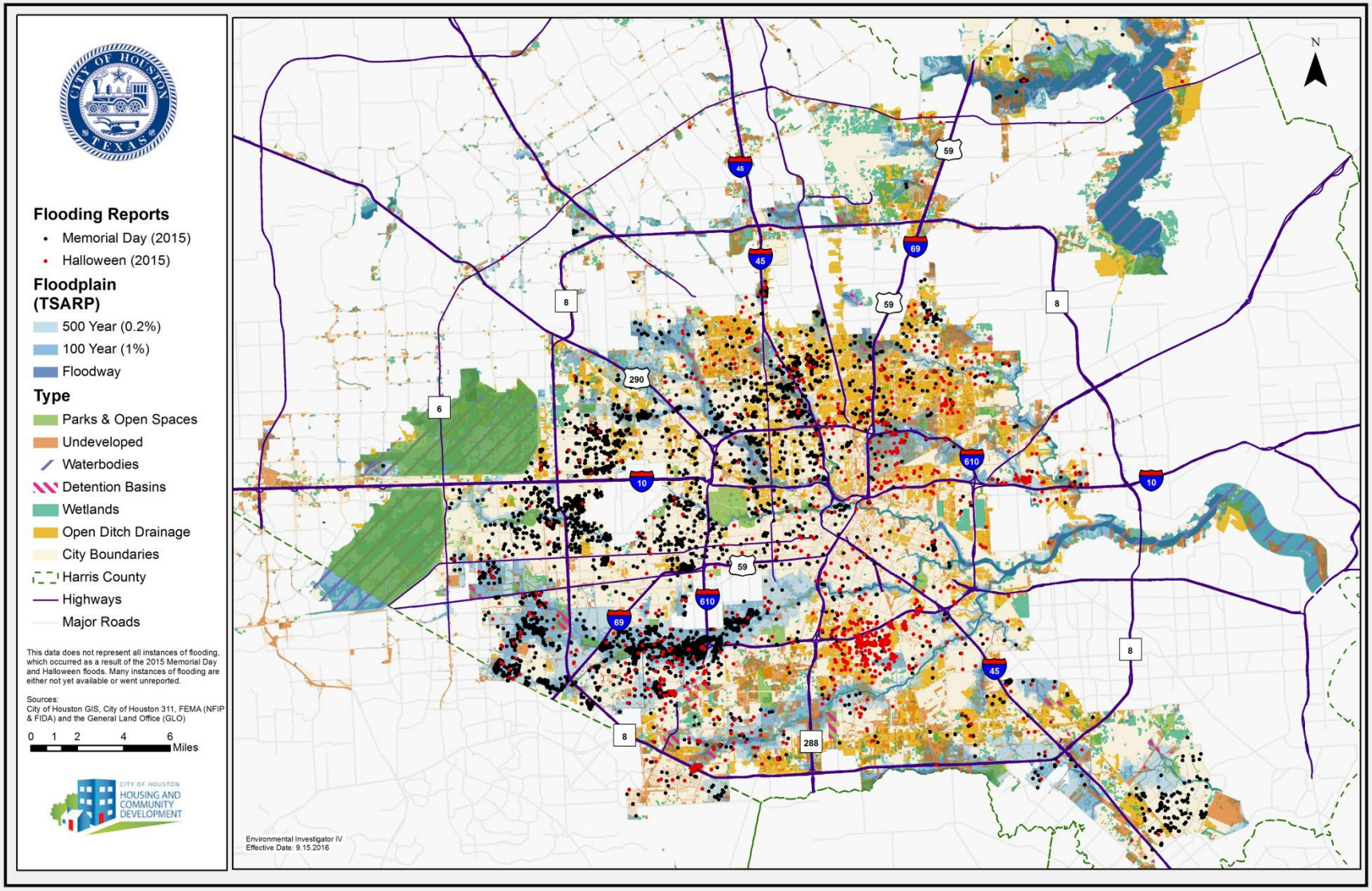


Figure 8: 2015 Flooding in Neighborhoods with Open Ditches



Public Assistance

Given the aforementioned background on the unique infrastructure and drainage needs faced by the City, it is important to consider the amount of Public Assistance that the City may expect to receive for long-term recovery. Moreover, to best proxy Houston's unmet infrastructure needs, HUD also used data from the FEMA Public Assistance (FEMA—PA) Program on Texas' match requirement.[47]

The FEMA—PA Program is designed to provide immediate assistance to impacted jurisdictions for emergency protective measures and permanent repairs to infrastructure and community facilities. The federal share of assistance is generally not less than 75% of the eligible project cost, requiring the state to contribute the remaining 25% in cost share.

The following table outlines the amount of Public Assistance provided (Statewide) to impacted areas, for each declared event.

Table 18: FEMA PA Summaries[48]

Statewide FEMA PA: DR-4223			
	Total Public Assistance Grants - Dollars Obligated	Emergency Work (Categories A-B) - Dollars Obligated	Permanent Work (Categories C-G) - Dollars Obligated
Total Amount	$130,490,043.17	$21,923,528.12	$107,005,614.05
Source: Data: August 2016			
Statewide FEMA PA: DR-4245			
	Total Public Assistance Grants - Dollars Obligated	Emergency Work (Categories A-B) - Dollars Obligated	Permanent Work (Categories C-G) - Dollars Obligated
Total Amount	$14,157,254.91	$1,602,251.41	$12,277,070.50
Source: http://www.fema.gov/disaster/4245 Data: August 2016			

Regarding the city's specific needs and funding as a subset of the statewide total above, Public Assistance needs for FEMA DR-4223 and DR-4245 have been preliminarily identified by the FEMA PA projections as $21,201,826.41 in public assistance need for Categories C-G (permanent repair) to date, for the May event (DR-4223) only. No FEMA PA projections have reported damages related to Categories C-G for the October event at this time (DR-4245).

Current data indicates that just $1,239,771.80 in FEMA PA federal funding has been issued to the city from FEMA towards those needs. These categories can be seen below in Table 19:

Based on this data, a remaining unmet need of **$19,962,054.61**[49] in identified infrastructure damage eligible under FEMA-PA Categories C-G remains.

[47] Because FEMA–PA damage estimates are only available Statewide (and not County), HUD allocated CDBG–DR funding by the estimate of unmet infrastructure needs suballocated to counties and local jurisdictions based on each jurisdiction's proportion of unmet housing and business needs.

[48] FEMA PA: fema.gov/disaster/4223 & fema.gov/disaster4245

[49] **Note regarding data:** This estimate is preliminary due to the limitations on data availability at this time. This number is likely to change as more FEMA PA data is made available.

Table 19: Memorial Day Flood Anticipated FEMA Public Assistance Need: City of Houston Preliminary Estimates[50]

Emergency Work: PA Categories A-B	Permanent repair: PA Categories C-G	Estimated Repair Cost
Debris Clearance		$7,067,275.47
Emergency		$7,067,275.47
	Category C: Roads and Bridges	-
	Category D: Water Control Facilities	-
	Category E: Buildings and Equipment	$7,067,275.47
	Category F: Utilities	$7,067,275.47
	Category G: Parks, Recreational Facilities, and Other Facilities	$7,067,275.47
	Subtotal Categories C-G Only:	**$21,201,826.41**

HMGP

The Hazard Mitigation Grant Program (HMGP) will be a critical part of long-term resilience improvements for infrastructure in the impacted area. HMGP is generally calculated at 15% of the total amount of Individual Assistance and Public Assistance allocated to the flood event. The amount available for mitigation and resilience activities for the city is unavailable at this time.

Existing Efforts by Houston's CDBG Entitlement Program

Houston's Community Development Block Grant (CDBG) Program, operated by HCDD, received an annual allocation of $22,140,237.00 from HUD, for the 2016 Program Year. The allocation is focused on the provision of economic development, community revitalization, public services, and affordable housing. The City faces a large demand for the services addressed in the regular program; however, the targeting of the regular allocation funds to meet those demands leaves a significant unmet need for infrastructure improvements exacerbated by ongoing flood and disaster events in the City.

As set forth in its 2016 Annual Action Plan for entitlement grants, HCDD will provide funding for 6 public infrastructure and facility improvements through its Public Facilities Program during the 2016 Program Year[51]. LMI neighborhoods will be significantly improved by creating new or improved amenities and services in these neighborhoods.

Existing Infrastructure Conditions

As noted in the beginning of this section, infrastructure in Houston, like other large cities, is deteriorating and costs for improvement are compounding. In addition, infrastructure can become inadequate in a fast growing city like Houston. Although the 2015 flooding events damaged some infrastructure in the city, as seen through the requests issued through the FEMA-PA Program, much of the flooding occurred due to inadequate or aging drainage infrastructure. This needs assessment does not recommend any specific project; however it shows that investment in infrastructure would enhance drainage in neighborhoods some of which have flooded repeatedly. To evaluate ways in which the City can reduce the risk of future flooding in areas affected by the 2015 flood events, HCDD is working with engineering experts to evaluate potential drainage improvement projects. A summary of the beginning of the evaluation is included in a later section of this document, "CDBG-DR15 Infrastructure Program". Some of the projects evaluated were noted as having an aging and deteriorated drainage system and upgrades to these systems would improve drainage.

[50] GLO FEMA PA Data
[51] Source: Houston and HCDD Annual Action Plan

Economy

Business & Employment

Houston is built along the coast of Texas at an elevation barely above sea level, where beaches and bayous have been filled in with pavement to support a growing, industrial city. The economy is primarily fueled by the energy sector with approximately 3,600 energy-related companies located in the area. The City is also a world leader in the chemical industry, with an extensive infrastructure that includes the world's most elaborate pipeline network, and over 405 chemical plants in the Houston-Baytown-Huntsville area. The City is diverse and a hub for international business; the Port of Houston is the world's sixth largest port, making the City of Houston an international gateway to the Southwest. Another well-known feature of the City's economy is the Johnson Space Center of the National Aeronautics and Space Administration. [52]

The Memorial Day and Halloween flood events left businesses across Houston with extensive clean up required; however, the City was fortunate that the losses to the economic sector were relatively minor. Business slowed as owners returned to work to find damaged inventory, stagnant flood waters, and various needs for structural repairs. Construction projects throughout the City paused to allow the waters to recede and favorable conditions to return. Economic activity was temporarily slowed due to limited access from flooding along the major transportation arteries.[53]

Flood Impact

Early impact predictions in June, the month following the Memorial Day Flood, estimated anywhere from $3- to $8-million in lost tax revenue; an estimate much higher than documented impact.[54]

As of August 2016, the SBA has issued $2,022,000 in Business and Economic Injury Disaster Loans (EIDL) to residents in the city. A total of 31 loans were issued, at an average payout of $61,219 for the Memorial Day floods, and only 2 loans at an average of $62,100, for the Halloween flood.[55] An additional loan for $2,000,000 was made to a non-profit entity for FEMA DR-4223, for a total of $4,022,000 in assistance provided to businesses and non-profits for flood recovery, as shown below:

Table 20: SBA Disaster Loans for Economic Development[56]

SBA Disaster Loans Addressing Economy	Amount	Number of Loans	Avg. Loan Amount
Memorial Day Flood: SBA Disaster Business Loans	$1,897,800	31	$61,219
Memorial Day Flood: Non-Profit Loans	$2,000,000	1	$2,000,000
Halloween Flood: SBA Disaster Business Loans	$124,200	2	$62,100
Total SBA Business & Non-Profit Loans (For Both Events)	$4,022,000	34	$118,294

Additionally, preliminary data from the Office of Emergency Management (OEM) indicates:

[52] http://www.city-data.com/us-cities/The-South/Houston-Economy.html
[53] http://www.bizjournals.com/houston/news/2015/12/16/year-in-review-floods-hammer-houston-in-2015.html
[54] http://www.bizjournals.com/houston/news/2015/06/03/heres-the-estimated-economic-impact-of-houstons.html
[55] See Appendix for detailed breakout by NAICS code (when made available)
[56] SBA Office of Disaster Assistance

Business Losses/Impacts

Table 21: Memorial Day Flood[57]

Type of Damage	Number	# Covered by Adequate Insurance	Total estimated repair cost
Minor Damage (<40%)	57	20	NA
Major Damage (>40%)	13	6	NA
Total	70	26	NA

*13 businesses had to cease operations, 57 experienced economic injuries.

The Halloween flooding caused a less significant impact and businesses reopened sooner than with the Memorial Day flooding event. The business losses for the Halloween event were:

Business Losses/Impacts: Halloween flooding

- Major Damage (>40%): 1
- Estimated Persons unemployed as a result of disaster: 30

The Greater Houston Partnership (Chamber of Commerce), the Texas Workforce Commission, and the Mayor's Office of Economic Development were consulted for additional economic/business-related impact from the flooding events and no additional impact was reported. No Disaster Unemployment Assistance (DUA) claims were indicated to have been paid out for Houston residents.

State of the Economy

Overall, flood-related impact to the Houston economy was minimal. The damage hit as local businesses and families were coping with an economic slowdown driven by low crude oil prices. The Houston economy is primarily based on the energy industry, with jobs largely existing in the oil and gas industry, which has been in a steady decline since 2014. Oil prices began their slide in the summer of 2014, plunging from more than $100 a barrel to less the $30 in February 2015, leading to production cuts, bankruptcies, and widespread layoffs in the industry.[58]

According to the 2015 *Economy at a Glance* report, issued by the Greater Houston Partnership, eight sectors in the City's economy experienced decline, while nine experienced growth.[59]

[57] Houston OEM
[58] http://www.houstonchronicle.com/news/houston-texas/houston/article/Years-of-pain-still-ahead-for-Houston-UH-7561506.php
[59] https://www.houston.org/pdf/research/glance_archives/Glance_Feb16.pdf

Table 22: Economy at a Glance[60]

Growth	Decline
Added 64,000 jobs in 2015	**Collectively cut 40,800 jobs in 2015**
Construction; retail trade; administrative support; educational services; health care; arts, entertainment and recreation; accommodations and food services; information; and government	Mining and logging (i.e., upstream energy); manufacturing; wholesale trade; transportation, warehousing and utilities; finance and insurance; real estate; professional and technical services; and management of companies

The City's housing market actually experienced the second best growth year on record during 2015. According to the aforementioned Economy at a Glance report, "Houston-area realtors sold 73,724 single family homes in 2015, down 2.4 percent from 75,535 sold the prior year, according to the Houston Association of REALTORS®. After a record-breaking 2014, Houston recorded its second-highest sales volume in 2015." In fact, despite the 2015 Disasters, Houston added 20,800 jobs in October.[61]

Economic Unmet Need

In regards to the specific Economic Unmet Need, **a calculation using the estimated impact and estimated assistance was used to arrive at a remaining unmet economic need of $0.00**, which illustrates the resiliency of the Houston economy.

Table 23: Economic Unmet Need [62]

Economy	
Estimated Impact	$4,022,000
Funds Made Available	$4,022,000
Unmet Need	**$0.00**

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[60] Greater Houston Partnership

[61] https://www.houstonpublicmedia.org/articles/news/2015/11/20/128264/houston-adds-20800-jobs-in-october-pushing-total-employment-past-3-million/

[62] Estimated Impact and Funds Made Available Calculated as SBA Disaster Business Loans tied to Memorial Day and Halloween flood events in the City of Houston

CDBG-DR15 Program Method of Distribution and Basis for Allocations

Program Budget

The Appropriations Act requires Houston's CDBG-DR15 funds to be used for specific disaster-related purposes. All activities must clearly address an impact stemming from the 2015 Disasters consistent with the purpose of the appropriation. Each activity must: (1) be CDBG eligible (or receive a waiver), (2) meet a national objective, and (3) address a direct or indirect impact from the disaster in a Presidentially-declared county. A disaster impact can be addressed through any eligible CDBG activity.

Houston considered the impacts to each of the three core sectors when developing the CDBG-DR15 Program Budget: housing, infrastructure, and economic revitalization. In addition to the three individual sectors, the City included preparedness and mitigation measures into its analysis so to ensure that its communities recover to be safer and stronger than they were before the 2015 Disasters.

Program funds administered by the City will be made available only within the impacted areas of the City consistent with the official FEMA Disaster Declarations DR-4223 and DR-4245 issued on May 29, 2015 and November 25, 2015 respectively. The City has proposed the following activities. The City will ensure that at least 70% of this funding will benefit LMI beneficiaries by prioritizing assistance for LMI families or benefitting LMI areas in the project selection process. This will be shown through the monitoring of beneficiaries served throughout the grant period.

Table 24: CDBG-DR15 Program Budget

Activity	Amount
Public Facilities and Improvements (Infrastructure)	$67,678,488.67
Housing (Single Family Home Repair)	$5,600,418.54
Property Buyout	$10,660,000.00
Planning	$98,492.79
Administration	$3,054,600.00
Total	**$87,092,000.00**

Accomplishment of CDBG-DR National Objectives

Houston is a long-time steward of CDBG funds; thus, the City supports, understands and fully embraces HUD's national objectives. The accomplishment of a national objective through the CDBG programs furthers the development of viable communities by creating a suitable living environment, providing decent housing, and creating economic opportunities, for LMI persons. All activities funded, except for program administration and planning, will meet one of the following three national objectives:

- Benefit to low- and moderate-income (LMI) persons
- Aid in the prevention or elimination of slums or blight
- Meet a need having a particular urgency (referred to as urgent need)

The City has designed the CDBG-DR15 Program in compliance with HUD national objectives and throughout the life of the CDBG-DR15 Program, Houston will ensure that assistance is prioritized toward the most disadvantaged populations and areas, using primarily the LMI national objective. The urgent need national objective may also be used for Public Facilities/Infrastructure and the Strategic Buyout activities.

This Action Plan further details the projects and activities to be carried out through the CDBG-DR15 Program. Included in the description of each activity is the identification of the specific national objective which will be accomplished through that funded activity.

CDBG-DR15 Program Start and End Dates

The City's CDBG-DR15 Program will commence immediately upon execution of the grant agreement with HUD. Thus, it is anticipated that various program implementation activities as detailed herein will commence approximately January 1, 2017. The City will expend all program funds and complete all CDBG-DR15 Program activities within the six (6) year period prescribed by HUD. Thus, although the final start and end date will depend upon the execution of the grant agreement, the anticipated time period for the City's Strategic Buyout, Single Family Housing, and Infrastructure Programs is January 1, 2017 through approximately December 2022, and a more detailed timeline is included in each program's description. Once the grant agreement is finalized and executed between the City and HUD, the City will provide specific details regarding its program activity start and end dates through its Quarterly Performance Reports submitted to HUD.

Housing Impact

CDBG-DR funds are often used to rehabilitate damaged homes and multifamily units. However, grantees may also fund new construction or rehabilitate units not directly impacted by the disaster if the activity clearly addresses a disaster-related issue. This impact can be demonstrated by the disaster's overall effect on the quality, quantity, and affordability of the housing stock and the resulting inability of that stock to meet post-disaster needs and population demands.

Based on the analysis of the City's unmet needs and the limited amount of recovery funds available, the City will target CDBG-DR15 funding towards a single family housing program, voluntary acquisition program, and infrastructure improvements in support of disaster-impacted housing. To provide lasting relief to the greatest number of residents, Houston will focus primarily on infrastructure improvements certain to eliminate or lessen the number of homes that will be impacted by future floods. Many of the same homes that flooded in 2015, flooded in subsequent events in 2016, highlighting the need for a more permanent solution based on the root cause of the flooding, while also providing assistance to impacted Houstonians to repair or elevate their homes. Thus, this recovery strategy aims to provide a comprehensive approach ensuring long-term recovery.

Strategic Buyout Program

Many of the same properties that flooded in 2015, flooded in subsequent events in 2016, highlighting the need for a more permanent solution based on the root cause of the flooding in addition to the repair or elevation of specific homes. As part of the City's continued commitment to funding the acquisition of flood impacted homes/properties in areas subject to repetitive flooding, the City has allocated funding to the CDBG-DR15 Strategic Buyout program which will be administered by the City through HCD. Thus, this recovery strategy aims to sustain long-term recovery to buyout properties in support of improving infrastructure and reducing flooding. It involves the voluntary purchase and removal of structures from interested homeowners and property owners who were substantially damaged during the 2015 floods. This program is intended to address flood risks in areas that have repeated flooding.

Properties that have been damaged by, or may be prone to incurring damage caused by, storms or storm related flooding, or that may buffer or protect other lands from such damage are eligible for buyout. By transforming the parcels of land into wetlands, open space, or storm water management systems, the City creates a natural buffer to safeguard against future flooding in neighborhoods benefiting both renters and homeowners. Eligible activities include the buyout/acquisition of a residential or nonresidential property, including vacant or undeveloped lots in targeted areas.

Through the Strategic Buyout Program, contiguous parcels of land will be targeted for acquisition. Any property acquired, accepted, or from which a structure will be removed pursuant to the project will be dedicated and maintained in perpetuity for a use that is compatible with open space, recreational, or floodplain and wetlands management practices. No new structure will be erected on property acquired, accepted, or from which a structure was removed under the acquisition or relocation program other than: (a) a public facility that is open on all sides and

functionally related to a designated open space (e.g., a park, campground, or outdoor recreation area); (b) a rest room; or (c) a flood control structure, provided that structure does not reduce valley storage, increase erosive velocities, or increase flood heights on the opposite bank, upstream, or downstream and that the local floodplain manager approves, in writing, before the commencement of the construction of the structure. The City may lease acquired property to adjacent property owners or other parties for compatible uses in return for a maintenance agreement. Although federal policy encourages leasing rather than selling such property, the property may also be sold. In all cases, a deed restriction or covenant running with the property must require that the buyout property be dedicated and maintained for compatible uses in perpetuity.

The Strategic Buyout Program will meet one of three National Objectives:

- Urgent Need (direct benefit) – if the activity addresses the serious threat to community welfare following the disaster and the household assisted is above 80% AMI.
- LMI Housing (direct benefit) if the household to be assisted is LMI and is occupying replacement housing.
- LMI Income Area Benefit – if the final use of the land is available for the use of an LMI area.

Table 25: National Objectives

Activity Types	National Objective Urgent Need Direct	National Objective L/M Income
Acquisition/buyout of eligible property	X	X
Clearance and Demolition	X	X
Relocation Payment and Assistance	X	X

Properties may be acquired using the urgent need national objective to reduce risks of future flooding, such as through drainage detention, which may benefit a single neighborhood or multiple neighborhoods. The location of the properties using the urgent need national objective will likely be in communities that have flooded repeatedly over time.

Property buyout will be prioritized as it relates to planned or in-progress infrastructure projects or other targeted buyout programs. Selection of properties will occur after a thorough analysis of impacted areas where documentation supports buyout will enhance infrastructure activities, funded with CDBG-DR15 or other sources, to decrease risks of future flooding in the immediate neighborhood and/or lessen the potential downstream flooding. The program will seek projects that benefit a majority of low- and moderate-income residents; however, the program allows funding to address urgent need, which could include income levels above low- and moderate income. The target area for the property buyout will be low- and moderate-income areas, although some projects may be selected that are outside of this target area and these will most likely meet the urgent need national objective.

The Strategic Buyout Program removes the threat to lives and property and reduces government expenditures associated with flood disasters. This program is dual-benefit and will convert high-risk areas into drainage detention areas to better sustain neighborhoods and may provide housing choice options to residents like relocation assistance to other higher-quality rental properties.

If a rental property is purchased through the Strategic Buyout Program and contains tenants that will be required to relocate, they are considered displaced persons who may be eligible for relocation benefits under the Uniform Relocation Act (URA).

As a displaced tenant under the URA, a tenant can receive two types of replacement housing assistance: a moving allowance and a replacement housing payment [42 U.S.C. 4623(a)(1), 42 U.S.C. 4623(b), 42 U.S.C. 4624(a), 42 U.S.C. 4624(b)]. The moving allowance can be an actual reasonable moving and related expenses reimbursement, or a fixed payment for moving expenses determined by a schedule published by the Federal Highway Administration. The replacement housing payment can take two forms. If a displaced tenant chooses to continue to rent a dwelling,

the award amount they are eligible for is 42 months multiplied by the difference in rent/utilities of their new home and their buyout dwelling (including lot rent, if a mobile home unit). Rental assistance is capped at $7,200 for 90-day tenant occupants, except in situations where housing of last resort applies. Another option is for the displaced tenant to purchase a new home and receive a lump sum down payment form of assistance. If the displaced tenant elects to receive lump sum down payment assistance, their award cannot exceed what they would have been eligible for had they continued to rent a unit.

For homeowner occupants of 90 days or more, a price differential payment is based on the difference, if any, between the acquisition price of the acquired dwelling and the purchase price of a comparable decent, safe, and sanitary replacement dwelling. The maximum amount of assistance is $31,000 for these homeowner occupants.

Minimizing Displacement of Persons

Consistent with the City's Consolidated Plan, CDBG-DR15 funded activities will be designed to eliminate (or minimize) the occurrence of displacement. The City will minimize displacement of persons or entities and assist persons or entities displaced as a result of implementing a project with CDBG-DR15 funds. This is not intended to limit the ability of the City to conduct buyouts or acquisitions for destroyed and extensively damaged units or units in a floodplain.

The City will ensure that the assistance and protections afforded to persons or entities under the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), and Section 104(d) of the Housing and Community Development Act of 1974, is available. The URA provides that a displaced person is eligible to receive a rental assistance payment that covers a period of 42 months. Given its priority to engage in buyout and optional relocation activities to avoid repeated flood damage and improve floodplain management, the City accepts the HUD waiver of the Section 104(d) requirements, which assures uniform and equitable treatment by setting the URA and its implementation regulations, as the sole standard for relocation assistance under the Notice published at 81 FR 39687. Efforts to conduct voluntary buyouts for destroyed and extensively damaged buildings in a floodplain may not be subject to all provisions of the URA requirements. For LMI residents displaced by the CDBG-DR15 program, a temporary housing program may be available through the CDBG-DR15 program to allow time for new units to be rehabilitated or constructed.

Duplication of Benefits Clarification for Strategic Buyout Program

The City will be using post-disaster fair market value as the valuation method for acquired properties. If applicable, the CDBG-DR15 Strategic Buyout Program will conduct a duplication of benefits (DOB) calculation for each eligible property prior to providing the funding necessary to acquire the property.

Environmental Requirements

It is required that all approved applicants for the Strategic Buyout Program follow all CDBG environmental regulations prior to receiving a release of funds.

Eligibility Requirements of Proposed Buyout Property/Owner

To be considered an eligible property for the buyout, the buyout property must satisfy at least one of the following requirements:

1. The property is located in the designated areas (land City deems eligible for Strategic Buyout), or
2. The property is located outside of the designated, and satisfies one of the following requirements:
    - The property is substantially damaged (51% or more of the pre-flood fair market value of the structure is damaged), or
    - The property is considered a health/safety risk.

Timeline

The following is a tentative timeline for DR15 expenditures for the Strategic Buyout activity.

Table 26: Strategic Buyout Timeline

Development of Program Guidelines and Implementation Structure	Project Selection	Demolition and/or Construction	Program Closeout
October 2016 – February 2017	March 2017 – September 2017	November 2017 – September 2022	December 2022

CDBG–DR15 Single Family Housing Program

The primary focus of the Single Family Housing Program funded under the CDBG–DR15 program (CDBG–DR15 Single Family Housing Program or CDBG–DR15 SFHP) is to provide housing assistance to LMI households impacted by the 2015 Disasters. The City has allocated $6,300,000for this program which will offer multiple paths to provide different types assistance for impacted home owners. The CDBG-DR15 SFHP will also be administered by the City through HCD. Assistance will be provided through multiple housing activities including, but not limited to, the rehabilitation, reconstruction, and assistance with property elevation of impacted housing units. The program may also provide assistance for homeowners that have completed rehabilitation work related to the 2015 Disasters with personal resources, subject to the restrictions set forth under applicable laws, regulations, and the program requirements (e.g., eligibility criteria, grant restrictions). A primary objective of the program is to facilitate decent, safe, and sanitary housing in flood-impacted areas through these activities. Providing decent, safe, and sanitary housing for elderly and disabled populations will also be a priority.

National Objective

The activities funded under the CDBG–DR15 SFHP will serve low- to moderate-income populations thereby satisfying the LMI housing national objective.

Eligibility Criteria

Applicants for the CDBG-DR15 SFHP will be required to provide complete and accurate information regarding their household composition, household income, and other information necessary regarding an applicant's housing situation. A failure to disclose accurate and complete information may affect eligibility requirements.

At a minimum, the following criteria must be met for an applicant to be eligible for assistance; however, meeting these threshold requirements will not guarantee assistance.

- The property must have documented damage as a result of one or both of the 2015 Disasters and the applicant must not have been able to fully repair or rebuild since the 2015 Disasters. Due to the length of time and subsequent storms, it may be difficult to attribute 2015 Disaster damage to the current condition of the property. Therefore, an inspection report will be the preferred method by which the damage resulting from the 2015 Disasters can be verified. The application should also be supported by one of the following:
    - FEMA claim letter for housing repair
    - SBA loan for structure for flood recovery (*Loan must be related to either DR-4223 or DR-4245.)
    - Insurance claim paid for structure
- Applicants must be very-, low-, or moderate-income with a total household annual gross income that does not exceed 80% Area Median Family Income (AMFI), adjusted for family size, as published annually by HUD.
- The applicant must have had ownership interest in the property on the date of the 2015 Disaster which impacted the applicant's property and the applicant must presently own the property.

  - Ownership is verified through a warranty deed or fee simple title.
  - If a deed cannot be provided, applicants who wish to submit an application may provide an Affidavit in the form and substance required by the City which affidavit certifies to one of the following:
    - No other individual or entity has the right to claim ownership in the subject property; or
    - If another individual or entity has a right to claim ownership, that party has been contacted and agrees to participate in the CDBG–DR15 program; or
    - If another individual or entity has a right to claim ownership, attempts were made to contact that party but after reasonable attempts, that party could not be located; or

    The affidavit must be supported by additional documentation from the list below, in order of preference:

    - Tax receipts at the time of the 2015 Disaster;
    - Hazard insurance for the home in question;
    - Utility statements at the time of the storm; or
    - Other documentation acceptable by the City.
- The applicant must have occupied the damaged home as their principal residence on the date of the 2015 Disaster impacting the subject property. Vacation homes and rental properties are not eligible for assistance under the CDBG–DR15 SFHP.
- Only single family owner-occupied units within the city limits of Houston, Texas will be eligible for the CDBG–DR15 SFHP. Manufactured housing units (MHUs or mobile homes) will not be repaired with CDBG–DR15 program funds.
- The applicant must furnish evidence that the subject property taxes are current, or have an approved payment plan upon which they are current, or qualify for an exemption under current Texas laws.
- One person on the application with an ownership interest, in part or in whole, on the property must be able to demonstrate U.S. Citizenship or Lawful Permanent Residence.
- If located in a flood plain, the applicant must acquire flood insurance and comply with obligations to notify future owners of flood-insurance requirements.

In order to assist the most vulnerable populations with this disaster recovery funding, Houston will prioritize assistance for all housing programs based on the following criteria:

- Individuals who are very-low, low-, or moderate-income with a total household annual gross income that does not exceed 80% Area Median Family Income (AMFI), adjusted for family size, as published annually by HUD;
- Persons with documented disabilities;
- Age-dependent household members (above the age of 62 or below the age of 18).

It is anticipated that the unmet needs of Houston's most vulnerable citizens will exceed the available funding; accordingly, the City will assist all possible eligible applicants with households falling within these priority categories (in other words, under the 80% AMI threshold) before giving any consideration to extending housing assistance to those eligible applicants whose income is above the 80% AMI threshold.

Basis for Calculating Housing Assistance Awards

If eligible and awarded, housing assistance award calculations may be based on the following factors:

1. A review of funding from all sources to calculate previous assistance received by the Applicant and to ensure no Duplication of Benefits (DOB);
2. Damage/scope of project work needed; and,
3. Pre-disaster housing unit value.

Housing assistance awards will be determined after factoring in the inputs listed above, subtracting any unaccounted for duplication of benefit, and then factoring in the pre-determined program assistance maximums that apply to the particular housing assistance activities to be used. Funds qualified as DOB may be required to be placed in escrow while assistance is provided.

Demonstrable Hardship

The City may consider exceptions to program policies for applicants who demonstrate undue hardship. Applicants in this situation will be reviewed to determine whether denial of program assistance further perpetuates circumstance attributing to such hardship. Demonstrable hardship may include but is not limited to: excessive amounts of debt due to a natural disaster, prolonged job loss, substantial reduction to household income, death of a family member, unexpected and extraordinary medical bills, disability, etc.

Construction Standards for Replacement and New Construction of Residential Housing

The City will use Housing Quality Standards (HQS) as a minimum property standard. In addition, the City will require all new construction and all replacements of substantially damaged residential buildings to meet the Green Building Standard. Replacement of residential buildings may include reconstruction (*i.e.,* demolishing and rebuilding a housing unit on the same lot in substantially the same manner) and may include changes to structural elements such as flooring, systems, columns, or load bearing interior or exterior walls.

The City will implement construction methods that emphasize high quality, durability, energy efficiency, sustainability, and mold resistance. All rehabilitation, reconstruction, and new construction will be designed to incorporate principles of sustainability, including water and energy efficiency, resilience, and mitigation against the impact of future disasters.

Under the CDBG-DR15 Program, the City will require any and all construction activities to follow the guidelines specified in the HUD CPD Green Building Checklist and meet an industry-recognized standard that has achieved certification under at least one of the following programs

- ENERGY STAR Multifamily High Rise Program
- Enterprise Green Communities
- LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development)
- ICC-700 National Green Building Standard
- EPA Indoor AirPlus (ENERGY STAR a prerequisite)
- any other equivalent comprehensive green building program

Houston will implement and monitor construction so as to ensure the safety of residents and the quality of projects developed.

For rehabilitation other than those substantially damaged residential buildings described above, grantees must follow the guidelines specified in the HUD CPD Green Building Retrofit Checklist. Grantees must apply these guidelines to the extent applicable to the rehabilitation work undertaken, including the use of mold resistant products when replacing surfaces such as drywall.

Construction Warranties

Assisted homeowners will be provided a warranty on the work performed and funded through the CDBG-DR15 Single Family Housing Program. All work performed by the contractor will be guaranteed consistent with Texas standards, or standards adopted by the City and referenced in contractor agreements to be executed between the homeowner/applicant and contractor. Contractors will be required to guarantee 1 year of general warranty for the entire home, 2 years of electrical, delivery, and mechanical system warranty, and 10 years of structural warranty. Applicants will have access to a thorough appeals process to address any construction quality concerns identified by the homeowner during the construction process.

Appeals Process

In addition, in line with its existing policies and practices, the City will establish a formal appeals process for any CDBG-DR15 SFHP activity under which a homeowner and/or business can appeal the quality of any rehabilitation work. This protocol will include details on the appeals process, appealable decisions, review criteria, and governance mechanisms, will be developed as part of the program operations and guidelines. Upon the approval of this Action Plan and the implementation of any such activity, the appeals process specific to such activity will be announced and placed on the CDBG-DR15 webpage.

Duplication of Benefits

In accordance with the Robert T. Stafford Act, government entities providing disaster recovery assistance are required to prevent and rectify any duplication of benefits (DOB) by establishing and implementing strong policies and procedures regarding the same. As a previous subrecipient of CDBG-DR funds, the City, through HCDD, currently has in place policies and procedures to conduct data checks, collect verifiable documentation from individual applicants, and coordinate with private insurance to conduct a thorough verification of benefits review. The duplication of benefits procedures were previously provided to HUD with the *Risk Assessment Documentation* and will be adapted from the current HCDD policies and procedures to achieve compliant implementation of the activities funded by the CDBG-DR15 SFHP. The City will establish data share agreements with federal entities, to ensure ongoing exchange of data throughout the life of the program, supporting accurate award calculation.

The City has many years of experience with verifying assistance from: FEMA Individual Assistance (IA); FEMA National Flood Insurance Program (NFIP); Private Insurance; SBA; and other federal or state-level sources of assistance. Under federal law, duplication of benefits received by any of these sources must be deducted from a program applicant's eligible award, which is based on an estimated cost of repairs. The CDBG–DR15 SFHP will only consider payouts received for structural repairs, not those received for contents or personal items.

All program applicants will be required to sign a Subrogation Agreement upon application, permitting the City through HCDD to recover any future insurance payout that may be issued to the applicant after the time of original award. Where additional DOB is received by the applicant and paid out, the City, through HCDD, shall enforce the terms of the Subrogation Agreement to collect repayment.

As detailed in its current duplication of benefits policies and procedures, the City, through HCDD, requires all applicants to disclose previous assistance and provide supporting documentation. Acceptable documentation will be required to demonstrate the cost and type of repair conducted to the storm-damaged property. For example, if the cost of repairs was greater than or equal to the funds received, then the funds available for repairs funded through CDBG-DR15 SFHP will not be reduced. If the cost of repairs was less than the funds received, then the funds available for assistance will be reduced.

The City will access the data files which include previous benefits paid for real property repairs from FEMA, SBA, NFIP, private insurance, or any other source disclosed by applicant, to determine if there was a previous benefit paid to the applicant(s) or any member of the household, to repair structural deficiencies caused by the floods. All sources of previous benefits paid will be requested from the applicant(s) or any member of the household and must be disclosed on the application. Verification may be obtained through homeowner(s) documentation, copies of bank records, if required, for validation and/or information sharing with SBA and FEMA, whenever possible.

Broadband Infrastructure

The City will also ensure through any CDBG-DR15 SFHP activity providing new construction or substantial rehabilitation, as defined by 24 CFR 5.100, of a building with more than four rental units, installation of broadband infrastructure (as defined in 24 CFR 5.100) will be included, except where the City documents that: (i) The location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible; (ii) the cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden; or (iii) the structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

Flood Insurance & Elevation

The City will implement resilient home construction standards. Specifically, HUD guidance will be followed by Houston to ensure all structures, defined at 44 CFR 59.1, designed principally for residential use and located in the 1 percent annual (or 100-year) floodplain that receive assistance for new construction, repair of substantial damage, or substantial improvement, as defined at 24 CFR 55.2(b)(10), must be elevated with the lowest floor, including the basement, at least two feet above the 1 percent annual floodplain elevation. Residential structures with no dwelling units and no residents below two feet above the 1 percent annual floodplain, must be elevated or flood-proofed, in accordance with FEMA flood-proofing standards at 44 CFR 60.3(c)(3)(ii) or successor standard, up to at least two feet above the 1 percent annual floodplain.

Property owners assisted through the CDBG–DR15 SFHP will be required to acquire and maintain flood insurance if their properties are located in a FEMA designated floodplain. This requirement is mandated to protect safety of residents and their property and the investment of federal dollars. The elevation height of a house can significantly reduce the cost of flood insurance. Houston will implement procedures and mechanisms to ensure that assisted property owners comply with all flood insurance requirements, including the purchase and notification requirements described below, prior to providing assistance.

As noted in the eligibility requirements set forth herein, the City will ensure that property owners receiving disaster assistance that triggers the flood insurance purchase requirement are informed that they have a statutory responsibility to notify any transferee of the requirement to obtain and maintain flood insurance, and that the transferring owner may be liable if he or she fails to do so.

Timeline

The following is a tentative timeline for DR15 expenditures for the Single Family Home Repair activity

Table 27: Single Family Home Repair Timeline

Development of Program Guidelines and Implementation Structure	Begin to Receive Applications	Begin Construction	Program Closeout
October 2016 – February 2017	March 2017	October 2017	October 2021

Fair Housing

Throughout all of the CDBG-DR15 activities, the City will provide an environment that is free from discrimination based on selected characteristics. The fundamental principles of equal opportunity and fair housing are the foundations of sustaining communities in Houston. Thus, the City will maintain its commitment and ensure that fair housing is appropriately addressed through the disaster recovery activities under the CDBG-DR15 Program.

During the development of this Action Plan, the City closely examined its 2015 Analysis of Impediments to Fair Housing Choice (AI). Consistency with goals and priorities set forth in the AI was a driving factor in the priorities established for the CDBG-DR15 Program. Possible obstacles which could impede fair housing choice were reviewed and possible actions to be taken through the CDBG-DR15 Program were identified with a goal to remove or overcome these barriers through funded activities.

One impediment identified within the AI, to affirmatively furthering fair housing, is the lack of knowledge about fair housing.[63] It was specifically determined that there is a lack of knowledge about fair housing rights amongst citizens, as well as government agencies and other partners working alongside HCDD, to realize fair housing for all within the Houston communities. Remaining true to the fair housing goals included in the AI, the CDBG-DR15 activities will

[63] Houston Housing and Community Development Department, 2015 Analysis of Impediments to Fair Housing Choice

continue to provide education, resources, and outreach as program participants or applicants may not know or understand their fair housing rights or available resources regarding the same. All outreach activities, presentations, or meetings will include a discussion of fair housing rights in connection with the CDBG-DR15 Program and resources available to all citizens. At its first opportunity, the public and stakeholder meeting concerning the Action Plan on August 18, 2016, included a presentation educating the audience about fair housing rights, laws, and resources available through the CDBG-DR15 Program to address any fair housing concerns. Should any local government units or entities partner with HCDD on CDBG-DR15 activities, these entities will receive additional training and guidance on how fair housing should be applied in the disaster recovery programs.

The CDBG-DR15 Program will intentionally target the creation of additional affordable housing. Within the AI, a lack of affordable housing options was an additional impediment identified.[64] According to the AI, there is a lack of affordable housing options within certain areas of the City. The AI specifically stated:

"…(S)ome housing affordable to low- and moderate-income families are located in neighborhoods that are not located near public transportation, near high quality schools, lack amenities, or have a high number of crime incidences. Many of the publicly funded affordable housing developments are located in mostly low-income neighborhoods. In addition, market housing available for low- and moderate-income households are often in older housing stock which may need a higher cost of repairs and may have additional health hazards, like lead-based paint or asbestos."[65]

The City will work to ensure that its disaster recovery funding is used to affirmatively further fair housing by funding activities in areas with concentrations of poverty, in particular in its efforts to de-concentrate poverty in minority communities through acquisitions.

Any activities that will be administered under the CDBG-DR15 Program will be conducted in accordance with the City's AI. Where impacts to housing are identified, any work will be conducted in accordance with Fair Housing principles. It is anticipated that any planning activities conducted will be required to incorporate a review of Fair Housing practices and address any concerns stemming from such practices related to the activities under the CDBG-DR15 Program.

Finally, the City is mindful that it is required to update its full Consolidated Plan, to reflect disaster-related needs, any unmet disaster-related needs, and associated priorities no later than 24 months after the effective date of the Notice. According to Houston's Consolidated Plan Strategic Plan formulation cycle, the City's 2020 Proposed Consolidated Plan is currently scheduled to be the City's next Five-Year Strategic Plan (for Plan Years 2015-2019). The Assessment of Fair Housing will be conducted as part of the City's 2020 Consolidated Plan formulation cycle.

CDBG-DR15 Infrastructure Program

The primary focus of the CDBG-DR15 Infrastructure Program is to reduce the risk of potential future flooding in neighborhoods. The following reviews the selection criteria that HCDD will utilize to select projects for approval. Analysis will be conducted in order to select projects that will perform the best and have the greatest impact on the health, safety, and overall welfare of the citizens. After the analysis of potential projects, City Council will approve the selection of infrastructure projects to be funded with CDBG-DR15. No projects have been selected at the time of submission of this document, and therefore locations and exact beneficiaries of projects are currently unknown. This section gives locations of potential projects currently under consideration.

[64] Houston Housing and Community Development Department, 2015 Analysis of Impediments to Fair Housing Choice
[65] Houston Housing and Community Development Department, 2015 Analysis of Impediments to Fair Housing Choice, pg. 120

Program Priorities

The City has allocated $66,978,907.21of CDBG-DR15 funding to its CDBG-DR15 Infrastructure Program and this program will be administered by HCDD in conjunction with Houston Public Works.

Based on the repeated damage from flooding as confirmed through the City's impact and unmet needs assessment, unless the City undertakes these critical infrastructure repairs and upgrades, Houston cannot best address its housing needs as its residents will only continue to experience repetitive loss due to flooding.

As a component of the unmet needs analysis, the City conducted a review of its planned infrastructure projects and other projects associated with the City-owned drainage system to identify opportunities to be funded through its CDBG-DR15 Infrastructure Program which would complement the City's existing plans and diminish the risk of repeated flooding in the most heavily impacted areas. In order to evaluate and identify areas of critical need, the City utilized previously detailed data summarized in the unmet needs assessment from the 2015 Disasters. A primary focus remained on locations tied to FEMA Individual Assistance claims, supplemented by 311 Hotline calls and debris removal pick-up locations. Utilizing this information, the City then mapped these areas to identify specific areas of concentrated impact. As illustrated in Figure 9 below, these areas of concentration or "clusters" are located both within LMI and non-LMI areas.

Upon the examination of the widespread impact, four primary areas of concentrated damage or "cluster areas" within LMI and non-LMI zones were identified. The highest rainfall amounts covered neighborhoods in Southern Houston, and the heavily impacted Meyerland neighborhood. (See Figures 10 and 11 below). Although located north of these higher rainfall totals, two additional areas which encompass many LMI areas also revealed widespread infrastructure weaknesses even though these two areas are located outside of the FEMA floodplain. Such reports confirmed that localized ponding, stream (bayou) flooding, and undersized storm drains contributed to the significant damage suffered by the housing sector. Given this analysis, the City sought additional feedback and insight from local leaders and residents of these areas to assess the specific needs of its impacted communities.

The City specifically consulted with Council Members representing all districts but focused outreach to those representing the affected areas. Comments were reviewed from residents which identified additional areas of impact, and specifically how those areas were affected by the floods. Incorporating the input from multiple stakeholders solidified the goals of the CDBG-DR15 Program to reduce Houston's recurring flood impacts:

I. Leverage the time and funds previously invested by the City to reduce recovery time of the flood-impacted areas;
II. Maintain focus on resilience and proactively plan to ensure long-term benefit realized by LMI communities beyond single project implementation;
III. Timely completion of projects to bring quick recovery to those neighborhoods impacted by the 2015 Disasters; and,
IV. Maintain focus on improving drainage in LMI communities as well as reduce flood impacts to areas which suffer reoccurring losses due to flooding.

Thus, the City will focus activities funded through the CDBG-DR15 Infrastructure Program on flood mitigation and related infrastructure improvements such as, but not limited to, roads, bridges, drainage systems, and public utility infrastructure. Specific program objectives include rebuilding, repairing, and/or replacing underperforming or insufficient infrastructure and facilities. The City will evaluate and incorporate specific project design elements that may enhance preparedness for future disasters.

Figure 9: Potential Project Areas and FEMA Flood & 311 Data

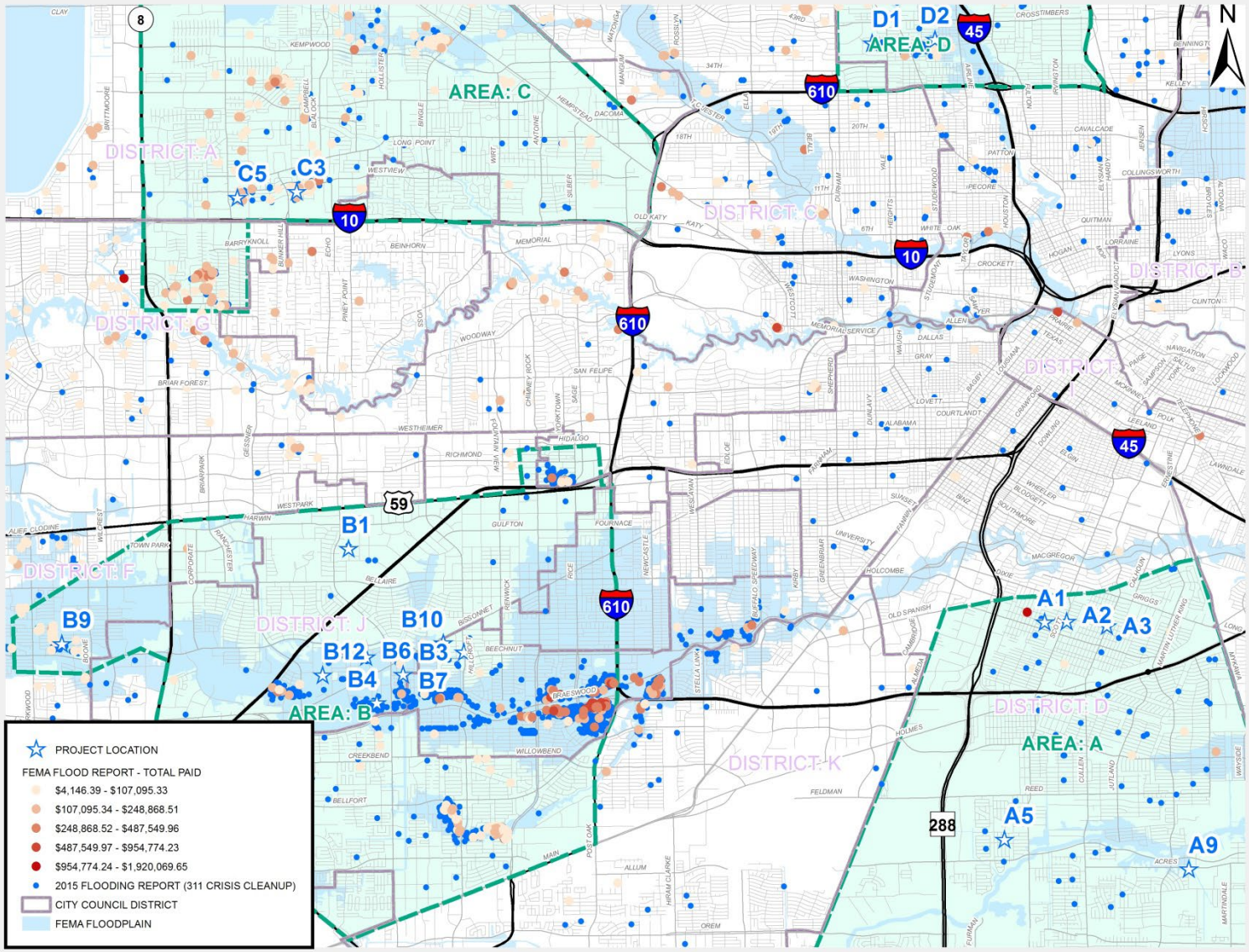
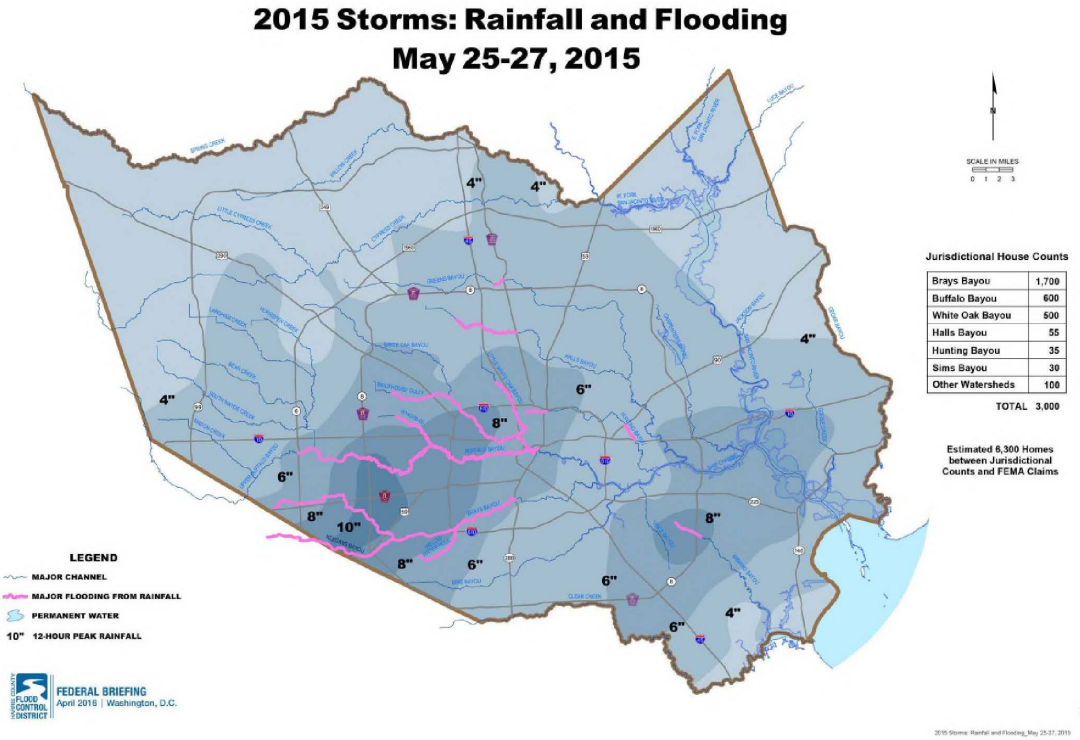
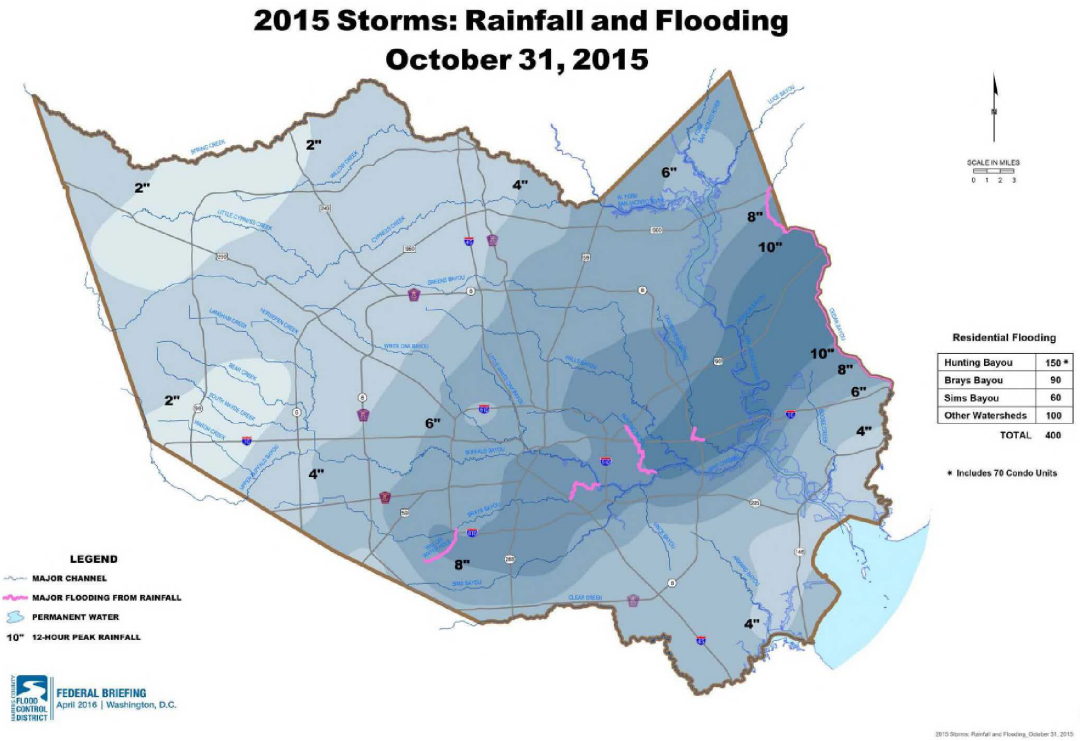


Figure 10: Rainfall and Flooding May 25-27, 2015 & Figure 11: Rainfall and Flooding October 31, 2015





CDBG-DR15 Infrastructure Program Eligible Activities

The City will fund a variety of different infrastructure projects; however, flood-control related projects will be prioritized. A list of projects which could be funded through the CDBG-DR15 Infrastructure Program is set forth in Table 26 below and the list which follows Table 26. Specific projects which will mitigate flooding in the areas of concentration located both within and outside of the floodplain will be targeted. Projects range from street improvements with drainage to pure drainage infrastructure replacement. A consistent theme of this program no matter the specific activity will be to upgrade existing infrastructure impacted by the 2015 Disasters where such repairs and upgrades would protect the surrounding neighborhood but not increase downstream flooding. As data from the unmet needs analysis supports, housing suffered the greatest losses as a result of the 2015 flood events. Selected projects most likely will benefit neighborhoods where both renters and homeowners live.

Eligible projects include but are not limited to:

- Improvement of open ditch drainage systems to enhance flood reduction without enclosing the ditch in a pipe or box culvert;
- Detention and green infrastructure projects to improve resiliency and provide other community benefits such as open space, recreation, water quality, and reduced maintenance;
- Repairs/replacements of road systems and bridges including culvert repair/replacement drainage ditch repair/replacement;
- Repairs/replacements for water control facilities;
- Creation of new drainage systems;
- Repair/replacement of City owned buildings and/or equipment; and/or,
- Parks, recreation and other facilities.

Although not currently planned, if the City uses CDBG-DR funding to repair flood control structures, such as dams and levees, the City will not enlarge the dam or levees beyond the original footprint of the structure that existed prior to the 2015 flood events.

These multi-use or multi-benefit projects will provide economic benefits such as increased property values, higher quality of life, reduced heat island impacts, and better air quality. Neighborhood detention may be integrated into areas where voluntary property acquisition of flooded homes has already occurred or will occur in the near future. This neighborhood retrofitting effort will provide an opportunity to enhance protection of remaining homes and increase property values by removing the risk of flooding. An expected ancillary benefit is additional private investment in maintaining or upgrading existing housing stock.

Project Eligibility Criteria & Ranking

The CDBG-DR15 Program funds to support its infrastructure program activities will be distributed through an application process that evaluates potential projects using objective weighted scoring criteria. The CDBG-DR15 Infrastructure Program will serve all of Houston and specific project locations will be identified by the City through its Quarterly Performance Reports upon project approval. Applications for project funding are anticipated, but not limited, to be submitted by various City agencies, the City's Capital Improvement Program (CIP) and/or the ReBuild Houston Program. The City will not establish a limit to the amount of CDBG-DR15 funds eligible to be applied towards a project in order to maintain the discretion to allocate program funds realizing the maximum benefit for impacted Houston communities. Proposed projects will be reviewed by an evaluation team which team will use the eligibility criteria listed below. The evaluation of funding eligibility of potential projects will use a triple-bottom line approach that includes social, economic, and engineering factors. Next, the City's evaluation team will score each project submitted through the application process based upon ranking criteria included herein. The projects receiving the highest ranking will be concluded as those most effective to address current conditions, identified unmet needs, and desired future outcomes of the City as well as those that comply with the requirements of the CDBG-DR15 Program.

The final decision on the projects to be funded shall be made by the City Council of Houston.

Eligibility Criteria

I. The project must provide service to areas of at least 51% low-to-moderate income persons unless a documented Urgent Need exists as validated by the City. Generally, to qualify as an Urgent Need, existing conditions must pose a serious and immediate threat to the health or welfare of the community and be of recent origin or recently became urgent.
II. The project must address an indirect or direct impact of the 2015 Disasters.
III. The project must support the availability of affordable housing by protecting existing housing stock from harm and/or creating conditions favorable to the production of new units in the project area.

The following table represents unfunded infrastructure projects identified through the City's Capital Improvement Plan (CIP) that are located in primarily LMI areas. These projects may have the potential to mitigate future flooding.

Table 28: Potential Projects

PLAN ID	CIP ID	PROJECT DESCRIPTION	CITY COUNCIL DISTRICT	ESTIMATED COST
A1	M-410024-0001	Southland Area: Drainage: Sub Project 1	D	$ 7,140,000
A2	M-000295-0001	Scott Street: Ih-610 To Old Spanish Trail Drainage Improvements	D	$ 17,080,000
A3	M-000294-0001	Cullen From Ih-610 To Old Spanish Trail Drainage Improvements	D	$ 107,640,000
A5	M-000126-0065	Fairland: Dulcrest to Barberry	D	$ 20,300,000
A6	N-210004-0001	Cloverland Area Sec-1 Drainage	D	$ 2,980,000
A9	M-430004-0001	5700 South Acres	D	$ 1,990,000
B1	M-000126-0067	7500 Bellerive & Marinette	J	$ 8,460,000
B3	N-100012-0001	Hillcroft Avenue: Bissonnet To Beechnut	C	$ 9,530,000
B4	M-000126-0077	Cadawac Drive	J	$ 3,720,000
B6	N/A	Bintliff Ditch Tributary	J	$ 6,150,000
B7	M-420126-0086	Bintliff Ditch	J	$ 7,660,000
B9	N/A	Boone Road Park Area	F	$ 15,530,000
B12	N/A	Wateka Drive Local Drainage	J	$ 7,830,000
C5	N/A	Bunker Hill Area	A	$ 4,740,000
D1	M-000126-X73A	200 Blk of 44th St	H	$ 39,180,000
D2	N/A	N Main Street Area	H	$ 69,730,000
Total				$ 329,660,000

In addition, the following is a list of potential projects that have been proposed or supported through our community engagement process.

- Additional Detention to Service Fondren Diversion Channel/Willow Waterhole
- Open Ditch Projects – DeSoto Project (TC Jester to Wheatly)
- Braewick Ditches

- Hillcroft Retention
- Brooke Smith (storm drain and drainage infrastructure)
- Westpark Neighborhood
- Braes Project
- Westwood Country Club
- Campbell Road (Buttermilk Creek)

There are also many particularly hard hit neighborhoods that have been identified and supported throughout the community engagement process, although specific projects have yet to be identified. As the process moves forward, and specific projects are identified to address flooding concerns in these neighborhoods/areas, these and any other projects may also be considered.

- Larkwood Neighborhood
- Braeburn Valley
- Braeburn Glen
- Braeburn Valley West
- Bonham Acres/Tree Frog Lane
- Memorial City
- Spring Branch
- Meyerland

All proposed projects will be reviewed to ensure alignment with HUD regulations. We will utilize the identified ranking criteria to determine the projects capable of making the greatest impact on the affected areas. Once all projects have been evaluated, we will develop the finalized project list and each selected project will go before City Council for final approval. The public will have an opportunity to comment during that process.

The specific locations of the potential projects listed in Table 26 are visible in the maps and identified as within Areas A-D. Please see Figures 12 through 15, following this page for the location of the projects referenced above.

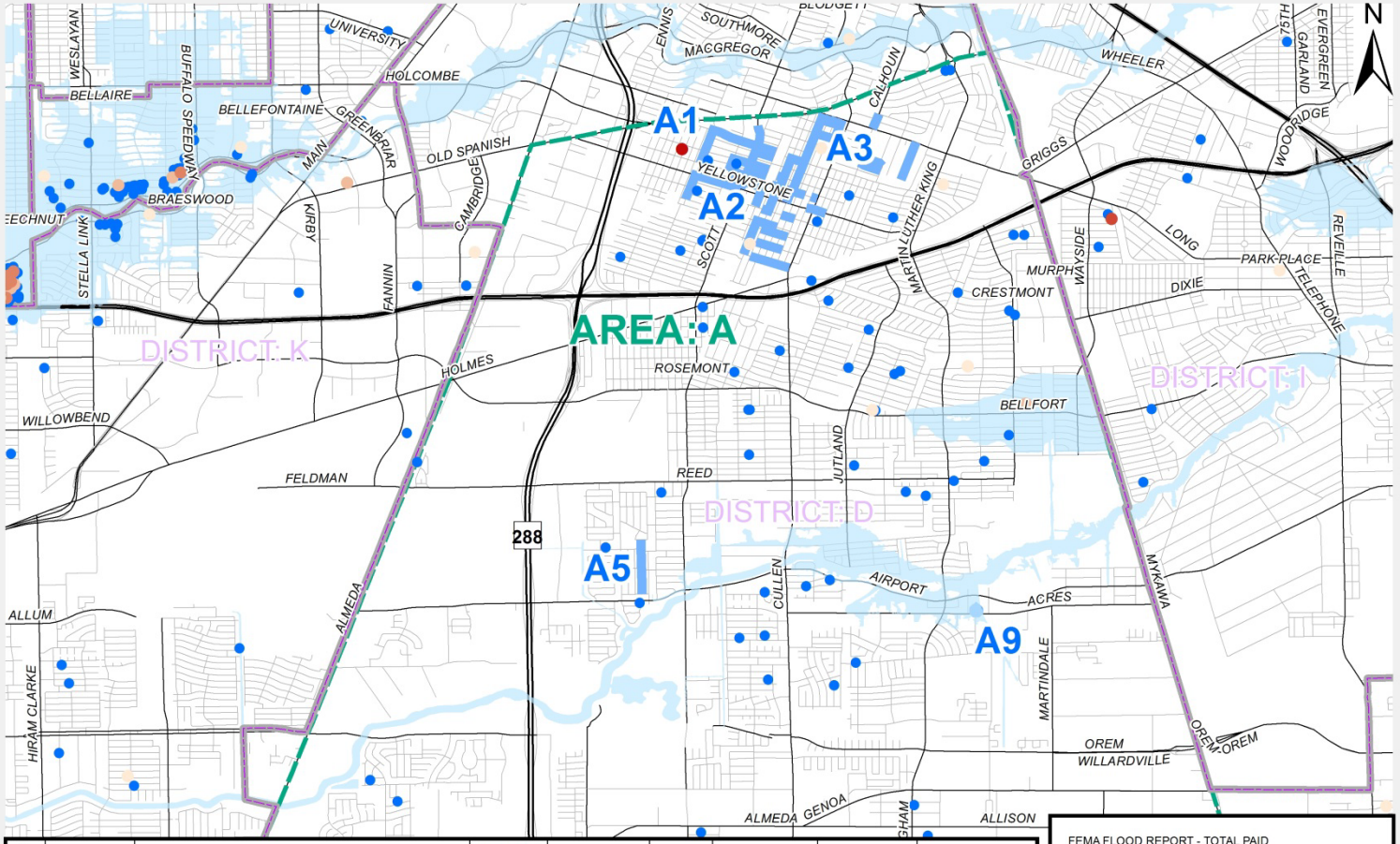
Area A is located in the Southeast quadrant of the City, and potential projects identified are located in the following Super Neighborhoods: Greater OST/South Union, Sunnyside and Minnetex. These neighborhoods have a high percentage of minority residents as well as a low median household income.

Area B is in the Southwest quadrant of the City. Potential projects identified are located in the following Super Neighborhoods: Alief, Sharpstown, Meyerland Area, Braeswood Place, and Brays Oaks. These neighborhoods are majority minority with median income below the Houston median, with the exception of the Meyerland Area and Braeswood Place.

Area C is located on the west side of Houston. Both potential projects identified are located in the Spring Branch West Super Neighborhood. This Super Neighborhood is majority minority and has a slightly higher median income than the City of Houston.

Area D is located to the north of downtown. Both potential projects identified are located in the Independence Heights Super Neighborhood. Independence Heights is a historical African American neighborhood and has a majority of African Americans living in the neighborhood today.

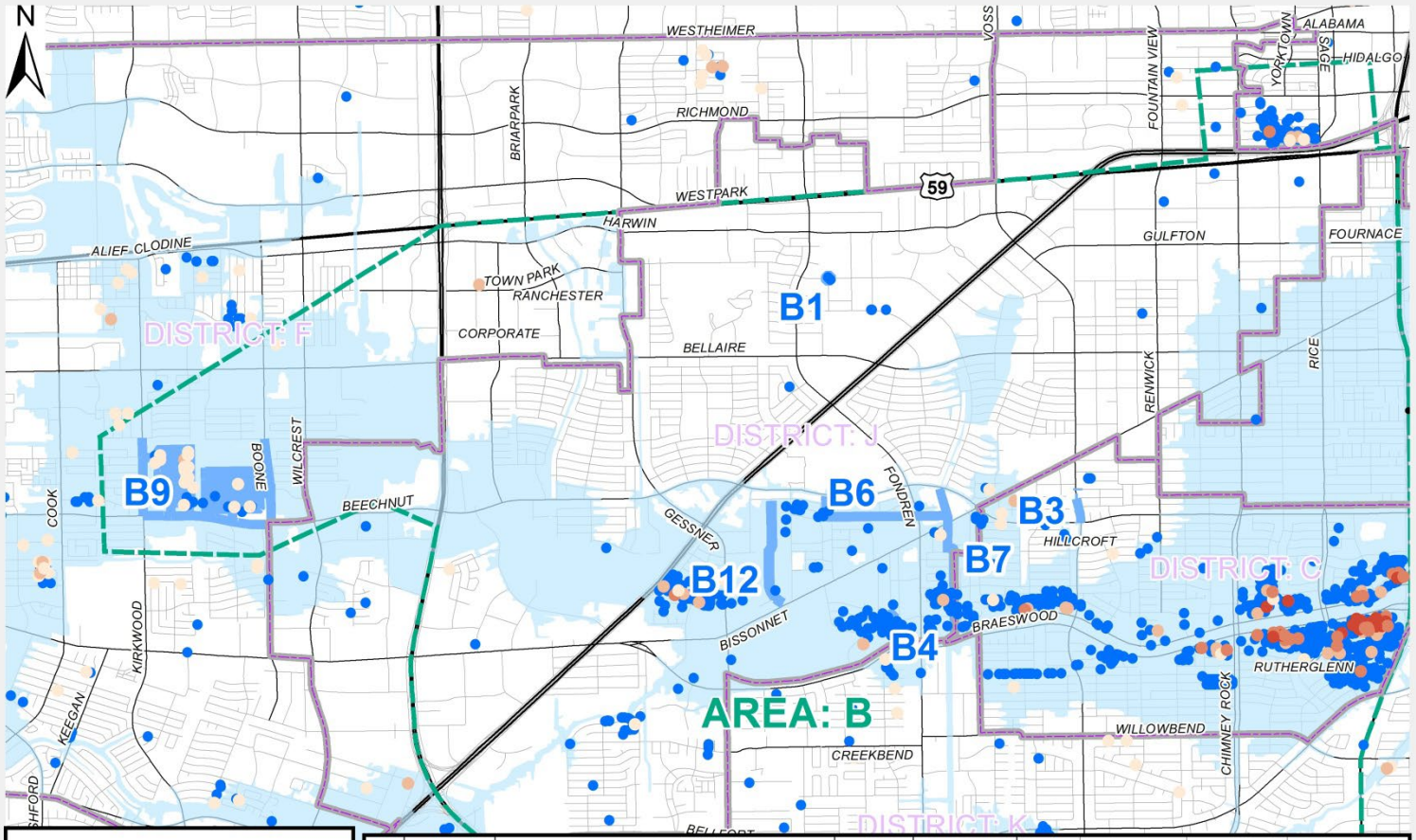
Figure 12: Drilldowns into Area A



Plan ID	CIP ID	Project Description	City Council District	Estimated Cost	LMI	Affected Property	Appraisal Value	Market Value
A1	M-410024-0001	Southland Area: Drainage : Sub Project 1	D	$ 7,140,000	Y	155	$7,853,962	$7,875,816
A2	M-000295-0001	Scott Street: Ih-610 To Old Spanish Trail Drainage Improvements	D	$ 17,080,000	Y	252	$20,070,692	$20,106,567
A3	M-000294-0001	Cullen From Ih-610 To Old Spanish Trail Drainage Improvements	D	$ 107,640,000	Y	559	$39,292,733	$39,325,099
A5	M-000126-0065	Fairland: Dulcrest to Barberry	D	$ 20,300,000	Y	71	$2,103,456	$2,117,611
A9	M-430004-0001	5700 South Acres	D	$ 1,990,000	Y	3	$220,758	$220,758

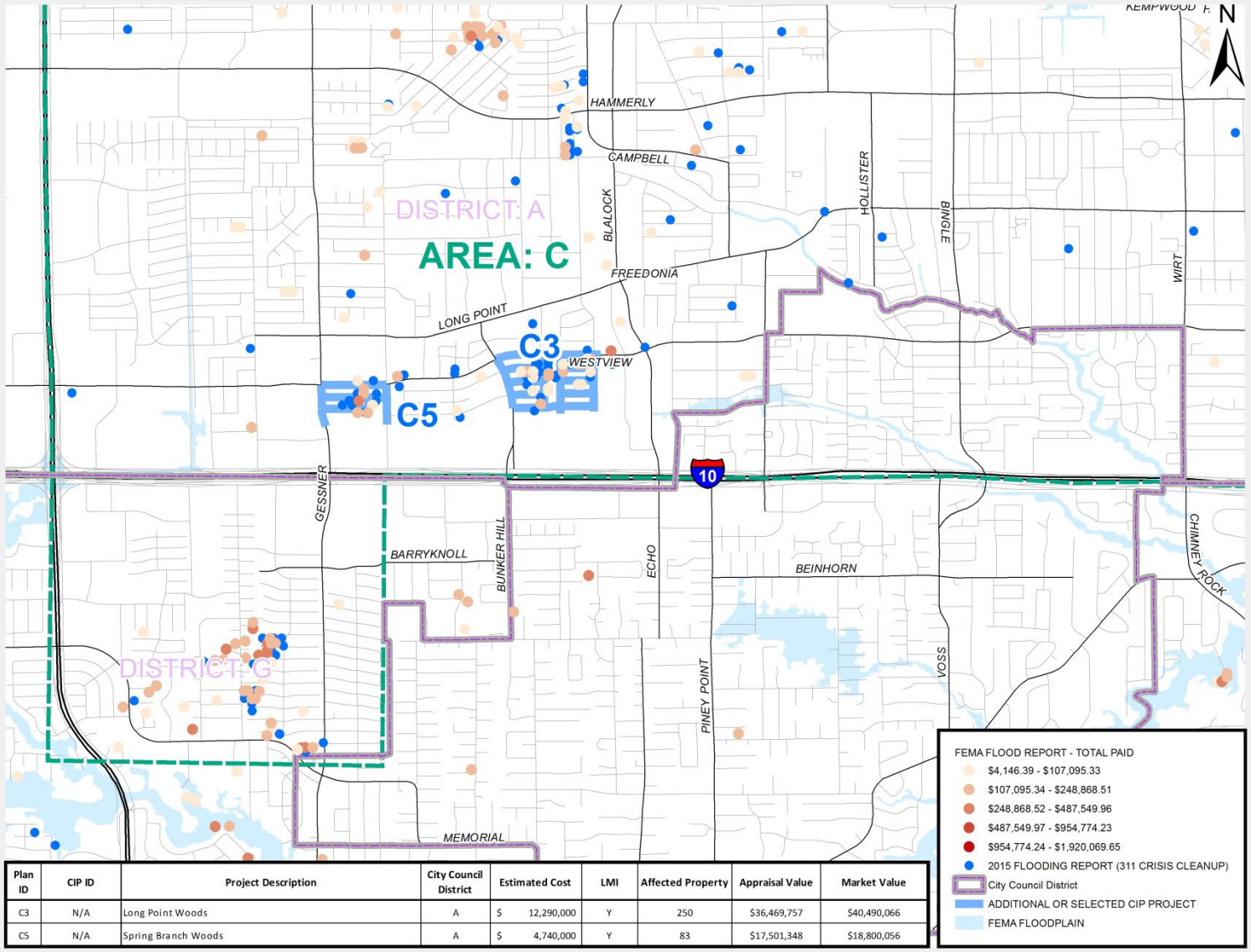
FEMA FLOOD REPORT - TOTAL PAID
- $4,146.39 - $107,095.33
- $107,095.34 - $248,868.51
- $248,868.52 - $487,549.96
- $487,549.97 - $954,774.23
- $954,774.24 - $1,920,069.65
- 2015 FLOODING REPORT (311 CRISIS CLEANUP)
- CITY COUNCIL DISTRICT
- FEMA FLOODPLAIN
- ADDITIONAL OR SELECTED CIP PROJECT

Figure 13: Drilldowns into Area B



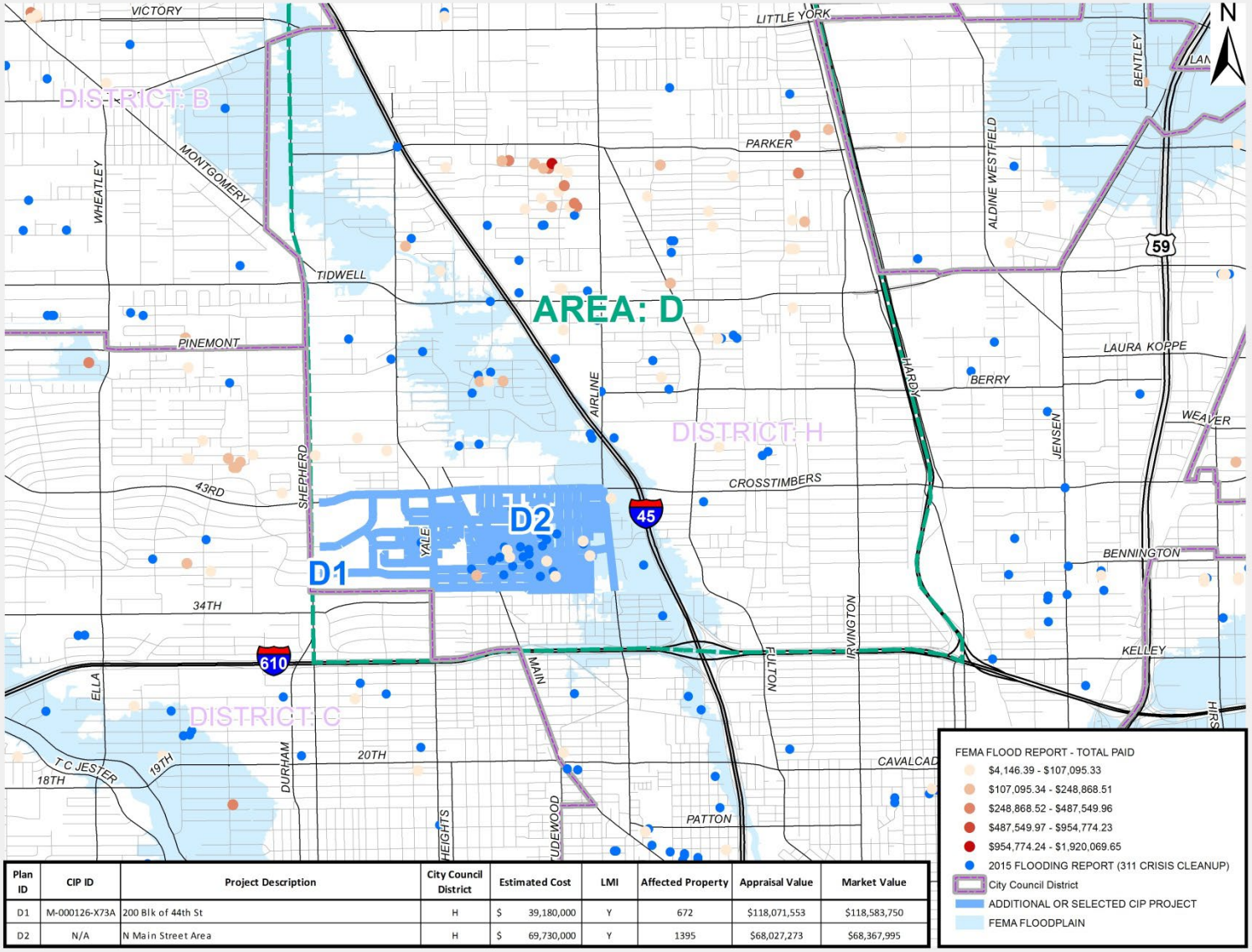
Plan ID	CIP ID	Project Description	City Council District	Estimated Cost	LMI	Affected Property	Appraisal Value	Market Value
B1	M-000126-0067	7500 Bellerive & Marinette	J	$ 8,460,000	Y	22	$21,370,801	$21,370,801
B3	N-100012-0001	Hillcroft Avenue: Bissonnet To Beechnut	C	$ 9,530,000	Y	31	$3,965,398	$4,139,754
B4	M-000126-0077	Cadawac Drive	J	$ 3,720,000	Y	14	$1,736,928	$1,803,454
B6	N/A	Bintliff Ditch Tributary	J	$ 6,150,000	Y	308	$60,097,201	$62,677,446
B7	M-420126-0086	Bintliff Ditch	J	$ 7,660,000	Y	199	$40,850,630	$41,762,322
B9	N/A	Boone Road Park Area	F	$ 15,530,000	Y	690	$70,284,711	$70,760,084
B12	N/A	Wateka Drive Local Drainage	J	$ 7,830,000	Y	42	$8,926,336	$8,939,206

Figure 14: Drilldowns into Area C



Plan ID	CIP ID	Project Description	City Council District	Estimated Cost	LMI	Affected Property	Appraisal Value	Market Value
C3	N/A	Long Point Woods	A	$ 12,290,000	Y	250	$36,469,757	$40,490,066
C5	N/A	Spring Branch Woods	A	$ 4,740,000	Y	83	$17,501,348	$18,800,056

Figure 15: Drilldowns into Area D



Plan ID	CIP ID	Project Description	City Council District	Estimated Cost	LMI	Affected Property	Appraisal Value	Market Value
D1	M-000126-X73A	200 Blk of 44th St	H	$ 39,180,000	Y	672	$118,071,553	$118,583,750
D2	N/A	N Main Street Area	H	$ 69,730,000	Y	1395	$68,027,273	$68,367,995

Table 29: Ranking Criteria

Weight	Evaluation Area	Description
High	**LMI Area**	Project has a service area of at least 51% low-to-moderate income persons
High	**Hydraulic/hydrologic significance or impact**	Reduces flood flows and/or flood depths. These reductions can be measured or quantified with respect to the amount of floodplain area reclaimed and/or the number of structures (or square footage of structures) removed from flood zones. These projects 1) mitigate flood damage in terms of reclaimed area, structures, or infrastructure, 2) can impact upstream or downstream of the project area, 3) reduce flood flows, water surface elevations, and/or pollutant loadings, and may increase values or encourage economic development.
High	**Time to implement or construct**	Projects that need right-of-way and/or lengthy design or construction timeframes, or potential for permitting issues, will not be scored as favorably as those with no land acquisition requirements and completed designs. The CDBG-DR has a 6-year period of performance.
Medium	**Level of protection provided (i.e. 2 year, 25 year, 50 year or 100 year flood)**	Categorize the project into design return period as defined by the regional or local hydrologic standards. For example, a regional project designed to accommodate the 1% (100-year) flood event would rank higher than one designed for a 4% (25-year) event.
Medium	**Public safety**	Increases safety for emergency personnel and the general public. Projects can 1) enhance mobility for emergency responders, by providing unflooded or safe access routes, especially where none presently exist, 2) reduce and/or removes public roadways, facilities, etc.
Medium	**Beneficial neighborhood impacts**	This factor should weigh in on the non-hydrologic/hydraulic significance of a project on adjoining neighborhoods and should include the construction phase of a project. A positive example would be a multi-use facility. A negative example of this might be the necessary removal of trees for a detention facility or channelization project adjacent to a residential neighborhood that might influence this ranking factor are aesthetics, security and objectionable construction activity.
Medium	**Sustainability or low operations & maintenance cost**	Sustainability refers to the operation and maintenance cost of a project. It can be thought of in terms of the ability of a project to remain effective relative to its upkeep or operational cost. A nonstructural flood mitigation project, such as natural creekway enhancements, buyouts, or open space purchases, would typically require less maintenance as compared to a channel improvement project that may require scheduled mowing and debris removal.

Weight	Evaluation Area	Description
Low	**Water quality enhancement**	A measure of a project's effect on water quality either (and preferably) as designed or through planned or easily incorporated future upgrades. For example, a detention pond may provide settlement time for solids with no specific water quality upgrade or design component while a channelization project may have a small water quality benefit if grass filters can be effectively added in the future.
Low	**Environmental or habitat enhancement**	A measure of a project's potential to enhance a desired habitat and/or have a positive impact on the environment. For example, an open concrete-lined channel would score low, but a restored natural channel would score high.
Low	**Potential for Recreation/Open Space/Connectivity for linear parks**	A measure of the acceptability/adaptability of a project site for recreational facilities or open space. Some projects may be located in floodplain areas and may provide links between other parks, and open space.

National Objective

The national objective to be satisfied through the CDBG-DR15 Infrastructure Program will be either low- and moderate-income area or urgent need. Impacted areas benefitting LMI residents will be prioritized to meet the 70% LMI benefit threshold for the CDBG-DR15 allocation. These planning efforts are founded in principles critical to the overall long-term recovery process, so that the City's communities will be more resilient to future disasters. Infrastructure projects funded under the urgent need national objective will respond to disaster-related impacts and will likely address flooding at the neighborhood scale in areas that were affected most, as described in the needs assessment.

Timeline

The following is a tentative timeline for DR15 expenditures for the Public Facility/Infrastructure Program

Table 30: Public Facility/Infrastructure Timeline

Development of Program Guidelines and Implementation Structure	*Project Selection*	*Construction RFP (if needed)*	*Construction*	*Program Closeout*
October 2016 – February 2017	May 2017 – December 2017	March 2017 – October 2017	May 2019 – September 2022	August 2022

Economic Revitalization

For CDBG disaster recovery purposes, economic revitalization can include any activity that demonstrably restores and improves some aspect of the local economy. Financing other efforts that attract/retain workers in devastated communities is eligible under this activity as long as it can be tied to an economic impact(s) caused by the disaster and identified in the needs assessment of the Action Plan. The CDBG-DR15 Program, however, will not include

economic development activities. The needs assessment did not yield a conclusion necessitating the prioritization of such activities.

Section 3 – Creating Opportunities for Small and Local Businesses and Section 3 Residents

Section 3 of the Housing and Urban Development Act of 1968, as amended (12 U.S.C. 1701u) and the implementing regulations at 24 C.F.R.135 (Section 3) requires program participants to ensure that employment and other economic opportunities generated by some of the Department of Housing and Urban Development (HUD) financial assistance, to the greatest extent feasible, consistent with existing Federal, State and local laws and regulations, be directed to low- and very low- income persons, particularly recipients of government housing assistance, and business concerns that provide economic opportunities to low- and very low-income persons. The City understands that, as a recipient of federal funds from HUD, the City must ensure compliance with the Section 3 requirements.

The CDBG-DR15 Single Family Housing and Infrastructure Programs could generate Section 3 covered activities. Thus, employment and contracting opportunities could be generated for local Section 3 residents and Section 3 businesses. Once the Section 3 covered projects are identified, the City, through its current Section 3 Program administered by HCD, will target outreach to the small and local Section 3 businesses ensuring these businesses are aware of the opportunities generated by the City's CDBG-DR15 Programs. These local and small businesses will have the chance to assist the City's recovery while also benefitting and growing from HUD's investment in the City's recovery. Accordingly, through Houston's CDBG-DR15 Section 3 program, not only will compliance be achieved not but this program will serve as one vehicle to create new jobs for local low-income residents and contracts for small and local businesses.

Connection to the Disaster - Record Keeping and Performance Reporting

The City will ensure that it maintains records specific to each activity funded through the CDBG-DR15 Program. All required records will be collected and retained to demonstrate the connection between the funded activities and the 2015 Disasters. Specifically, it is anticipated that the City will utilize the disaster impact information gathered through the needs assessment and additional data collected subsequent to the submission of the Action Plan to inform decisions related to the funded activities. As an example, the City will document the household impact related to the 2015 Disasters for the service area of a funded infrastructure project. By documenting the household impact, the City will be able to demonstrate the connection between the funded activity, the underlying disaster event upon which eligibility is founded, and the benefit to the LMI area.

Record Keeping

As a UGLG, Houston will ensure that it maintains compliance with all recordkeeping requirements set forth at 24 CFR 570.506. Such records, shall include but not be limited to, records clearly describing activities assisted, national objectives met, satisfaction of eligibility requirements, fair housing and equal opportunities records, financial records, and any other records required to be maintained in accordance with other applicable laws and regulations.

Performance Reporting

In accordance with HUD requirements, the City will submit a Quarterly Performance Report (QPR) through the HUD Disaster Recovery Grant Reporting (DRGR) system no later than thirty (30) days following the end of each calendar quarter. Program QPR's will be posted on a quarterly basis until all funds have been expended and all expenditures have been reported. The City will utilize OnBase, its content and case management software, to collect required reporting elements and ensure the accuracy of QPR's.

CDBG – DR15 Program Administration Requirements

Program Income

The City does not intend to implement any programs that generate income as described in 24 CFR 570.489. However, in the event that any of the activities funded by CDBG-DR15 will generate income, the City will comply with all HUD requirements found at 24 CFR 570.489, as well as the rules outlined in 81 FR 39687. Specifically, the City will adhere to the Program Income policies and procedures detailed in the *Risk Assessment Documentation (Financial Management Procedures)*.

Under 81 FR 39687, HUD provides grantees the option of transferring program income to their annual CDBG entitlement grant (if applicable) or to be used as CDBG-DR15 funds until grant closeout. The City has opted to not return any program income received to the CDBG-DR15 Program and instead transfer it to its annual CDBG entitlement grant. To the maximum extent feasible, HUD requires that program income shall be used or distributed before additional withdrawals from the U.S. Treasury are made.

Monitoring Standards and Procedures

The complete HCDD Monitoring Plan, Policies and Procedures (HCDD Monitoring Plan) were included in the *Risk Assessment Documentation* submitted to HUD. As demonstrated therein, HCDD already possesses the necessary policies, systems, and procedures which formally establish the critical monitoring strategies encompassing all cross-cutting regulatory requirements. These well-established systems include HUD program rules and regulations, civil rights, environmental, labor standards, fair housing, Section 3, citizen participation, reporting and recordkeeping requirements. Not only do the systems exist, but they have proven to be successful approaches in the oversight of projects supported with CDBG and previously allocated CDBG-DR funds. The CDBG-DR15 allocation will leverage these existing resources and adapt them to the requirements of Public Law 114-113 and any subsequent related guidance.

HCDD has refined procedures on compliance monitoring which ensure compliance with cross-cutting regulatory requirements for the ongoing administration of HUD programs such as CDBG, HOME, HOPWA, ESG, and NSP. The HCDD Monitoring Plan details the reasons monitoring reviews occur, timelines, specific approach to monitoring, documentation requirements and corrective actions necessary to resolve issues or concerns discovered through a review.

HCDD has a dedicated Compliance Division to conduct long-term monitoring over ongoing programs. This Division will conduct monitoring and compliance for the activities funded by the CDBG-DR15 Program. HCDD's Compliance Division is comprised of three sections: Contract Monitoring, Contract Compliance, and Real Estate Compliance. All 3 of these sections ensure funding recipients, developers, contract service providers, and all contracted agencies adhere to city, state, and federal regulations and requirements when operating, facilitating, or developing HCDD administered programs and activities. In order to effectuate the necessary oversight, these sections utilize the aforementioned HCDD Monitoring Plan, which includes monitoring procedures, scheduling, and standards, to provide HUD-funded activity compliance and performance reviews for all funding recipients, including internal HCDD program operations. To ensure timely monitoring of recipients, staff conduct monitoring and compliance reviews based on predetermined scheduling. However, at times staff may use circumstantial monitoring, which is the monitoring of programs and projects related to an acute or chronic matter uncovered by an external audit or necessitated by the possibility of fraud, waste, or mismanagement. The monitoring process reviews consist of entrance meetings, analysis of documentation, client interviews, exit meetings, development and issuance of compliance review reports, and if necessary, follow-up reviews and letters.

Citizen Participation Plan for Disaster Recovery 2015: Flood Events

A. Introduction

The purpose of the Citizen Participation Plan for Houston's CDBG-DR15 Program (CPP-DR15) is to establish means by which residents of the City of Houston, Texas (City), public agencies, and other interested parties can actively participate in the development, implementation, and assessment of documents related to CDBG-DR15. The City developed the CPP-DR15 to meet the requirements of the CDBG-DR15 funding and reflects the alternative requirements as specified by *81 FR 39687*.

The CPP – DR15 is a separate, distinct, and tailored plan based upon and consistent with the City's *Citizen Participation Plan*, which describes public participation related to the consolidated planning process and entitlement grants. The City encourages citizen participation that emphasizes the involvement of low- and moderate-income residents, minority populations, persons with limited English proficiency, and persons with disabilities.

B. Documents

For the CPP-DR15, documents related to the CDBG-DR15 Program are defined as the Action Plan for Disaster Recovery–2015 Flood Events (Action Plan), any substantial amendments to the Action Plan, and any associated performance reports. As the City is committed to providing access to the CDBG-DR15 information and programs for all citizens, these documents will be made available to persons with limited English proficiency or made accessible to persons with disabilities, upon request. Requests may be made to: 2015FloodEvents@HoustonTX.gov or 832.394.6200.

1. Action Plan

This Action Plan is available on the City's CDBG-DR15 website:
https://houstontx.gov/hcdrecovery/dr15/hud-reports/index.html

Copies of the Action Plan are available upon request to:
2015FloodEvents@HoustonTX.gov or 832.394.6200.

2. Amendments

Occasionally, it may be necessary for the City to update the Action Plan. Amendments to the Action Plan are divided into two categories: substantial amendments and non-substantial amendments. As amendments occur, both types of amendments are numbered sequentially and posted on the City's CDBG-DR15 website: https://houstontx.gov/hcdrecovery/dr15/hud-reports/index.html. Copies of amendments are available upon request to: 2015FloodEvents@HoustonTX.gov or 832.394.6200.

a. Substantial Amendment

The following criteria are used by the City for determining what constitutes a substantial amendment to its approved Action Plan.

- A change in program benefit or eligibility criteria
- The addition or deletion of an activity[1]
- A new allocation or reallocation of more than 25% of an activity on the Budget Page

Substantial amendments are subject to a citizen participation process and require formal action by the City Council and submission to HUD. The City announces substantial amendments to the public

[1] Activity: The first level of HUD categories of activities at 24 CFR 570.201-206 and listed on the Action Plan for Disaster Recovery 2025 budget page that accompanies the SF-424 Form, i.e. public services, public facilities, and improvements, etc.

through a public notice published on our website, and the City may utilize additional methods for general circulation, for a period of fourteen (14) days, to provide opportunity for public review and comment regarding proposed substantial amendments. Notices will be available in English and may also be available in Spanish and other languages, as feasible**.** The City will consider all written and/or oral comments or views concerning proposed substantial amendments that are received during the comment period. A summary of these comments and views, including comments or views not accepted, and the reason why, along with HCDD's response to each, shall be submitted with each substantial amendment.

b. Non-substantial Amendment

The City classifies any change to the Action Plan that does not meet the criteria for a "substantial amendment" as a non-substantial amendment. Because the public is already informed of new project activities through separate public notices, adding a project[2] to an activity does not necessitate an amendment to the Action Plan. The City does not require a public comment period for these non-substantial changes.

c. Transparency Notice

The City classifies any allocation of funding to a project (a subrecipient, developer, institutions, businesses, other city departments, and/or infrastructure sites) before council approval as requiring a "transparency notice". As the City identifies projects under this grant, it will post this notice on our website for seven (7) days to provide an opportunity for public review and comment.

d. Substantial Amendment, Non-substantial Amendment, vs Transparency Notice Chart

To make it easier to determine the difference between a substantial amendment, non-substantial amendment, or transparency notice the City has created the chart below:

Substantial Amendment	Non-substantial Amendment	Transparency Notice
• A change in program benefit or eligibility criteria • The addition or deletion of an activity • A new allocation or reallocation of more than or equal to 25% of an activity on the budget page	• Any change to an approved action plan or amendment • A new allocation or reallocation of less than 25% of an activity on the budget page • Edits or formatting changes to an approved action plan or amendment	• Any allocation of funding to a project (a subrecipient, developer, institutions, businesses, other city departments, and/or infrastructure sites) before Council approval

3. Performance Reports

As outlined in the Action Plan, the City will submit the Action Plan to HUD's Disaster Recovery Grant Reporting (DRGR) System, which will include detailed performance metrics and a performance schedule. The performance metrics will be based on quarterly expected expenditures and outcomes. DRGR quarterly reports will be posted on the City's CDBG-DR15 website at:
http://houstontx.gov/housing/2015_Flood_Events_Recovery.
html. Copies of QPRs are available upon request to:

[2] Project: Allocation of funds under an activity to a subrecipient, developer, institutions, businesses, other city departments, and/or infrastructure sites.

2015FloodEvents@HoustonTX.gov or 832.394.6200.

C. Public Hearings

Unlike the *Citizen Participation Plan* for the consolidated planning process, there is no requirement for a public hearing relative to CDBG-DR15. However, if the City holds a public hearing related to this funding, the City will encourage public participation in the following ways.

Public hearings will be held in locations accessible to persons with disabilities, consistent with accessibility and reasonable accommodation requirements. Interpretation for persons with limited English proficiency or persons with hearing impairments will be provided, upon request. HCDD may also provide interpreters, without request, if a public hearing is held where a significant number of non-English speaking residents are expected to participate. Additional accommodations may be made upon advance request.

Public hearings shall be held after a minimum of a fourteen (14) day notice in at least one newspaper of general circulation. Notices will be available in English and may also be available in Spanish and other languages, as feasible.

Public hearings and public meeting notices are posted on the bulletin board at City Hall, readily accessible to the general public at least three (3) days (72 hours) before the meeting date, in accordance with the Texas Open Meetings Act.

D. Website

The City maintains a comprehensive disaster recovery website dedicated to information related to CDBG-DR activities. This website has links to

- Action Plan for Disaster Recovery
- Amendments to the Action Plan for Disaster Recovery
- Quarterly Performance Reports (QPRs), as created using the DRGR system
- Procurement policies and procedures
- Executed CDBG-DR15 contracts
- Status of services or goods currently being procured by the grantee

E. Access to Records

During the term of the grant, the City will provide the public with reasonable and timely access to information and records concerning documents related to CDBG-DR15 and to the use of the City's CDBG-DR15 funds.

F. Application Status

As applicable, HCDD will provide various methods in which individual applicants for recovery assistance can receive information on the status of their applications. These will be listed on the CDBG-DR15 website, as needed: http://houstontx.gov/housing/2015_Flood_Events_Recovery.html.

G. Citizen Complaints

Written complaints from the public related to this Action Plan (or its amendments), QPRs, or the City's activities or programs funded with CDBG-DR15 will receive careful consideration and will be answered in writing, or other effective method of communication, within fifteen (15) business days, where practicable.

Written complaints should be sent to

Attn: Compliance and Grant Administration
City of Houston

Housing and Community Development Department
2100 Travis Street, 9th floor
Houston, Texas 77002

Phone: 832.394.6200
Email: HCDDComplaintsAppeals@houstontx.gov

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Grantee Certifications

In accordance with the applicable statutes and regulations governing the CDBG-DR grant, including the Federal Register Notice published June 17, 2016, at 81 FR 39687 (the Notice), the City of Houston (the Grantee), certifies as follows:

a. The Grantee certifies that it has in effect and is following a residential anti-displacement and relocation assistance plan in connection with any activity assisted with funding under the CDBG program.
b. The Grantee certifies its compliance with restrictions on lobbying required by 24 CFR part 87, together with disclosure forms, if required by part 87.
c. The Grantee certifies that the Action Plan for Disaster Recovery (Action Plan) is authorized under State and local law (as applicable) and that the Grantee, and any entity or entities designated by the Grantee, possess(es) the legal authority to carry out the program for which it is seeking funding, in accordance with applicable HUD regulations and the Notice. The Grantee certifies that activities to be administered with funds under the Notice are consistent with its Action Plan.
d. The Grantee certifies that it will comply with the acquisition and relocation requirements of the URA, as amended, and implementing regulations at 49 CFR part 24, except where waivers or alternative requirements are provided for in the Notice.
e. The Grantee certifies that it will comply with Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u), and implementing regulations at 24 CFR part 135.
f. The Grantee certifies that it is following a detailed citizen participation plan that satisfies the requirements of 24 CFR 91.105 or 91.115, as applicable (except as provided for in notices providing waivers and alternative requirements for this grant).
g. The Grantee certifies that it is complying with each of the following criteria:
   (1) Funds will be used solely for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas for which the President declared a major disaster in 2015 pursuant to the Robert T. Stafford Disaster Relief and emergency Assistance Act of 1974 (42 U.S.C. 5121 et seq.) related to the consequences of Hurricane Joaquin and adjacent storm systems, Hurricane Patricia, and other flood events.
   (2) With respect to activities expected to be assisted with CDBG-DR funds, the Action Plan has been developed so as to give the maximum feasible priority to activities that will benefit low- and moderate-income families.
   (3) The aggregate use of CDBG-DR funds shall principally benefit low- and moderate-income families in a manner that ensures that at least 70 percent (or another percentage permitted by HUD in a waiver published in an applicable Federal Register) of the grant amount is expended for activities that benefit such persons.
   (4) The Grantee will not attempt to recover any capital costs of public improvements assisted with CDBG-DR grant funds, by assessing any amount against properties owned and occupied by persons of low- and moderate-income, including any fee charged or assessment made as a condition of obtaining access to such public improvements, unless: (a) disaster recovery grant funds are used to pay the proportion of such fee or assessment that relates to the capital costs of such public improvements that are financed from revenue sources other than under this title; or (b) for purposes of assessing any amount against properties owned and occupied by persons of moderate income, the Grantee certifies to the Secretary that it lacks sufficient CDBG funds (in any form) to comply with the requirements of clause (a).
h. The Grantee certifies that it will conduct and carry out the grant in conformity with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d) and the Fair Housing Act (42 U.S.C. 3601–3619) and implementing regulations, and that it will affirmatively further fair housing.
i. The Grantee certifies that it has adopted and is enforcing the following policies:

(1) A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in nonviolent civil rights demonstrations; and
(2) A policy of enforcing applicable State and local laws against physically barring entrance to or exit from a facility or location that is the subject of such nonviolent civil rights demonstrations within its jurisdiction.

j. The Grantee certifies that it (and any subrecipient or recipient) has the capacity to carry out disaster recovery activities in a timely manner; or the Grantee will develop a plan to increase capacity where such capacity is lacking to carry out disaster recovery activities in a timely manner; and that the Grantee has reviewed the requirements of the Notice and the requirements of Public Law 114-113 applicable to funds allocated by the Notice, and certifies to the accuracy of Risk Analysis Documentation submitted to demonstrate that the Grantee has in place proficient financial controls and procurement processes; adequate procures to prevent any duplication of benefits as defined by section 312 of the Stafford Act, to ensure timely expenditure of funds; to maintain a comprehensive disaster recovery website; to ensure timely communication of application status to applicants for disaster recovery assistance, and that its implementation plan accurately describes it current capacity and how it will address any capacity gaps.

k. The Grantee will not use grant funds for any activity in an area identified as flood prone for land use or hazard mitigation planning purposes by the State, local, or Tribal government or delineated as a special flood hazard area in FEMA's most recent flood advisory maps, unless it also ensures that the action is designed or modified to minimize harm to or within the floodplain, in accordance with Executive Order 11988 and 24 CFR part 55. The relevant data source for this provision is the State, local and Tribal government land use regulations and hazard mitigation plan and the latest issued FEMA data or guidance, which includes advisory data (such as Advisory Base Flood Elevations) or preliminary and final Flood Insurance Rate Maps.

l. The Grantee certifies that its activities concerning lead-based paint will comply with the requirements of 24 CFR part 35, subparts A, B, J, K, and R.

m. The Grantee certifies that it will comply with applicable laws.

Signature/ Authorized Official	Date
Sylvester Turner	
Mayor	
Title	

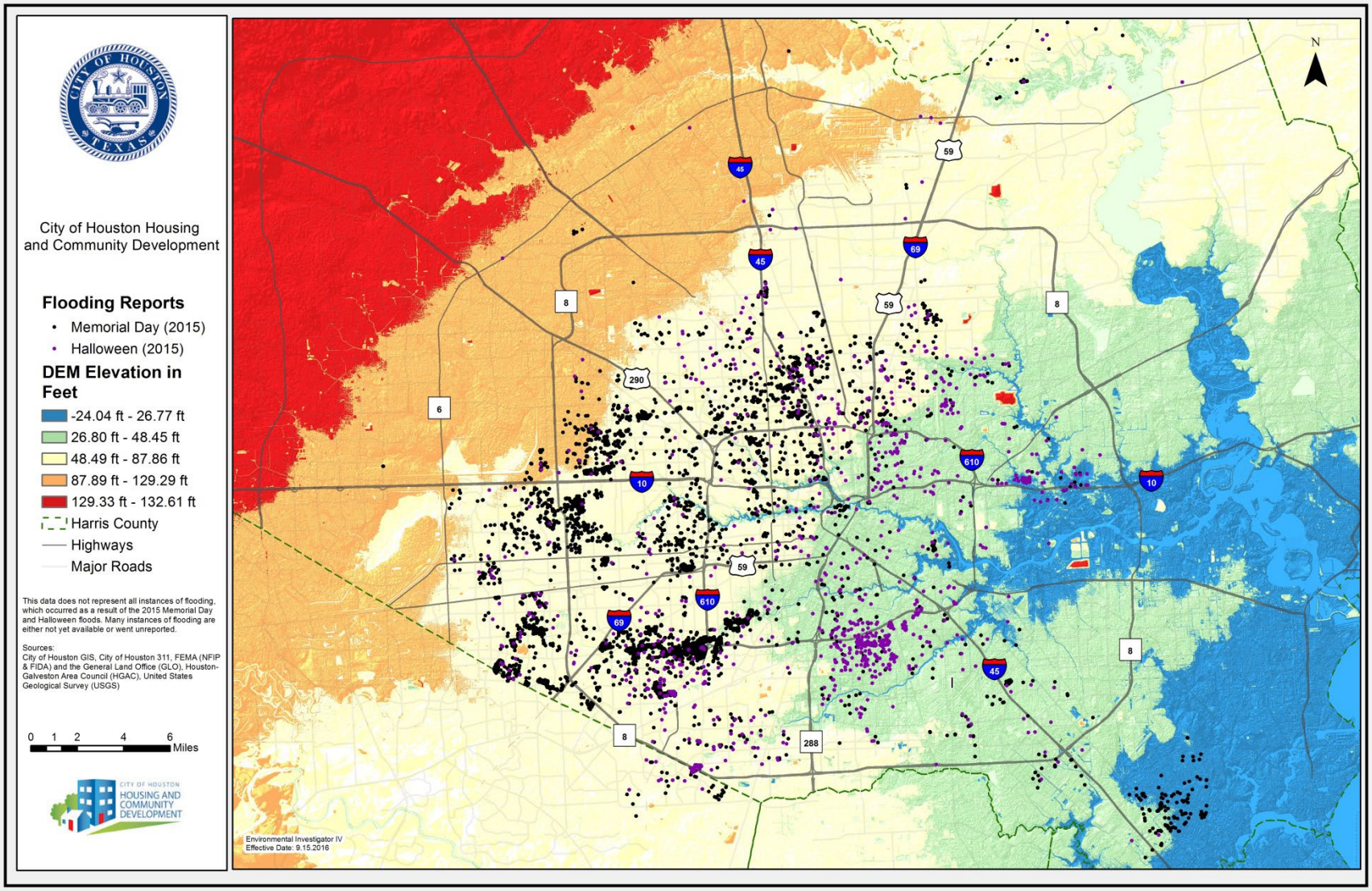
Appendices

Appendix A: Data Sources

Info/Data Sought	Source(s) Contacted/Used
Houston Crisis 311 call-in data	HCDD
Disaster Summary Outlines May & October	Houston OEM
SBA Disaster Home and Business Loans May and October	SBA Disaster Recovery
Addresses of SBA Disaster Loans, and NAICS Codes	SBA Disaster Recovery
General Disaster Event information (i.e. rainfall, damages, power outages, narrative building)	Various publications (Houston Chronicle, NY times, NBC, etc.)
Demographic Information	US Census Bureau, American Community Survey
Resiliency Planning Info	H-GAC Our Great Region 2040
Resiliency Planning Info	OEM site: houstongovnewsroom.org
General LMI population info/maps	HCDD
LMI/Council Districts and flood reports mapped	HCDD
Impact on Special Needs info (i.e. Homeless)	Houston Coalition for Homeless (PIT study)
Impact to existing HOPWA participants	HCDD
Emergency Shelters	Public News Articles, and American Red Cross
Individual Assistance Data (May DR-4223 and October DR-4245)	FEMA, GLO
Public Assistance Data (May DR-4223 and October DR-4245)	FEMA, GLO
Insurance/NFIP data	Texas Dept. of Insurance
General Damage Assessments/Estimates from May & October events	Houston OEM
Housing Stock Information	2013 American Housing Survey
Economic Impact data/Disaster Unemployment	CoH Metropolitan Chamber of Commerce, Texas Workforce Commission, Greater Houston Partnership Econ. Development
Housing Information	2015 Analysis of Impediments to Fair Housing Choice (HCDD)
Public Housing information	Houston Housing Authority
Existing CDBG program info	HCDD Annual Action Plan 2016
Damage reports to City's infrastructure	Houston PWE

Appendix B: Additional Map

Figure 16: 2015 Flooding with Digital Elevation



Appendix C: Public Hearing (8/18/16) Summary

Appendix D: Public Comments and Responses

Appendix E: Public Meeting (9/9/2016)

Summary of Concerns

Name of Person or Entity	Summary of Concern
1. Michael Huffmaster (Houston Super Neighborhood Alliance)	Concerns that while the plan addresses issues, the past practices that allow development, and construction without adequate detention and drainage will not be stopped
2. Resident of Houston	Suggested that electronic survey of affected households be conducted to help determine program design
3. Resident of Houston	Concerned that home furnishing losses were not addressed
4. Dr. Larry Rose	Expressed concern regarding angst resulting from flood events
5. Cindy Chapman	Supported Brays Oak Management District drainage study and transparency
6. Lynne Hester	Noted impact of Flooding
7. Ed Lesage	Supported Brays Oaks Management District drainage study
8. AB Horowitz	Expressed concerns about implications of downstream location.
9. Donna Storm	Noted negative impact on sales and property values Expressed support for Brays Oaks plan
10. Michael Bercu	Supported Brays Oaks Management District drainage study
11. Charles Goforth	Supported putting dollars into Brays Bayou watershed
12. Daniel Bustamante	Supported helping families impacted by flooding and offered his organization's assistance
13. Jane Falk	Supported recognition of the Role of American Red Cross and the Brays Oaks Management District drainage study
14. Richard Rodriguez	Requested public sector support for Brays Oaks Management District drainage study
15. Mahmoud Harmuche	Expressed his story of impact and supported expansion of Brays Bayou
16. Reis Ermis	Supported detention on Hillcroft Avenue and opposed expansion of traffic lanes on Hillcroft
17. Erda Gomez	Indicated Section 7 of Meyerland subdivision's extensive damage
18. Donald Perkins	Notes attached

Note: A detailed assessment of the meeting is as follows.

Appendix F: SF-424

Appendix G: Public Engagement Summary (Sept/Oct 2017)

Amendment 2: Action Plan for Disaster Recovery – 2015 Flood Events Public Engagement Summary (Sept/Oct 2017)

Public Hearing

In line with the Citizen Participation Plan for Houston's CDBG – DR15 Program (CPP-DR15), the Housing and Community Development Department (HCDD) held one public hearing to solicit input for the second substantial amendment to the Action Plan for Disaster Recovery – 2015 Flood Events (Action Plan).

A public notice advertising the public hearing and comment period for the draft second substantial amendment to the Action Plan for Disaster Recovery – 2015 Flood Events was published in the *Houston Chronicle* and *La Voz* on September 12, 2017. The public hearing was also announced on HCDD's Facebook and Twitter pages and at www.houstontx.gov/housing. Flyers publicizing the event were sent electronically by email to City Council members and the Mayor's Office for distribution and to HCDD's outreach list of over 700 people. Information about the public hearing and comment period was included in the flyers. HCDD also published a second public notice in the *Houston Chronicle* and *La Voz* on September 29, 2017 announcing the public comment period and the proposed budget increases. All advertising materials publicized that accommodations for persons with disabilities were available upon request. HCDD's Fair Housing Hotline was also listed on the advertisements as a resource for landlord/tenant or fair housing questions.

The public hearing was held on Tuesday, September 26, 2017 at the Leonel Castillo Community Center from 6:00 p.m. to 8:00 p.m. The venue was accessible for persons traveling on public transportation and also had interior and exterior accessibility features for persons with a physical disability. HCDD provided CART services for the hearing impaired. Two people attended this public hearing. One offered public comment. Each attendee received an agenda and HCDD's Public Hearing Guidelines. HCDD made various resources available at the public hearing, which included fair housing education materials, flood resources, and other HCDD program information.

Summary of Public Comment at Public Hearing

1. A representative from the Local Imitative Support Corporation (LISC) encouraged the City to continue providing funding for affordable housing to serve low- and moderate-income families. The representative also encouraged the City to fund a full spectrum of housing for both rental and home ownership opportunities.

Needs Survey

From September 29, 2017 to October 18, 2017, a link to an electronic survey was posted on www.houstontx.gov/housing, as well as, HCDD's Facebook and Twitter pages. The survey was also made available at the public hearing. There were five questions on the survey, and all respondents answered each question. The survey received a total of 18 responses, two of which were from the public hearing.

One third of respondents lived in the inner 610 Loop, while approximately one fourth lived in Southwest Houston (28%) and Northwest Houston (22%). Half of the respondents had damage from flood events in the past three years with over a quarter of respondents (28%) receiving damage to their home or business during Hurricane Harvey.

Approximately half of respondents thought that "Home repair assistance for single family owners" (56%) and "Removing homes from the floodplain through housing buyout" (50%) were the top two housing activities that should be addressed with disaster recovery funding. Almost two-thirds of respondents thought that "Drainage Improvements" (61%) and "Large scale flood retention/detention improvements to hold water runoff (ponds or basins)" (61%) were the top two non-housing activities that should be addressed with disaster recovery funding. Half of the respondents thought that the preferred allocation for CDBG-DR15 should be split 50% for housing and 50% for hon-housing while 39% of respondents thought that more should be allocated toward housing.

Public Comment Period

The public comment period on the draft Action Plan was available from September 29, 2017 to October 10, 2017. Two comments were received. The comments and HCDD's responses follow this summary.

Appendix H: Projection of Expenditures and Outcomes

Appendix 1 : Projected Expenditures and Outcomes

Program/Activity	Program Allocation	2021			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$0	$5,009	$12,529	$59,047
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$0	$5,009	$12,529	$59,047
Funds Remaining		$61,884,000	$61,878,991	$61,866,462	$61,807,415

Program/Activity	Program Allocation	2022			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$10,959	$10,959	$10,959	$10,959
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$10,959	$10,959	$10,959	$10,959
Funds Remaining		$61,796,456	$61,785,497	$61,774,538	$61,763,579

Program/Activity	Program Allocation	2023			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$10,959	$52,971	$73,977	$73,977
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$10,959	$52,971	$73,977	$73,977
Funds Remaining		$61,752,620	$61,699,649	$61,625,672	$61,551,695

Program/Activity	Program Allocation	2024			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$2,400,000	$2,400,000	$2,989,800	$3,000,000
Grand Total	$61,884,000	$2,473,977	$2,473,977	$3,063,777	$3,073,977
Funds Remaining		$59,077,718	$56,603,741	$53,539,964	$50,465,987

Program/Activity	Program Allocation	2025			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Grand Total	$61,884,000	$3,073,977	$3,073,977	$3,073,977	$3,073,977
Funds Remaining		$47,392,010	$44,318,033	$41,244,056	$38,170,079

Program/Activity	Program Allocation	2026			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Grand Total	$61,884,000	$3,073,977	$3,073,977	$3,073,977	$3,073,977
Funds Remaining		$35,096,102	$32,022,125	$28,948,148	$25,874,171

Program/Activity	Program Allocation	2027			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Grand Total	$61,884,000	$3,073,977	$3,073,977	$3,073,977	$3,073,977
Funds Remaining		$22,800,194	$19,726,217	$16,652,240	$13,578,263

Program/Activity	Program Allocation	2028			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Grand Total	$61,884,000	$3,073,977	$3,073,977	$3,073,977	$3,073,977
Funds Remaining		$10,504,286	$7,430,309	$4,356,332	$1,282,355

Program/Activity	Program Allocation	2029			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$73,977	$73,977	$73,977	$73,977
Funds Remaining		$1,208,378	$1,134,401	$1,060,424	$986,447

Program/Activity	Program Allocation	2030			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$73,977	$73,977	$73,977	$73,977
Funds Remaining		$912,470	$838,493	$764,516	$690,539

Program/Activity	Program Allocation	2031			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$73,977	$73,977	$73,977	$73,977
Funds Remaining		$616,562	$542,585	$468,608	$394,631

Program/Activity	Program Allocation	2032			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$73,977	$73,977	$73,977
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$73,977	$73,977	$73,977	$73,977
Funds Remaining		$320,654	$246,677	$172,700	$98,723

Program/Activity	Program Allocation	2033			
		Q1	Q2	Q3	Q4
Local Flood Mitigation Program	$58,789,800	$73,977	$24,746	$0	$0
Administration	$3,094,200	$0	$0	$0	$0
Grand Total	$61,884,000	$73,977	$24,746	$0	$0
Funds Remaining		$24,746	$0	$0	$0